American Society of Radiologic Technologists
Twenty-ninth Session of the House of Delegates

Rosen Plaza
Orlando, Florida
June 27-29, 2014
Twenty-ninth Session of the ASRT House of Delegates

Rosen Plaza
Orlando, Florida

June 27-29, 2014

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Rosen Plaza
Orlando, Florida

June 27-29, 2014

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First Business Meeting

I. Call to Order

Speaker of the House Amanda Garlock-Corbin called the 29th Annual Meeting of the ASRT House of Delegates to order at 7:32 a.m., Friday, June 27, 2014.

II. Opening Ceremony

Speaker of the House Amanda Garlock-Corbin appointed Liana Watson, ASRT Chief Governance and Development Officer, to take the minutes of the House meetings.

III. Introductions

IV. Delegate Orientation

Speaker of the House Amanda Garlock-Corbin presented delegate orientation.

V. Credentials Report

Vice Speaker of the House Michael Odgren, presented the Credentials Report. Out of a possible 170 delegates, 149 were credentialed as follows:

- Credentialed Affiliate Delegates: 92
- Credentialed Chapter Delegates: 57
- Total Credentialed Delegates: 149

Action: Adopted with a majority of delegates voting in the affirmative. The Credentials Report established that a quorum was present.

VI. Adoption of House of Delegates’ Standing Rules

Action: Adopted by unanimous vote of delegates voting.

VII. Adoption of Agenda

Action: Adopted by unanimous vote of delegates voting.

VIII. Memorial Resolution

Motion: Be it resolved, that the American Society of Radiologic Technologists expresses its sorrow over the passing of these members since our 2013 House of Delegates meeting in Albuquerque, N.M., and affirms our sorrow by rising for a moment of silence in memory of our departed colleagues.
Action: Adopted by a rising vote without objection. (The list of deceased members can be found in the attached appendix.)

IX. Courtesy Resolutions

No courtesy resolutions were received.

X. ASRT Annual Report

President of the ASRT Julia Gill presented the annual report. The 2014 election results were provided to the House of Delegates.

XI. Most Active Chapter Award

Most active chapter award was presented to the Registered Radiologist Assistant Chapter delegates.

XII. Introduction of Late Main Motions Requiring a 2/3 Vote to Debate

Motion: Lorenza Clausen, California Affiliate Delegate, moved to debate the motion for the House of Delegates to direct the Practice Standards Council Cardiovascular Interventional Subcommittee to amend the Cardiovascular Interventional Practice Standards by removing recognition of the registered cardiovascular invasive specialist certification as a post–primary certification for cardiovascular interventional technologists.

Action: Adopted with 77 percent of the delegates voting in the affirmative. Motion is numbered C-14.16.

XIII. Nominations for Speaker and Vice Speaker

Speaker
Amanda Garlock-Corbin

Vice Speaker
Michael Odgren

XIV. Announcements

XV. Adjournment

Speaker of the House Amanda Garlock-Corbin adjourned the first business meeting of the 2014 House of Delegates at 9:15 a.m., Friday, June 27, 2014.
The Twenty-ninth Annual Meeting of the ASRT House of Delegates

Rosen Plaza
Orlando, Florida
June 27-29, 2014

Second Business Meeting

I. Call to Order

Speaker of the House Amanda Garlock-Corbin called the second business meeting of the 29th Annual Meeting of the ASRT House of Delegates to order at 8 a.m., Sunday, June 29, 2014.

II. Credentials Report

Vice Speaker of the House Michael Odgren presented the Credentials Report. There was no change in the number of credentialed delegates (149).

III. Committee on Bylaws Report

Chairman Meredith Gammons presented the Committee on Bylaws report.

Motion: If adopted, the Bylaws revision becomes effective upon the adjournment of the 2014 House of Delegates meeting.

Action: Adopted unanimously by the delegates.

Motion: Move the adoption of the proposed amendments for the current ASRT Bylaws.

Action: Adopted unanimously by the delegates.

Motion: Move that the Committee on Bylaws be authorized to correct article and section designations, punctuation and cross-references, and to make such other editorial and conforming changes as may be necessary to reflect the intent of the Society in connection with the adopted Bylaw amendments.

Action: Adopted with 99 percent of the delegates voting in the affirmative.

Adopted Bylaws Attached

IV. Commission Report and Consent Calendar

Action: Motions 03, 06, 07, 08, 10, 13, 14 and 15 were removed from the Consent Calendar. Following this action the remainder of the Consent Calendar, consisting of motions 01, 02, 04, 05, 09, 11 and 12 was adopted unanimously by the delegates.

Chairman Travis Prowant presented the Commission report. The full content of each
motion can be found in the attached appendix. The results of each motion are as follows:

<table>
<thead>
<tr>
<th>Main Motion</th>
<th>Title</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-14.01</td>
<td>Amend the Magnetic Resonance Imaging Practice Standards</td>
<td>Adopted on Consent Calendar.</td>
</tr>
<tr>
<td>C-14.02</td>
<td>Amend the Radiologist Assistant Practice Standards</td>
<td>Adopted on Consent Calendar.</td>
</tr>
<tr>
<td>C-14.03</td>
<td>Adopt the newly developed Medical Dosimetry Practice Standards</td>
<td>Motion 1, withdraw adopted with 95% in the affirmative.</td>
</tr>
<tr>
<td>C-14.04</td>
<td>Rescind the Position Statement “Qualifications for Performing Medical Dosimetry”</td>
<td>Adopted on Consent Calendar.</td>
</tr>
<tr>
<td>C-14.05</td>
<td>Rescind the Position Statement “Certification of Personnel Practicing in the Radiologic Sciences”</td>
<td>Adopted on Consent Calendar.</td>
</tr>
<tr>
<td>C-14.06</td>
<td>Amend the Practice Standards Glossary</td>
<td>Motion 2, amendment adopted with 93% in affirmative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adopted as amended with 97% in affirmative.</td>
</tr>
<tr>
<td>C-14.07</td>
<td>Adopt the Position Statement titled “Digital Imaging Post-Processing”</td>
<td>Motion 3, amendment not adopted with 70% in negative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Motion 4, amendment adopted with 99% in affirmative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adopted as amended with 97% in affirmative.</td>
</tr>
<tr>
<td>C-14.08</td>
<td>Adopt the newly developed Medical Dosimetry Practice Standards as amended by the Commission</td>
<td>Adopted as amended with 95% in affirmative.</td>
</tr>
<tr>
<td>C-14.09</td>
<td>Rescind the Position Statement titled “Campaign Guidelines”</td>
<td>Adopted on Consent Calendar.</td>
</tr>
<tr>
<td>C-14.10</td>
<td>Adopt the Position Statement titled “Digital Image Cropping or Masking”</td>
<td>Motion 5, amendment adopted with 97% in affirmative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adopted as amended with 99% in affirmative.</td>
</tr>
<tr>
<td>C-14.11</td>
<td>Amend the Position Statement titled “State Agency Recognition of Joint Review Committees”</td>
<td>Adopted on Consent Calendar.</td>
</tr>
<tr>
<td>C-14.12</td>
<td>Amend the Position Statement titled “Unification of the Profession”</td>
<td>Adopted on Consent Calendar.</td>
</tr>
<tr>
<td>C-14.13</td>
<td>Amend the Position Statement titled “Requirements for Radiologic Science Program Directors and Clinical Coordinators”</td>
<td>Motion 6, amendment adopted with 99% in affirmative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adopted as amended with 100% in affirmative.</td>
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</tr>
<tr>
<td>C-14.16</td>
<td>Remove Recognition of RCIS from Cardiovascular Interventional Practice Standards</td>
<td>Motion 8, amendment adopted with 96% in affirmative. Adopted as amended with 97% in affirmative.</td>
</tr>
</tbody>
</table>

V. **New Business**

A. **Introduction of Late Main Motions Requiring a 3/4 Vote to Debate**
   No late motions were received.

B. **Courtesy Resolutions**
   Without objection, the House of Delegates agreed to suspend the rules to allow Student Leadership Development Participants to bring a motion of courtesy thanking the ASRT for the opportunity to attend the ASRT Student Leadership Development Program and the Annual Governance and House of Delegates meeting.

**Motion:** The 2014 Student Leadership Development Program participants wish to express our gratitude and appreciation for the opportunity extended to us by the ASRT, mentors, House of Delegates, members and volunteers. It is truly an honor to be selected for this program. The mentorship and classes provide a platform and outlet to develop our strengths to advance our profession. Thank you for all your hard work, relentless advocacy and dedication to us and our profession.

**Action:** Adopted with delegates showing their appreciation through rising applause.
C. Report of Election of Chapter Steering Committee Chairmen

**Bone Densitometry**
Chairman  Marjorie Sawyer
Vice Chairman  Karen Prouty

**Cardiovascular Interventional Technology**
Chairman  Chris Steelman
Vice Chairman  Steve Miles

**Computed Tomography**
Chairman  Virginia Lester
Vice Chairman  Emilee Palmer

**Education**
Chairman  James Johnston
Vice Chairman  Nadine Menser

**Magnetic Resonance**
Chairman  Meredith Gammons
Vice Chairman  Joy Cook

**Mammography**
Chairman  Erin Zuba
Vice Chairman  Cheryl Worden

**Management**
Chairman  Michael DelVecchio
Vice Chairman  Danny Gonzales

**Medical Dosimetry**
Chairman  Cory Neill
Vice Chairman  Stacy Anderson

**Military**
Chairman  Danyll Gardner
Vice Chairman  Shawn Stevenson

**Nuclear Medicine**
Chairman  Richard States
Vice Chairman  Ryan Smith

**Quality Management**
Chairman  Anne Brittain
Vice Chairman  Donita Shipman

**Radiation Therapy**
Chairman  Michele Hutchins-Medina
Vice Chairman  Pam Cartright

**Radiography**
Chairman  Billy Mackey
Vice Chairman  Tricia Leggett

**Registered Radiologist Assistant**
Chairman  Vicki Sanders
Vice Chairman  Jonathan Mazal

**Sonography**
Chairman  Dale Collins
Vice Chairman  Diana Mishler
VI. Nominations for Speaker and Vice Speaker

Speaker
Amanda Garlock-Corbin

Vice Speaker
Michael Odgren

VII. Election of Speaker and Vice Speaker

Action: Amanda Garlock-Corbin elected as speaker and Michael Odgren elected as vice speaker for 2014-15 House of Delegates by affirmative voice vote of the delegates.

VIII. Adjournment

Speaker of the House Amanda Garlock-Corbin adjourned the second meeting of the 29th Annual Meeting of the House of Delegates at 10 a.m., Sunday, June 29, 2014.

Approved:

Speaker
Amanda Garlock-Corbin

Vice Speaker
Michael Odgren

Chairman, Minutes Approval Committee
Michael Odgren

Amanda Garlock-Corbin
Twenty-ninth Annual Meeting of the ASRT
House of Delegates
Motions Appendix

Rosen Plaza
Orlando, Florida, June 27-29, 2014

Motion
Be it resolved, that the American Society of Radiologic Technologists expresses its sorrow over the passing of these members since our 2013 House of Delegates meeting in Albuquerque, N.M., and affirms our sorrow by rising for a moment of silence in memory of our departed colleagues.

2014 Memorial Resolution

The American Society of Radiologic Technologists House of Delegates moves the following:

Whereas, all members of the American Society of Radiologic Technologists are of immeasurable value within our organization and invaluable as members of the health team in the field of medicine, we present the names of members who have passed since our last House of Delegates Meeting:
ASRT Articles of Incorporation, 2010
ASRT Bylaws, 2014

Adopted June 29, 2014
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The General Nature of the Bylaws

Bylaws are rules adopted and maintained by an association or society that define and direct its internal structure and management. They are subordinate, and complementary, to an association's articles of incorporation.

Articles of incorporation are the primary law of an association used to establish the general organization and governing of the association to achieve corporate existence.

Bylaws are the secondary law of an association best used to detail how the society is formed and run.

In some states, bylaws are not specifically required for an incorporated or unincorporated association, or they are only mentioned in a cursory manner. ASRT's state of incorporation, Illinois, requires them. Even where legally optional, most associations elect to have a set of bylaws because of its usefulness in management operations.

If the articles constitute an agreement between the society and the state, the bylaws shall be viewed as constituting the terms of an agreement between an association and its members. The agreement ordinarily shall be honored and enforced in a court of law. Bylaws describe the relationships, rights and obligations for the members, directors, officers and staff of an association. They can be invaluable in avoiding or resolving differences among those who are part of the association or who deal with it.

Consequently, bylaws should be kept current, taking into account the charges of an association. Members and staff also should familiarize themselves with the document to better understand the organization they represent and that represents them.

- Prepared September 2003 by ASRT’s legal counsel, Webster, Chamberlain and Bean, Washington, D.C.

Articles of Incorporation

ARTICLE I

The name of this organization shall be known as the American Society of Radiologic Technologists. The general nature of its business shall be educational, scientific and socioeconomic. The principal place of business of this corporation shall be located in the City of Chicago, County of Cook, State of Illinois, or at any other such place or places within the State of Illinois as the Board of Directors may from time to time determine by resolution thereof.

ARTICLE II

The time of commencement of this corporation shall be Jan. 16, 1932, and the period of its duration shall be in perpetuity.
ARTICLE III
The names and places of residence of the persons forming this corporation are:
Margaret Hoing, Chicago, Ill., president;
Virginia Eller, Janesville, Wis., second vice president;
Emma C. Grierson, St. Paul, Minn., secretary-treasurer.

ARTICLE IV
The management of this corporation shall be vested in a Board of Directors chosen to serve in accordance with the provisions of the Bylaws of the corporation.

The officers of this corporation shall consist of a chairman, president, president-elect, vice president and a secretary-treasurer. They shall be selected annually by the membership in accordance with the provisions of the Bylaws and shall serve for a period of one year or until their successors have been selected and assumed office.

The Board of Directors shall meet at least once a year at the annual meeting of the corporation.

The election of officers shall be conducted as in the Bylaws provided.

ARTICLE V
Individual members shall be admitted to this corporation in accordance with the qualifications and procedures established by the Bylaws. The candidate shall be notified of acceptance and shall be issued a certificate of membership. The membership may be renewed annually upon payment of such dues as shall be required. Rules of conduct for members, admission, expulsion of members and other related matters shall be governed by suitable Bylaws of this corporation.

Organizations engaged in and existing for purposes analogous to the nature of and business of this corporation may make application for and receive affiliate membership in this corporation upon such conditions and pursuant to such rules as shall be established by the Bylaws of this corporation.

ARTICLE VI
This corporation shall be nonprofit and nonsectarian. No part of any net earnings shall inure to the benefit of any individual, member or affiliate.

ARTICLE VII
Amendments to these Articles of Incorporation may be made by two-thirds of the members voting, following proper notification as established by the Bylaws of this corporation.
ASRT BYLAWS

ARTICLE I
Name

The name of this organization shall be the American Society of Radiologic Technologists, hereinafter referred to as the ASRT.

ARTICLE II
Definition and Purpose

Section 1. Definition
Radiologic technologist shall be the term used to define radiographer, nuclear medicine technologist, radiation therapist, sonographer and magnetic resonance technologist and shall be used to describe the areas of certification or licensure. Additional terms of description may be adopted by the ASRT to define new areas of certification or licensure.

Section 2. Purpose
The purpose of ASRT shall be to advance the professions of radiation and imaging disciplines and specialties; to maintain high standards of education; to enhance the quality of patient care; and to further the welfare and socioeconomics of radiologic technologists.

ARTICLE III
Membership

Section 1. Policy and Procedure
A. The ASRT is committed to equal opportunity and nondiscrimination in all programs and activities. No one shall be denied opportunities or benefits on the basis of age, sex, color, race, creed, national origin, religious persuasion, marital status, sexual orientation, gender identity, military status, political belief or disability.

B. The name of the ASRT or any delegate in the House of Delegates, its Board of Directors or its staff, in their official capacities, shall not be used in connection with a corporate company for other than the regular functions of the ASRT.

C. A candidate for membership shall submit an application for membership along with the required fee to the ASRT office.

Section 2. Categories of Membership
Voting
A. Active members are those who are registered by the American Registry of Radiologic Technologists (ARRT) or equivalent or hold an unrestricted license in medical imaging
or radiation therapy under state statute. They shall have all rights, privileges and obligations of membership including the right to vote, hold office and serve as a delegate.

B. Student members are those who are enrolled in primary medical imaging or radiation therapy programs. They shall have all rights, privileges and obligations of Active members. Eligibility for Student membership shall terminate upon initial certification.

C. Graduate Bridge members are those who meet the following qualifications:
   1. have graduated from an accredited program in their initial medical imaging or radiation therapy program within the past 24 months; or
   2. are registered by the American Registry of Radiologic Technologists (ARRT) or equivalent and are within 24 months of their initial certification.

They shall have all rights, privileges and obligations of Active members.

D. Emeritus members are those who have reached age 65, maintained membership in good standing in the ASRT for at least 30 years and applied for emeritus status. They shall have all rights, privileges and obligations of Active members except to hold office or serve as a delegate. They shall pay no membership dues. No new members shall be inducted into this category after January 1, 1990.

E. Life members are those voting members who have maintained continuous membership for a minimum of 30 years and shall be limited to one for each 2,500 active members. Their participation as a member shall reflect exceptional service and dedication to the ASRT and the profession. They shall be selected by three-fourths vote of the entire membership of the Board of Directors. They shall have all rights, privileges and obligations of Active members. They shall pay no membership dues.

F. Retired members are those who hold a certificate of recognition from the American Registry of Radiologic Technologists (ARRT) or equivalent or who meet Social Security Administration requirements for retirement. They shall have all rights, privileges and obligations of Active members except to hold office or serve as a delegate.

G. Radiologist assistants are those registered radiologic technologists who hold the credential R.R.A. They shall have all rights, privileges and obligations of Active members.

Nonvoting

A. Associate members are those who are or have been employed in the technical, educational, managerial or corporate aspects of the medical imaging or radiation therapy professions and do not qualify for Active membership. They shall have all rights, privileges and obligations of Active members except to vote, hold office or serve as a delegate.

B. Limited x-ray machine operators are those who perform diagnostic x-ray procedures on selected anatomical sites and are not registered radiologic technologists. They shall have
all rights, privileges and obligations of Active members except to vote, hold office or serve as a delegate.

C. International members are those who reside outside the United States or any of its territories, are not registered by the American Registry of Radiologic Technologists (ARRT) or equivalent, and are employed in the technical, educational, managerial or corporate aspects of the medical imaging or radiation therapy professions. They shall have all rights, privileges and obligations of Active members except to vote, hold office or serve as a delegate.

Section 3. Dues and Fees
A. Dues for all members, proposed by the Board of Directors, require adoption by a two-thirds vote of the delegates voting at the annual meeting of the House of Delegates.
   1. Intent to change dues shall be communicated to all delegates a minimum of 45 days prior to the beginning of the annual meeting of the House of Delegates.

B. One chapter membership shall be included as part of the annual ASRT dues. Each additional chapter membership shall require a fee as established by the ASRT Board of Directors.

C. Dues shall be paid by the expiration date.

Section 4. Resignation
Any member shall have the right to resign by written communication to the ASRT office.

Section 5. Reinstatement
A member who has resigned or whose membership has been revoked by the ASRT for other reasons may be reinstated only after filing a new application, acceptance of the application by the Board of Directors, and paying the fees as a new member.

ARTICLE IV
Officers

Section 1. Positions
The elected officers of the ASRT shall be chairman, president, vice president, president-elect and secretary-treasurer.

Section 2. Qualifications
A. General qualifications
   1. Shall practice in the medical imaging or radiation therapy professions or health care.
   2. Shall be a voting member of the ASRT and must have been a voting member for four years immediately preceding nomination.
3. Shall be a voting member of an ASRT affiliate or serve on active duty in the Army, Navy, Air Force or Coast Guard.

4. Shall show proof of continuing education.

5. Shall have served as a delegate for a minimum of two years.

6. Shall not serve concurrently on the board of any national medical imaging or radiation therapy certification or national accreditation agency, or in the House of Delegates.

B. President-elect
   1. Shall have served on the ASRT Board of Directors.

C. Vice president
   1. Shall have served on the ASRT Board of Directors.

D. Secretary-treasurer
   1. Shall have fulfilled two years in any appointed or elected ASRT position, or as president of an affiliate society.

E. An officer who met qualification requirements at the time of nomination shall be permitted to complete the term regardless of employment status changes.

Section 3. Terms of Office

A. The vice president and secretary-treasurer shall serve for a term of one year or until their successors have been elected.

B. The president-elect shall serve for a term of one year as president-elect, one year as president and one year as chairman.

C. Terms shall begin at the close of the annual meeting of the House of Delegates.

Section 4. Duties

A. Officers shall perform the duties prescribed by these bylaws.

B. Chairman
   1. Shall preside at meetings of the Board of Directors.

C. President
   1. In the absence or inability of the chairman to serve, the president shall preside at meetings of the Board of Directors.

   2. For additional duties related to committees see Article IX.

D. Vice President
1. Shall assume the duties of the president when necessary.

E. President-elect
1. Shall become familiar with all ASRT activities and be prepared to assume the office of president.

2. For additional duties related to committees see Article IX.

F. Secretary-treasurer
1. Shall perform duties assigned by the Board of Directors.

Section 5. Vacancies
A. A vacancy in the office of president shall be filled by the vice president.

B. A vacancy in the office of president-elect shall be filled by a special election.

C. A vacancy in the office of vice president or secretary-treasurer shall be filled by appointment by a majority vote of the entire remaining membership of the Board of Directors.

ARTICLE V
House of Delegates

Section 1. Purpose
The House of Delegates shall be the legislative body of the ASRT. The House of Delegates establishes professional standards of practice.

Section 2. Composition
A. The House of Delegates shall be composed of the speaker and vice speaker, affiliate delegates and chapter delegates.

B. Each affiliate shall be represented by two delegates.

C. Each chapter shall be represented by four delegates.

Section 3. Delegate Requirements and Qualifications
A. Affiliate delegates
1. Two delegates and two alternate delegates shall be elected or appointed by each ASRT affiliate in accordance with affiliate procedures.

2. Affiliates shall submit completed affiliate delegate information forms to ASRT for the delegates and alternate delegates by the end of the last business day of January. Delegate and alternate delegate positions not filled with qualified members by the last business day of January shall remain open until after the annual meeting of the House of Delegates.
3. A delegate shall show proof of continuing education.

4. A delegate shall be a voting member of the ASRT and the affiliate being represented for two years immediately preceding nomination.

5. A delegate shall have served as an officer, or on the Board of Directors or as a committee member in the affiliate being represented.

6. A delegate shall practice in the medical imaging or radiation therapy professions or health care.

7. A delegate may serve concurrently on the board of any national medical imaging or radiation therapy certification or national accreditation agency.

8. A delegate shall have the time and availability for necessary travel to represent the ASRT.

9. A delegate shall attend the annual meeting of the House of Delegates and all meetings required of delegates.

B. Chapter delegates

1. Two delegates and two alternate delegates shall be elected annually by a plurality vote of the voting members of the ASRT.

2. Delegates shall be elected for a term of two years. The term shall begin at the close of the annual meeting of the House of Delegates in the year the delegate is elected.

3. A delegate shall be limited to two, two-year consecutive terms unless there is not a full slate of qualified candidates nominated.

4. The delegate nominees receiving the third and fourth highest number of votes on the ballot are the elected alternate delegates.

5. An alternate delegate shall serve a one-year term. The term shall begin at the close of the annual meeting of the House of Delegates in the year the alternate delegate is elected.

6. If an alternate is not elected, this position remains open until the next regular election.

7. A delegate shall show proof of continuing education.

8. A delegate shall be a voting member of the ASRT for two years immediately preceding nomination.
9. A delegate, excluding a military delegate, shall be a member of an affiliate or have served as a Military Chapter delegate for two years immediately preceding nomination.

10. A delegate, excluding a military delegate, shall have served as an officer, delegate or an elected or appointed ASRT position, or as an officer on the Board of Directors or as a committee member in an affiliate.

11. In clinical practice chapters where certification and/or post primary examination offered by an ASRT-recognized organization exists, the delegate shall show proof of current credential and documentation of current practice in the discipline or specialty being represented.

12. In management and education chapters, the delegate shall show proof of documentation of current practice in the discipline or specialty being represented.

13. Military delegates shall be on active duty in the Army, Navy, Air Force or Coast Guard.

14. A delegate, excluding a military delegate, shall only be elected to represent a chapter of which the delegate is a member for the two years immediately preceding nomination.

15. A military delegate shall be a member of the Military Chapter at the time of nomination.

16. A delegate who met qualification requirements at the time of nomination shall be permitted to complete the term regardless of employment status changes. A military delegate who met qualification requirements at the time of nomination shall be permitted to complete the term in the event of retirement or honorable discharge from active duty.

17. A delegate may serve concurrently on the board of any national medical imaging or radiation therapy certification or national accreditation agency.

18. A delegate shall have the time and availability for necessary travel to represent the ASRT.

19. A delegate shall attend the annual meeting of the House of Delegates and all meetings required of delegates.

Section 4. Meetings
A. The House of Delegates shall meet at least annually.
B. The House of Delegates may permit any or all delegates to participate in a meeting by, or conduct the meeting through the use of, any means of communication by which all delegates participating may simultaneously hear each other during the meeting.

C. Special meetings of the House of Delegates may be called at such time and place as designated by a majority vote of the Board of Directors, or by written request of 65 delegates. Members of the House of Delegates shall be notified 30 days in advance of such meetings, with a statement of the business to be transacted. No business other than that specified shall be transacted.

Section 5. Quorum
A quorum shall consist of at least 65 credentialed delegates.

Section 6. Voting
A. Members may attend the annual meeting of the House of Delegates, but only credentialed delegates shall vote. There shall be no proxy voting.

B. Main motions adopted by the House of Delegates shall remain in force until rescinded or amended unless they are subject to Article VII, Section 2, paragraph D.

C. The House of Delegates shall present recommendations to the Board of Directors. The Board of Directors shall report to the House regarding recommendations no later than the next annual meeting of the House of Delegates.

Section 7. Absences and Vacancies
A. Absence
1. An absence exists when an elected/appointed delegate is unable to fulfill the duties of the position during the annual meeting of the House of Delegates. The delegate shall be considered absent for the purpose of that meeting only.

2. It is the responsibility of the delegate to notify the ASRT, the speaker of the House, and the alternate delegate of the delegate’s inability to attend the annual meeting of the House of Delegates as soon as possible. The alternate delegate shall be seated for that meeting only.

3. If the alternate delegate is unable to serve because of extenuating circumstances, the speaker of the House may seat a qualified delegate for the annual meeting of the House of Delegates for that meeting only.

B. Vacancies
1. Delegate vacancies shall be filled by the elected/appointed alternate delegate.

Section 8. Probation
A. If an affiliate fails to seat all delegates, that affiliate enters into probationary status.
B. If a chapter fails to elect and seat all delegates, that chapter enters into probationary status.

Section 9. Nominations and Elections of Speaker and Vice Speaker
A. At the annual meeting of the House of Delegates, prior to the close of the last business meeting of the House, a speaker of the House and a vice speaker of the House, who are members of the House, shall be elected by the credentialed delegates.

B. Nominations for speaker and vice speaker of the House of Delegates shall be accepted at the first business meeting of the House of Delegates. Nominations shall only be accepted at the second business meeting of the House of Delegates if there are no qualified candidates nominated at the first business meeting of the House of Delegates. An individual may not run for both speaker and vice speaker in the same year.

C. The elections of speaker and vice speaker shall be by majority vote of the delegates voting. If the majority vote is not obtained on the first ballot, the top two vote candidates, or more in the case of a tie, shall have a runoff ballot.

D. When there is only one candidate for speaker or vice speaker, the election may be by voice vote.

E. The affiliate or chapter that the speaker or vice speaker represents shall be entitled to fill that delegate position.
   1. The elected/appointed alternate affiliate delegate shall fill the position. A new qualified alternate affiliate delegate may be elected/appointed by the affiliate.
   2. The elected alternate chapter delegate shall fill that position. A new qualified alternate delegate may be appointed by the chapter within 60 days following the close of the annual meeting of the House of Delegates.
   3. If an elected alternate chapter delegate does not exist for the vacated delegate seat, the delegate position remains vacant until the next regular election.

Section 10. Qualifications for Speaker and Vice Speaker
A. General qualifications
   1. Shall practice in the medical imaging or radiation therapy professions or health care.
   2. Shall be a voting member of the ASRT and must have been a voting member for four years immediately preceding nomination.
   3. Shall be a voting member of an ASRT affiliate or serve on active duty in the Army, Navy, Air Force or Coast Guard.
   4. Shall show proof of continuing education.
5. Shall have served as a delegate for a minimum of two years.

6. Once elected, shall not serve concurrently on the board of any national medical imaging or radiation therapy certification or national accreditation agency, or as a delegate in the House of Delegates.

B. A speaker or vice speaker who met qualification requirements at the time of nomination shall be permitted to complete the term regardless of employment status changes.

Section 11. Terms of Speaker and Vice Speaker
A. The speaker and vice speaker shall be elected to serve for one year and may be re-elected for one additional, consecutive term.

B. Terms that are not consecutive shall not be restricted.

C. The term shall begin at the close of the annual meeting of the House of Delegates.

Section 12. Duties of Speaker and Vice Speaker
A. Speaker
1. Shall preside at all House meetings.

2. May vote only if his or her vote will make a difference in the outcome of the question being considered.

3. Shall be a member of the Board of Directors.

4. For additional duties related to committees see Article IX.

B. Vice Speaker
1. Shall be a nonvoting member of the House.

2. In the absence of the speaker, the vice speaker shall assume the duties of the speaker of the House, including the right to vote when the vote will make a difference.

3. Shall be a member of the Board of Directors.

Section 13. Vacancy of Speaker and Vice Speaker
A. A vacancy in the office of speaker of the House shall be filled by the vice speaker.

B. A vacancy in the office of vice speaker of the House shall be filled by a special election of the House of Delegates.

C. In the case of a concurrent vacancy in the office of speaker and vice speaker, the office of speaker shall be filled by appointment by a majority vote of the entire remaining membership of the Board of Directors.
ARTICLE VI
Nominations and Elections

Section 1. Composition and Responsibilities of the Committee on Nominations
A. The Board of Directors shall appoint a chairman and six members to the Committee on Nominations, none of whom may be members of the Board of Directors.

B. It shall be the duty of the Committee on Nominations to review candidate information and present all qualified candidates for ASRT officer and chapter delegate positions.

Section 2. Nominations
A. Nominations of officers and chapter delegates may be submitted by any ASRT voting member. Nominations shall be received in the ASRT office by the end of the first business day of October. Completed candidate information forms shall be received in the ASRT office by the end of the first business day of November.

B. An individual may not run for a national office and chapter delegate position on the same ballot.

C. An individual may not run for more than one chapter delegate position on the same ballot.

D. An individual shall not hold a national office and chapter delegate position simultaneously.

Section 3. Balloting
A. Ballots prepared by the ASRT office shall be made available to the voting members at least 120 days prior to the beginning of the annual meeting of the House of Delegates.

B. Ballots shall be cast no later than 90 days prior to the beginning of the annual meeting of the House of Delegates. Ballots postmarked after this date shall not be counted.

C. Write-in votes are prohibited for all officer and chapter delegate positions.

Section 4. Election and Notification
A. The vice president, president-elect, secretary-treasurer and chapter delegates shall be elected by a plurality vote of the voting members of the ASRT.

B. A tie vote shall be decided by lot at a regular business meeting of the House of Delegates.

C. Newly elected officers and chapter delegates shall be notified of election results at least 60 days prior to the beginning of the annual meeting of the House of Delegates.
D. Election results shall be announced at a regular business meeting of the House of Delegates.

**ARTICLE VII**  
**Board of Directors**

**Section 1. Composition**  
The Board of Directors shall consist of the officers of the ASRT, and the speaker and vice speaker of the House of Delegates.

**Section 2. Duties**  
The Board of Directors shall:

A. Be vested with the responsibility of the management of the business of the corporation in concert with its strategic plan.

B. Appoint external organization representatives.

C. Act on main motions received from the Commission concerning matters of organizational operations and report the status to the House of Delegates.

D. Temporarily suspend main motions adopted by the House of Delegates if found to be contrary to federal, state or local laws, ASRT Bylaws, or to be financially infeasible.

E. Place affiliates and chapters on probationary or inactive status.

F. Reinstate affiliates to active status when the requirements of these Bylaws, the ASRT Affiliate Charter Agreement and the House of Delegates Procedure Manual are met.

G. Reinstate chapters to active status when the requirements of these Bylaws and the House of Delegates Procedure Manual are met.

**Section 3. Meetings**  
A. The Board of Directors shall meet at least annually at the annual meeting of the House of Delegates.

B. The president or the chairman of the Board, or a majority of the members of the Board of Directors, upon written request to the chairman of the Board, may call a meeting, and the meeting shall occur, provided no less than a 15-day notice to all Board members is given.

C. The Board of Directors may permit any or all members to participate in a meeting by, or conduct the meeting through the use of, any means of communication by which all members participating may simultaneously hear each other during the meeting.
Section 4. Quorum
A majority of the Board of Directors shall constitute a quorum for all meetings. Proxies are prohibited.

ARTICLE VIII
Censure, Reprimand and Removal

An ASRT member, delegate or Board member may be censured, reprimanded or removed for cause. Sufficient cause includes a violation of the Bylaws or any lawful rule or practice duly adopted by the ASRT, dereliction of duty, other conduct prejudicial to the interests of the ASRT, or conduct detrimental to the ASRT. Such action may occur following completion of the due process procedure.

A. The Board of Directors must receive formal and specific charges in writing against the individual.

B. If the Board of Directors deems the charges to be sufficient, the person charged shall be advised, in writing, of the charges.

C. A statement of the charges shall be sent by certified or registered mail to the last recorded address of the person charged at least 20 days before final action is taken.

D. The statement shall be accompanied by a notice of the time and place of the meeting of the Board of Directors at which the charges shall be considered.

E. The person charged shall have the opportunity to address the charges and be represented by counsel to present any defense to such charges before action is taken.

F. Censure or reprimand of an ASRT member or delegate shall be by majority vote of the entire membership of the Board of Directors.

G. Censure or reprimand of a Board member shall be by majority vote of the entire remaining membership of the Board of Directors.

H. Removal of an ASRT member or delegate shall be by three-fourths vote of the entire membership of the Board of Directors.

I. Removal of a Board member shall be by three-fourths vote of the entire remaining membership of the Board of Directors.

J. Affiliates have the power to remove affiliate delegates.

ARTICLE IX
Committees
A. There shall be committees as deemed necessary appointed by the Board of Directors, president, president-elect or speaker of the House of Delegates.

B. The appointing authority may appoint Board members as ex-officio members of all committees, except the Committee on Nominations.

C. The Board shall appoint and provide charges to committees appointed by the Board.

D. The president-elect shall appoint and provide charges to presidential committees for his or her presidential year.

E. The speaker shall appoint and provide charges to House committees.

F. A vacancy in any committee shall be filled by the appointing power.

ARTICLE X
Affiliate Organizations and Chapters

Section 1. Affiliate Organizations
A. The ASRT has granted one affiliate charter in each state, the District of Columbia, the city of Philadelphia, Guam and Puerto Rico.

B. Each affiliate shall renew its charter annually, and within 60 days after the close of its fiscal year, submit the following to the ASRT:
1. Annual budget/financial statement.
2. Affiliate bylaws in agreement with ASRT Bylaws.
3. Articles of incorporation.
4. Certificate of good standing or proof of active incorporation verifying corporate existence is valid dated no later than 90 days prior to application being submitted.
5. Evidence of IRS recognition of tax-exempt status (e.g., determination letter issued to applicant or letter requesting ASRT include applicant in group exemption number).
6. Verification that affiliate officers are ASRT members.
7. Annual meeting information.
8. Names and contact information for officers and board members.
9. List of affiliate subordinates recognized by affiliate and attestation that these subordinates are in compliance with ASRT affiliate subordinate policies and procedures.

10. Verification that the affiliate filed the appropriate tax returns with the IRS in the prior year.

C. Any affiliate not in compliance with the ASRT Bylaws, the ASRT Affiliate Charter Agreement or the House of Delegates Procedure Manual shall be placed on probationary status.

D. An affiliate on probationary status for more than two consecutive years shall be considered inactive.

E. The ASRT Affiliate Charter Agreement may be terminated by the House of Delegates or by a vote of the members of the affiliate.

F. The ASRT shall not be responsible for any debts, actions or statements made by, or on behalf of, any affiliate.

Section 2. Chapters
A. Recognized chapters are:
   1. Bone densitometry
   2. Cardiovascular interventional technology
   3. Computed tomography
   4. Education
   5. Magnetic resonance
   6. Mammography
   7. Management
   8. Medical dosimetry
   9. Military
   10. Nuclear medicine
   11. Quality management
   12. Radiation therapy
   13. Radiography
   14. Registered radiologist assistant
   15. Sonography

B. Chapters shall be governed by the ASRT Bylaws.

C. Any chapter not in compliance with the ASRT Bylaws or the House of Delegates Procedure Manual shall be placed on probationary status.

D. A chapter on probationary status for more than two consecutive years shall be considered inactive.
ARTICLE XI
Commission and Main Motions

Section 1. Composition and Responsibilities of the Commission
A. The Commission shall consist of a chairman and members appointed by the speaker of the House.

B. Main motions shall be submitted to the Commission via the vice speaker of the House.
   1. Main motions submitted by individual delegates must be seconded by another delegate.
   2. Main motions submitted on behalf of chapters must be adopted by a majority of the chapter steering committee.
   3. Main motions submitted on behalf of affiliates must be adopted by the affiliate’s board of directors.
   4. Main motions submitted on behalf of Board of Directors, Commission and committees must be adopted by a majority of the submitting group.
   5. Only motions submitted by individual delegates need to be seconded.

C. The Commission shall distribute main motions as follows: Practice-related main motions shall be reported to the House of Delegates by the Commission; operational main motions shall be reported to the House of Delegates by the Board of Directors; and main motions containing Bylaw implications or Bylaw amendments shall be reported to the House of Delegates by the Committee on Bylaws.

Section 2. Deadline
Proposed main motions from any approved source other than the Board of Directors and the Commission shall be received by the vice speaker of the House by the first business day of January.

Section 3. Notification
Main motions received by the Commission and sent to the House of Delegates shall be sent to the delegates 45 days prior to the beginning of the annual meeting of the House of Delegates.

Section 4. Late Main Motions
A. Late main motions received by the speaker of the House prior to the beginning of the first business meeting of the House of Delegates shall be read and require a two-thirds vote of the delegates to be debated.
B. Late main motions received by the speaker of the House after the beginning of the first business meeting of the House of Delegates shall be read and require a three-fourths vote of the delegates to be debated.

**ARTICLE XII**
Parliamentary Authority

The rules contained in the current edition of *Robert’s Rules of Order Newly Revised*, shall govern the ASRT in all cases in which they are applicable unless they are inconsistent with these Bylaws, the Articles of Incorporation, or state or federal law.

**ARTICLE XIII**
Amendments

A. Amendments to the Bylaws shall be received by the vice speaker by the first business day of January.

B. Notice of Bylaw amendments shall be provided to the delegates at least 45 days prior to the beginning of the annual meeting of the House of Delegates.

C. All main motions received by the first business day of January that require a Bylaw amendment shall be sent to the chairman of the Committee on Bylaws for proper structure to be included in the *Delegate Handbook* at the upcoming annual meeting of the House of Delegates.

D. These Bylaws may be amended by two-thirds vote of the delegates voting at the annual meeting of the House of Delegates.

**ARTICLE XIV**
Indemnification

Every officer, director, employee or delegate of the ASRT shall be indemnified by the ASRT against all expenses and liabilities, including attorney's fees, in connection with any threatened, pending or completed proceeding in which the above-named individual is involved by reason of being or having been an officer, director, employee or delegate of the ASRT if the above-named individual acted in good faith and within the scope of the above-named individual’s authority and in a manner reasonably believed to be not opposed to the best interests of the ASRT. In no event shall indemnification be paid to or on behalf of any above-named individual going beyond or acting beyond the powers granted by authority of this organization or Bylaws. The foregoing right of indemnification shall be in addition to, and not exclusive of, all other rights to which such officer, director, employee or delegate may be entitled.
ARTICLE XV
Dissolution

In the event of dissolution or final liquidation of the ASRT, all of its assets remaining after payment of its obligations shall have been made or provided for, shall be distributed to and among such corporations, foundations or other organizations organized and operated exclusively for scientific and educational purposes in radiologic technology, consistent with those of the ASRT, as designated by the Board of Directors.
Main Motion C-14.01

Amend the Magnetic Resonance Imaging Practice Standards

The Practice Standards Council moves to amend the Magnetic Resonance Imaging Practice Standards, pages MR 1-33, by: Substitution.
The Practice Standards for Medical Imaging and Radiation Therapy

Magnetic Resonance Practice Standards
Preface to Practice Standards

A profession’s practice standards serve as a guide for appropriate practice. The practice standards define the practice and establish general criteria to determine compliance. Practice standards are authoritative statements established by the profession for 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 Magnetic Resonance Practice Standards

Definition

The practice of magnetic resonance is performed by a segment of health care professionals responsible for the use of radiofrequencies (RFs) within a magnetic field on humans and animals for diagnostic, therapeutic, or research purposes. A magnetic resonance technologist performs magnetic resonance procedures at the request of and for interpretation by a licensed independent practitioner.

The complex nature of disease processes involves multiple imaging modalities. Although an interdisciplinary team of clinicians, magnetic resonance technologists and support staff plays a critical role in the delivery of health services, it is the magnetic resonance technologist who performs the magnetic resonance examination that creates the images needed for diagnosis.

Magnetic resonance integrates scientific knowledge, technical skills, patient interaction and compassionate care resulting in diagnostic information. A magnetic resonance technologist recognizes conditions essential for successful completion of the procedure.

Magnetic resonance technologists must demonstrate an understanding of human anatomy, human physiology, pathology, pharmacology and medical terminology. They must maintain a high degree of accuracy in positioning and magnetic resonance technique. Magnetic resonance technologists must possess, use and maintain knowledge about magnetic protection and safety. Magnetic resonance technologists independently perform or assist the licensed independent practitioner in the completion of diagnostic, therapeutic, interventional and fusion magnetic resonance procedures. Magnetic resonance technologists prepare, administer and document activities related to medications in accordance with state and federal regulations or lawful institutional policy.

The magnetic resonance technologist is the primary liaison between patients, licensed independent practitioners, and other members of the support team. Magnetic resonance 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, magnetic resonance technologists participate in quality improvement processes and continually assess their professional performance.

Magnetic resonance 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, public education, knowledge and technical competence.

Education and Certification

Magnetic resonance technologists prepare for their role on the interdisciplinary team through one of the following:
• Successfully completing an accredited educational program in magnetic resonance and attaining certification in magnetic resonance by the American Registry of Radiologic Technologists.

Or

• Possessing appropriate primary certification by the American Registry of Radiologic Technologists or Nuclear Medicine Technologist Certification Board at the time of examination, documenting didactic and clinical experience in specific procedures and attaining certification in magnetic resonance by the American Registry of Radiologic Technologists.

Those passing the magnetic resonance examination use the credentials R.T.(MR).

To maintain ARRT certification, magnetic resonance 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, magnetic resonance 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 magnetic resonance technologist is impractical because clinical activities vary by practice needs and expertise of the magnetic resonance technologist. As magnetic resonance technologists gain more experience, knowledge and clinical competence, the clinical activities for the magnetic resonance 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 magnetic resonance technologist should, within the boundaries of all applicable legal requirements and restrictions, exercise individual thought, judgment and discretion in the performance of the procedure.
Magnetic Resonance 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 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 magnetic resonance technologist also includes:

1. Performing procedures or examinations under the order of a licensed independent practitioner for diagnostic interpretation or therapeutic intervention.
2. Applying principles of magnetic resonance safety to minimize risk to patient, self and others.

3. Selecting appropriate pulse sequences with consideration given to established protocols and other factors influencing data acquisition parameters.

4. Assisting the licensed independent practitioner with interventional procedures.

5. Post processing digital data for display or hard copy records, ensuring proper identification is evident.

6. Maintaining archival storage of digital data as appropriate.
Magnetic Resonance Clinical Performance Standards

Standard One – Assessment

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:
1. Screens patient for potential MRI contraindications either within the patients’ body or on their person prior to entering the magnet room.
2. Locates and reviews previous examinations for comparison.
3. Identifies and removes items that may affect patients safety, damage the equipment or affect the image quality.
Magnetic Resonance Clinical Performance Standards

Standard Two – Analysis/Determination

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:

1. Selects appropriate imaging coil.

2. Determines optimum placement of electrocardiogram (ECG) electrodes.

3. Reviews the patient's medical record and licensed independent practitioner’s request to determine optimal imaging parameters for clinical indications.

4. Determines the appropriate type and dose of contrast media to be administered based on established protocols.
5. Determines patient compliance with pre-examination preparation instructions.
Magnetic Resonance Clinical Performance Standards

Standard Three – Patient Education

The magnetic resonance 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 magnetic resonance technologist:

1. Verifies that the patient has consented to the procedure and fully understands its risks, benefits, alternatives and follow-up. The magnetic resonance 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 magnetic resonance technologist:

1. Consults with other departments, such as patient transportation and anesthesia, for patient services.

2. Determines that all procedural requirements are in place to achieve a quality diagnostic examination.
Magnetic Resonance Clinical Performance Standards

Standard Four – Performance

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:
1. Provides hearing protection to patient and others.
2. Positions imaging coil.

3. Monitors the patient’s specific absorption rate for variances.

4. Identifies appropriate cardiac or respiratory triggers.

5. Uses appropriate positioning and/or insulation materials to shield the patient from excessive heating and/or burns.
Magnetic Resonance Clinical Performance Standards

Standard Five – Evaluation

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:
1. Reviews images to determine if additional imaging sequences will enhance the diagnostic value of the procedure.
Magnetic Resonance Clinical Performance Standards

Standard Six – Implementation

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:
   1. Performs routine and specialized postprocessing.
   2. Adjusts imaging parameters, patient procedure or computer-generated information to improve the outcome.
Magnetic Resonance Clinical Performance Standards

Standard Seven – Outcomes Measurement

The magnetic resonance technologist reviews and evaluates the outcome of the procedure.

Rationale
To evaluate the quality of care, the magnetic resonance 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 magnetic resonance 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.
Magnetic Resonance Clinical Performance Standards

Standard Eight – Documentation

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:
1. Documents unintended patient outcomes according to established guidelines.
Magnetic Resonance Quality Performance Standards

Standard One – Assessment

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:
1. Maintains controlled access to the magnet room.

2. Participates in patient safety, risk management and quality management activities.
Magnetic Resonance Quality Performance Standards

Standard Two – Analysis/Determination

The magnetic resonance 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 magnetic resonance 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
None added.
Magnetic Resonance Quality Performance Standards

Standard Three – Education

The magnetic resonance 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 magnetic resonance 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.
Magnetic Resonance Quality Performance Standards

Standard Four – Performance

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:
1. Performs routine archiving status checks.
2. Monitors image production to determine technical acceptability.
3. Consults with medical physicist and/or engineer in performing and documenting the quality assurance tests.
Magnetic Resonance Quality Performance Standards

Standard Five – Evaluation

The magnetic resonance 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 magnetic resonance technologist:
1. Validates quality assurance testing conditions and results.
2. Evaluates quality assurance results.
3. Formulates an action plan.

Specific Criteria
None added.
Magnetic Resonance Quality Performance Standards

Standard Six – Implementation

The magnetic resonance 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 magnetic resonance technologist:

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

Specific Criteria
None added.
Magnetic Resonance Quality Performance Standards

Standard Seven – Outcomes Measurement

The magnetic resonance 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 magnetic resonance 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.
Magnetic Resonance Quality Performance Standards

Standard Eight – Documentation

The magnetic resonance 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 magnetic resonance 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
None added.
Magnetic Resonance Professional Performance Standards

Standard One – Quality

The magnetic resonance 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 magnetic resonance 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
None added.
Magnetic Resonance Professional Performance Standards

Standard Two – Self-Assessment

The magnetic resonance 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 magnetic resonance technologist:

1. Assess 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.
Magnetic Resonance Professional Performance Standards

Standard Three – Education

The magnetic resonance 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 magnetic resonance 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.
Magnetic Resonance Professional Performance Standards

Standard Four – Collaboration and Collegiality

The magnetic resonance 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 magnetic resonance 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 magnetic resonance technologist:

1. Instructs others on magnet and radiofrequency energy safety.

2. Instructs health care team regarding contrast media considerations.
Magnetic Resonance Professional Performance Standards

Standard Five – Ethics

The magnetic resonance 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 magnetic resonance technologist:
1. Provides health care services with respect for the patient’s dignity, age-specific needs and culture.
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.
Magnetic Resonance Professional Performance Standards

Standard Six – Research and Innovation

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

Specific Criteria
None added.
Magnetic Resonance Advisory Opinion Statements

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

Medication Injections by Radiologic Technologists.

Medication Injection Through Existing Vascular Access.
Main Motion C-14.02

Amend the Radiologist Assistant Practice Standards
The Practice Standards Council moves to amend the Radiologist Assistant Practice Standards, pages RA 1-33, by: Substitution.
The Practice Standards for Medical Imaging and Radiation Therapy

Radiologist Assistant Practice Standards
Preface to Practice Standards

A profession’s practice standards serve as a guide for appropriate practice. The practice standards define the practice and establish general criteria to determine compliance. Practice standards are authoritative statements established by the profession for 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 Radiologist Assistant Practice Standards

Definition
A radiologist assistant is an advanced-practice radiographer who practices under the supervision of a radiologist and enhances patient care in radiology services. As a member of the radiologist-directed team, the radiologist assistant exercises independent professional judgment in:

A. Assessing, monitoring and managing patient physiologic and psychologic status.
B. Performing invasive and noninvasive imaging procedures as delegated by the radiologist who is licensed to practice and has privileges for the procedure being performed by the radiologist assistant.
C. Obtaining images necessary for diagnosis and providing initial observations to the supervising radiologist.
D. Emphasizing patient safety and verifying procedure appropriateness by analyzing and incorporating evidenced-based practices for optimal patient care.
E. Advocating for patient and personnel radiation safety by employing the ALARA principle to minimize patient and occupational radiation dose.
F. Participating in quality improvement activities within the radiology practice.
G. Assisting with data collection and review for clinical trials or other research.

Education and Certification
Radiologist assistants prepare for their role as mid-level providers in medical imaging by attaining primary certification as a radiographer by the American Registry of Radiologic Technologists, successfully completing a recognized radiologist assistant educational program and attaining certification by the ARRT.

Those passing the registered radiologist assistant examination use the credentials R.R.A.

To sustain a level of expertise and awareness of changes and advances in practice and to maintain certification, the R.R.A. must complete appropriate continuing education requirements, as defined by the ARRT.

Overview
An interdisciplinary team of radiologists, radiologist assistants, 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 radiologist assistant is impractical because clinical activities vary by practice needs and expertise of the radiologist assistant. As radiologist assistants gain more experience, knowledge and clinical competence, the clinical activities for the radiologist assistant may evolve. The clinical activities are delegated by the supervising radiologist in accordance with state statute or regulations and lawful institutional policies.

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 radiologist assistant should, within the
boundaries of all applicable legal requirements and restrictions, exercise individual thought, judgment and discretion in the performance of the procedure.

*In addition, because a radiologist assistant holds radiographer credentials, specific criteria for radiographers are incorporated into these standards by reference.* Both the Radiologist Assistant and Radiography sections of the Practice Standards for Medical Imaging and Radiation Therapy should be consulted when seeking practice information for the radiologist assistant practice.
Radiologist Assistant Scope of Practice

Performance of clinical activities by the radiologist assistant is defined by educational preparation, documented clinical competence with radiologist supervision and radiologist delegation in accordance with state laws, regulations and lawful institutional policy.

Preprocedure responsibilities include, but are not limited to, completing patient history and physical, determining procedure appropriateness and participating in informed patient consent. The radiologist assistant reviews variances identified through preprocedural evaluation that may influence the expected outcome with the supervising radiologist prior to the procedure.

The radiologist assistant performs or assists the radiologist with noninvasive and invasive radiology procedures using image guidance as appropriate. The radiologist assistant participates in the preparation, administration and documentation of medications. The radiologist assistant assesses, monitors and manages patient status, including patients under minimal and moderate sedation.

Postprocedural responsibilities include, but are not limited to, evaluating images for completeness and diagnostic quality, reporting initial observations to the supervising radiologist, providing follow-up patient evaluation and communicating the radiologist’s report to the appropriate health care providers. The radiologist assistant does not provide an image interpretation as defined by the American College of Radiology.

Radiologist assistants act as liaisons between patients, radiographers, radiologists and other members of the health care team. Radiologist assistants remain sensitive to the physical, cultural and emotional needs of patients through good communication, comprehensive patient assessment, continuous patient monitoring and advanced patient care skills. Radiologist assistants use independent, professional, ethical judgment and critical thinking to safely perform imaging procedures. Radiologist assistants commit to continued professional development to enhance patient care, public education, knowledge and technical competence.

Radiologist assistants maintain their radiographer credentials; therefore, scopes of practice for radiographers are incorporated into these standards by reference. Both the Radiologist Assistant and Radiography sections of the Practice Standards for Medical Imaging and Radiation Therapy should be consulted when seeking practice information for the radiologist assistant practice.
Radiologist Assistant Clinical Performance Standards

Standard One – Assessment

The radiologist assistant 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 radiologist assistant:
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 radiologist assistant:
1. Interviews patient to obtain, verify and update medical history.
2. Performs and documents a radiology-focused physical examination, an analysis of data (e.g., signs and symptoms, laboratory values, vital signs, and significant abnormalities) and reports findings to the supervising radiologist.
3. Observes and assesses a patient who has received minimal and moderate sedation.
4. Assesses the patient’s level of anxiety and pain and informs the supervising radiologist.

See also Radiography Practice Standards.
Radiologist Assistant Clinical Performance Standards

Standard Two – Analysis/Determination

The radiologist assistant 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 radiologist assistant:

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 radiologist assistant:

1. Determines patient compliance, if needed, with pre-examination preparation instructions.

2. Reviews the patient’s medical record and the licensed independent practitioner’s request to determine optimal imaging procedure for clinical indications.

See also Radiography Practice Standards.
Radiologist Assistant Clinical Performance Standards

Standard Three – Patient Education

The radiologist assistant 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 radiologist assistant:
1. Verifies that the patient has consented to the procedure and fully understands its risks, benefits, alternatives and follow-up. The radiologist assistant 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 radiologist assistant:
1. Explains procedure to the patient or significant others, including a description of risks, benefits, alternatives and follow-up.
2. Provides pre- and postcare instructions to the patient under the supervision of a radiologist.
3. Provides information regarding risks and benefits of radiation.
4. Refers questions about diagnosis, treatment or prognosis to the supervising radiologist.
5. Obtains informed consent.
See also Radiography Practice Standards.
Radiologist Assistant Clinical Performance Standards

Standard Four – Performance

The radiologist assistant 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 radiologist assistant:

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 radiologist assistant:

1. Administers minimal and moderate sedation and observes and assesses the patient who has received minimal and moderate sedation.
2. Recognizes and responds to medical emergencies, activates emergency response systems and provides advanced life support intervention.

3. Performs invasive and noninvasive procedures as delegated by the radiologist.

4. Administers medications as approved by the supervising radiologist.

5. Monitors patient’s physical condition during the procedure and responds to changes in patient vital signs, hemodynamics and level of consciousness.

6. Collects and documents tissue samples.

7. Communicates the supervising radiologist’s report to the appropriate health care provider consistent with the American College of Radiology Practice Guidelines for Communication of Diagnostic Imaging Findings.

See also Radiography Practice Standards.
Radiologist Assistant Clinical Performance Standards

Standard Five – Evaluation

The radiologist assistant 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 radiologist assistant:
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
None added.

See also Radiography Practice Standards.
Radiologist Assistant Clinical Performance Standards

Standard Six – Implementation

The radiologist assistant 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 radiologist assistant:
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
None Added.

See also Radiography Practice Standards.
Radiologist Assistant Clinical Performance Standards

Standard Seven – Outcomes Measurement

The radiologist assistant reviews and evaluates the outcome of the procedure.

Rationale
To evaluate the quality of care, the radiologist assistant 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 radiologist assistant:
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
The radiologist assistant:
1. Evaluates images for completeness and diagnostic quality and recommends additional images.
2. Reports clinical and imaging observations and procedure details to the supervising radiologist.
3. Performs follow-up patient evaluation and communicates findings to the supervising radiologist.

See also Radiography Practice Standards.
Radiologist Assistant Clinical Performance Standards

Standard Eight – Documentation

The radiologist assistant 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 radiologist assistant:

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 radiologist assistant:

1. Documents use of minimal and moderate sedation.

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard One – Assessment

The radiologist assistant 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 radiologist assistant:
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 radiologist assistant:
1. Participates in radiation protection, patient safety, risk management and quality management activities.

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard Two – Analysis/Determination

The radiologist assistant 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 radiologist assistant:
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
None added.

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard Three – Education

The radiologist assistant 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 radiologist assistant:
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

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard Four – Performance

The radiologist assistant 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 radiologist assistant:

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 radiologist assistant:

1. Participates in quality improvement activities within the radiology practice.
2. Provides a safe environment for patients and staff.

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard Five – Evaluation

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

Specific Criteria
The radiologist assistant:
   1. Evaluates radiation safety, patient safety, risk management and quality management activities.

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard Six – Implementation

The radiologist assistant 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 radiologist assistant:
1. Obtains assistance to support the quality assurance action plan.
2. Implements the quality assurance action plan.

Specific Criteria
The radiologist assistant:
1. Implements radiation safety, patient safety, risk management and quality management decisions.

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard Seven – Outcomes Measurement

The radiologist assistant 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 radiologist assistant:

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.

See also Radiography Practice Standards.
Radiologist Assistant Quality Performance Standards

Standard Eight – Documentation

The radiologist assistant 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 radiologist assistant:

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
None added.

See also Radiography Practice Standards.
Radiologist Assistant Professional Performance Standards

Standard One – Quality

The radiologist assistant 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 radiologist assistant:

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
None added.

See also Radiography Practice Standards.
Radiologist Assistant Professional Performance Standards

Standard Two – Self Assessment

The radiologist assistant 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 radiologist assistant:
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.

See also Radiography Practice Standards.
Radiologist Assistant Professional Performance Standards

Standard Three – Education

The radiologist assistant 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 radiologist assistant:
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.

See also Radiography Practice Standards.
Radiologist Assistant Professional Performance Standards

Standard Four – Collaboration and Collegiality

The radiologist assistant 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 radiologist assistant:
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 radiologist assistant:
1. Promotes understanding of procedures through in-service for other health care providers.

See also Radiography Practice Standards.
Radiologist Assistant Professional Performance Standards

Standard Five – Ethics

The radiologist assistant 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 radiologist assistant:
1. Provides health care services with respect for the patient’s dignity, age-specific needs and culture.
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
The radiologist assistant:
1. Communicates with the supervising radiologist prior to providing final diagnosis to other health care providers.

See also Radiography Practice Standards.
Radiologist Assistant Professional Performance Standards

Standard Six – Research and Innovation

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

Specific Criteria
The radiologist assistant:
1. Assists with data collection and review for clinical trials or other research.

See also Radiography Practice Standards.
Radiologist Assistant Advisory Opinion Statements

Guidance for the Communication of Clinical and Imaging Observations and Procedure Details by Radiologist Assistants to Supervising Radiologists.

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

Medication Injections by Radiologic Technologists.

Medication Injection Through Existing Vascular Access.

Placement of Personal Radiation Monitoring Devices.
References

ARRT R.R.A. Entry Level Clinical Activities (ELCA) 2009

ARRT R.R.A. Continuing Education Requirements

ASRT Radiologist Assistant Curriculum

ARRT Content Specifications for the Registered Radiologist Assistant Examination
Main Motion C-14.03

Adopt the newly developed Medical Dosimetry Practice Standards

The Practice Standards Council moves to adopt the Medical Dosimetry Practice Standards, pages MD 1-32.

**Motion 1**

Motion on behalf of the Medical Dosimetry Practice Standards Council Subcommittee and the Practice Standards Council to withdraw C-14.03 in support of C-14.08.

Main Motion C-14.04

Rescind the Position Statement “Qualifications for Performing Medical Dosimetry”

The Practice Standards Council moves to rescind the position statement titled “Qualifications for Performing Medical Dosimetry.”

**Qualifications for Performing Medical Dosimetry:**

It is the position of the American Society of Radiologic Technologists that only individuals certified in medical dosimetry by the Medical Dosimetrist Certification Board or equivalent perform medical dosimetry procedures.

Main Motion C-14.05

Rescind the Position Statement “Certification of Personnel Practicing in the Radiologic Sciences”

The Practice Standards Council moves to rescind the position statement titled “Certification of Personnel Practicing in the Radiologic Sciences.”

**Certification of Personnel Practicing in the Radiologic Sciences**

It is the position of the American Society of Radiologic Technologists that radiologic technologists practicing radiography, sonography, nuclear medicine, radiation therapy and other imaging disciplines or specialties in all health care facilities are certified by agencies such as the American Registry of Radiologic Technologists, American Registry for Diagnostic Medical Sonography, Nuclear Medicine Technology Certification Board, Medical Dosimetrist Certification Board or meet state licensure requirements.

Main Motion C-14.06

Amend the Practice Standards Glossary

The Practice Standards Council moves to amend the Practice Standards Glossary, pages 1-6, by: Substitution.
**Motion 2**
Motion to amend the definition of “educationally prepared” by inserting “properly” before “perform,” striking “safely” after “procedure,” and inserting “in accordance with accepted practice standards” at the end of the statement.
Glossary to The Practice Standards for Medical Imaging and Radiation Therapy

Accuracy – Ability of the bone mineral densitometry system to measure the true value of an object.

Act – anything done, being done, or to be done; the process of doing. Synonymous with “procedure” and “clinical services.”

Action plan – A program or method developed prior to the performance of the procedure or treatment.

Advanced-practice radiographer – A registered technologist who has gained additional knowledge and skills through successful completion of an organized program or radiologic technology education that prepares radiologic technologists for advanced practice roles and has been recognized by the national certification organization to engage in the practice of advanced-practice radiologic technology.

Anatomic (anatomical) landmarks – Bones or other identifiable points that are visible or palpable and indicate the position of hidden anatomy.

Archive – (archival) The storage of data in either hard (film) or soft (digital) form.

Artifact – A structure or feature produced by the technique used and not occurring naturally.

As low as reasonably achievable (ALARA) – Acronym for “as low as (is) reasonably achievable,” which means making every reasonable effort to maintain exposures to radiation as far below the dose limits as practical, consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to use of nuclear energy and licensed materials in the public interest. The ASRT recognizes the concept of ALARA to include energies used for magnetic resonance and sonographic imaging.

Assess – To determine the significance, importance or value.

Assessment – The process by which a patient’s condition is appraised or evaluated.

Beam modification devices – Devices that change the shape of the treatment field or distribution of the radiation at (tissue) depth.

Blocks/custom made blocks – Devices designed to shape the radiation field.
**Brachytherapy** – A type of radiation therapy in which radioactive material sealed in needles, seeds, wires or catheters is placed directly into or near a tumor. Also called implant radiation therapy, internal radiation therapy and radiation brachytherapy.

**Clinical** – Pertaining to or founded on actual observation and treatment of patients.

**Clinically competent** – The ability to perform a clinical procedure in a manner that satisfies the demands of a situation, as assessed and documented by a qualified individual.

**Contraindicate** – To warrant an otherwise advisable procedure or treatment inappropriate.

**Contrast media** – Any internally administered substance that has a different opacity from soft tissue on radiography or computed tomography; includes barium, used to opacify parts of the gastrointestinal tract; water-soluble iodinated compounds, used to opacify blood vessels or the genitourinary tract; may refer to air occurring naturally or introduced into the body; also, paramagnetic substances used in magnetic resonance imaging.

**Customer** – Those internal and external individuals, departments and organizations that receive services or output or are the beneficiaries of the department’s activities.

**Digital imaging communications in medicine (DICOM)** – The Digital Imaging and Communications in Medicine (DICOM) standards are a complex set of instructions to exchange and present medical image information.

**Disease** – A pathological condition of the body that presents a group of clinical signs, symptoms and laboratory findings peculiar to it and setting the condition apart as an abnormal entity differing from other normal or pathological conditions.

**Dose distributions** – Spatial representations of the magnitude of the dose produced by a source of radiation. They describe the variation of dose with position within an irradiated volume.

**Dosimetric calculations** – Computation of treatment unit settings, monitor units, treatment times and radiation doses to anatomical areas of interest.

**Educationally prepared** – The successful completion of didactic and clinical education necessary to properly perform a procedure in accordance with accepted practice standards.

**Electrocardiogram (ECG)** – A record of the electrical activity of the heart.

**Ethical** – Conforming to the norms or standards of professional conduct.

**Examination preparation** – The act of helping to ready a patient for a diagnostic imaging procedure.

**Fiducial markers** – Fixed reference points against which other objects can be measured. They may be placed internally, at skin surface or fixed externally to the patient.
**Immobilization device** (radiation therapy) – Device that assists in reproducing the treatment position while restricting patient movement (i.e., casts, masks or bite blocks).

**Initial observation** – Assessment of technical image quality with pathophysiology correlation communicated to a radiologist.

**Interpretation** – The process of examining and analyzing all images within a given procedure and integration of the imaging data with appropriate clinical data in order to render an impression or conclusion set forth in a formal written report composed and signed by the radiologist.

**Interventional procedures** – Minimally invasive medical imaging guidance methods used to gain access to vessels and organs to diagnose and/or treat certain conditions percutaneously that might otherwise require surgery.

**Licensed independent practitioner** – An individual permitted by law to provide care and services, without direction or supervision, within the scope of the individual’s license and consistent with individually granted privileges (e.g., physician, nurse practitioner, physician assistant).

**Medical dosimetrist** – An individual who has education and knowledge in treatment planning and who, under the supervision of a radiation physicist and/or radiation oncologist, is capable of performing dose calculations and of assisting in calibration and verification of dose distribution within the patient.

**Medical physicist** – An individual who is competent to practice independently in the safe use of x-rays, gamma rays, electron and other charged particle beams, neutrons, radionuclides, sealed radionuclide sources, ultrasonic radiation, radiofrequency radiation and magnetic fields for both diagnostic and therapeutic purposes. An individual will be considered competent to practice in the field of Medical Physics if he or she is certified by the appropriate recognized certification organization.

**Medication** – Any chemical substance intended for use in the medical diagnosis, cure, treatment or prevention of disease.

**Minimal sedation (anxiolysis)** – A drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are unaffected.

**Moderate sedation** – A drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.
**Molecular imaging** – A biomedical discipline enabling the visualization, characterization, and quantification of biologic processes taking place at the cellular and subcellular levels within intact living subjects.

**Monitor units (MU)** – Unit of output measure used for linear accelerators. Accelerators are calibrated so that 1MU delivers 1cGy for a standard, reference field size at a standard reference depth at a standard source to calibration point.

**Normal tissue tolerance** – Radiation tolerance levels of healthy organs near or within the radiation treatment fields.

**Pathophysiology** – The study of how normal physiological processes are altered by disease.

**Personal radiation monitoring devices** – Devices designed to be worn or carried by an individual for the purpose of measuring the dose of radiation received.

**Physics survey** – Performing equipment testing, evaluating the testing results and completing a formal written report of same. The written survey report, validated by a medical physicist, contains sufficient information to document that each test was conducted according to local, state or federal requirements and includes assessment of corrective actions and recommendations for improvements.

**Portal images** – Images taken to demonstrate radiographically that the treatment field, as externally set on the patient, adequately encompasses the desired treatment volume and at the same time avoids adjacent critical structures.

**Post processing** – Computerized processing of data sets after acquisition to create a diagnostic image.

**Precision** – Ability of the bone mineral densitometry system to reproduce the same results in repeat measurement of the same object.

**Protocol** – The plan for carrying out a scientific study or a patient's treatment regimen.

**Qualified supervisor** (limited x-ray machine operator) – Individual who is educationally prepared, clinically competent, and credentialed in the medical imaging and radiation therapy sciences who provides clinical supervision to another individual.

**Quality assurance** – Activities and programs designed to achieve a desired degree or grade of care in a defined medical, nursing or health care setting or program.

**Quality control (QC)** – The routine performance of techniques used in monitoring or testing and maintenance of components of medical imaging and radiation therapy equipment. This includes interpretation of data regarding equipment function and confirmation that corrective actions are taken.
Radiation oncologist – A physician who specializes in using radiation to treat cancer.

Radiation protection – Prophylaxis against injury from ionizing radiation. The only effective preventive measures are shielding the operator, handlers and patients from the radiation source; maintaining appropriate distance from the source; and limiting the time and amount of exposure.

Radiobiology – The study of the effects of radiation on living organisms.

Radiography – The process of obtaining an image for diagnostic examination using x-rays.

Repeat analysis – A systematic approach to critically investigate images or procedures that did not meet established standards. The general purpose of repeat analysis is to determine why images or procedures did not meet established standards, implement corrective action and avoid the same outcome(s) in the future.

Sentinel event – An unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof. Serious injury specifically includes loss of limb or function. The phrase “or the risk thereof” includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome.

Setup – Arrangement of treatment parameters used in preparation for delivering radiation therapy; includes patient positioning data, field alignment information and equipment configurations.

Simulation – A process using imaging technologies to plan radiation therapy so that the target area is precisely located and marked; the mockup procedure of a patient treatment with medical imaging documentation of the treatment portals.

Static – Any radiographic image that is fixed or frozen in time.

Supervising radiologist – A board-certified radiologist who oversees duties of the radiologist assistant and has appropriate clinical privileges for the procedure performed by the RA.

Timeout – Preprocedural pause to conduct a final assessment that the correct patient, site and procedure are identified.

Tolerance levels (doses) – The maximum radiation dose that may be delivered to a given biological tissue at a specified dose rate and throughout a specified volume without producing an unacceptable change in the tissue.

Treatment calculations – See Dosimetric calculations.

Treatment field (portal) – Volume [of tissue] exposed to radiation from a single radiation beam.
Treatment planning – The process by which dose delivery is optimized for a given patient and clinical situation. It encompasses procedures involved in planning a course of radiation treatment; includes simulation through completion of the treatment summary.

Treatment record – Documents the delivery of treatments, recording fractional and cumulative doses, machine settings, verification imaging; and the ordering and implementation of prescribed changes.

T-score – Number of standard deviations the individual’s bone mineral density is from the average bone mineral density for sex-matched young normal peak bone mass.

Venipuncture – The transcutaneous puncture of a vein by a sharp rigid stylet or cannula carrying a flexible plastic catheter or by a steel needle attached to a syringe or catheter.

Z-score – Number of standard deviations the individual’s bone mineral density is from the average bone mineral density for sex and age-matched reference group.
Main Motion C-14.07

Adopt the Position Statement titled “Digital Imaging Post-Processing”
The Practice Standards Council moves to adopt the following position statement:

Digital Imaging Post-Processing
It is the position of the American Society of Radiologic Technologists that an image obtained for a prescribed view or protocol in a digital imaging system or series be assigned only to that specific view and not be altered by post-processing in order to be assigned to any other view.

Motion 3
Motion to amend by inserting the following sentence to the end of the statement: “To misrepresent a post-processed image as an additional projection or exposure is unethical conduct.”

Motion 4
Motion to amend Motion C-14.07, Adopt the Position Statement titled Digital Post-Processing by:
- Striking “imaging” and inserting “image” before “post-processing” and adding “in radiography” after “post-processing” in the title;
- Striking “view or protocol” and inserting “projection” after “prescribed”;
- Striking “view” and inserting “projection” after “specific”;
- And striking “assigned to any other view” and inserting “represented as another projection” after “be”.

Digital Image Post-Processing in Radiography
It is the position of the American Society of Radiologic Technologists that an image obtained for a prescribed projection in a digital imaging system or series be assigned only to that specific projection and not be altered by post-processing in order to be represented as another projection.

Main Motion C-14.08

Adopt the newly developed Medical Dosimetry Practice Standards as amended by the Commission

The Commission moves to adopt the Medical Dosimetry Practice Standards, pages MD 1-32, as amended by the Commission.
The Practice Standards for Medical Imaging and Radiation Therapy

Medical Dosimetry Practice Standards
Preface to Practice Standards

A profession’s practice standards serve as a guide for appropriate practice. The practice standards define the practice and establish general criteria to determine compliance. Practice standards are authoritative statements established by the profession for 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 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 Medical Dosimetry Practice Standards

Definition

The practice of medical dosimetry is performed by health care professionals responsible for designing a treatment plan for use in the administration of ionizing radiation for the purpose of treating diseases, primarily cancer.

The complex nature of cancer frequently requires the use of multiple treatment specialties. Radiation oncology is one such specialty. It requires an interdisciplinary team of radiation oncologists, medical dosimetrists, radiation therapists, medical radiation physicists and nurses. It is typically the medical dosimetrist who generates an optimal treatment plan and ensures the appropriate transfer of data that the radiation therapist will use to treat the patient. The medical dosimetrist maintains a commitment to a high degree of accuracy, thoroughness and safety.

Medical dosimetrists must demonstrate an understanding of anatomy, physiology, pathology and medical terminology. In addition, comprehensive knowledge of characteristics and clinical relevance of radiation oncology treatment machine and equipment, radiobiology, radiation physics, radiation safety and psychosocial aspects of cancer is required.

Medical dosimetrists must maintain a high degree of accuracy in treatment planning optimization, treatment techniques and positioning. Medical dosimetrists assist the radiation oncologist in localizing the treatment area, generate a treatment plan and actively communicate with the radiation oncology team to enable and ensure the appropriate transfer of information.

Medical dosimetrists are the primary liaison between the radiation oncologist, radiation therapist, and medical physicist. Medical dosimetrists must remain sensitive to the physical and emotional needs of the patient through good communication and patient assessment. Radiation therapy often involves daily treatments extending over several weeks using highly sophisticated equipment. It requires thorough initial planning as well as constant patient care and monitoring. As members of the health care team, medical dosimetrists participate in quality improvement processes and continually assess their professional performance.

Medical dosimetrists think critically and use independent, professional and ethical judgment in all aspects of their work. They engage in continuing education in their area of practice in order to enhance treatment planning skills, radiation safety, public education, knowledge and technical competence.

Education and Certification

Medical dosimetrists prepare for their role on the interdisciplinary team through one of the following:

- Possessing a bachelor’s of science or applied science degree and successfully completing an accredited educational program in medical dosimetry and attaining appropriate certification by the Medical Dosimetrist Certification Board.
Or

- Possessing a bachelor’s of science or applied science degree related to medical dosimetry and attaining appropriate certification by the Medical Dosimetrist Certification Board.

Or

- Possessing a bachelor’s of science or applied science degree, possessing primary certification as a radiation therapist by the American Registry of Radiologic Technologists, documenting clinical experience and continuing education in medical dosimetry as specified by the Medical Dosimetrist Certification Board and attaining appropriate certification by the Medical Dosimetrist Certification Board.

Those passing this examination use the credential certified medical dosimetrist, or CMD.

To maintain CMD certification, medical dosimetrists 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 radiation oncologists, radiation therapists, medical dosimetrists, medical physicists and other support staff plays a critical role in the delivery of health services as new modalities emerge and the need for radiation therapy treatment procedures and treatment planning evolve. A comprehensive procedure list for the medical dosimetrist is impractical because clinical activities vary by practice needs and expertise of the medical dosimetrist. As medical dosimetrists gain more experience, knowledge and clinical competence, the clinical activities for the medical dosimetrist 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 medical dosimetrist should, within the boundaries of all applicable legal requirements and restrictions, exercise individual thought, judgment and discretion in the performance of the procedure.
Medical Dosimetrist 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.

- 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 medical dosimetrist also includes:

1. Preparing radiation therapy treatment plans as prescribed by a radiation oncologist.

2. Obtaining and incorporating patient data from medical imaging procedures to be used in simulation, treatment planning, treatment delivery and quality assurance.

3. Performing or assisting with patient simulation as prescribed by a radiation oncologist.

4. Performing or assisting with the fabrication of patient immobilization and other treatment devices.

5. Preparing the patient for general or special treatment procedures.

6. Developing treatment strategies leading to optimal treatment plans under the direction of a radiation oncologist.

7. Performing dose calculations.
8. Evaluating treatment plans for accuracy.

9. Transferring and documenting treatment planning data according to departmental policy.

10. Monitoring, under the direction of a radiation oncologist, doses to normal tissues within the irradiated volume to ensure tolerance levels are not exceeded.

11. Participating in brachytherapy treatment planning and delivery.
Medical Dosimetrist Clinical Performance Standards

Standard One – Assessment

The medical dosimetrist 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 medical dosimetrist:

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. Assesses factors that may contraindicate the procedure, such as medications, patient history, insufficient patient preparation or artifacts.

5. Recognizes signs and symptoms of an emergency.

Specific Criteria
The medical dosimetrist:

1. Reviews patient history for previous therapeutic treatments.

2. Assesses the patient’s need for information and reassurance.
Medical Dosimetrist Clinical Performance Standards

Standard Two – Analysis/Determination

The medical dosimetrist 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 medical dosimetrist:
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 medical dosimetrist:
1. Gathers pertinent data relevant to the treatment planning and delivery process.
2. Recommends the appropriate immobilization devices and positioning aids for simulation and treatment.
3. Participates in reviewing patient treatment parameters and dose records to ensure treatment does not exceed the prescribed dose or normal tissue tolerances.
4. Recommends when to hold treatment until a radiation oncologist is notified.
Medical Dosimetrist Clinical Performance Standards

Standard Three – Patient Education

The medical dosimetrist 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 medical dosimetrist:

1. Verifies that the patient has consented to the procedure and fully understands its risks, benefits, alternatives and follow-up. The medical dosimetrist 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.

Specific Criteria

The medical dosimetrist:

1. Explains the role and function of the medical dosimetrist in the overall treatment course.

2. Reviews the treatment plan with the patient as requested by a radiation oncologist.
Medical Dosimetrist Clinical Performance Standards

Standard Four – Performance

The medical dosimetrist 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 medical dosimetrist:
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. Utilizes accessory equipment.
7. Assesses and monitors the patient’s physical, emotional and mental status.
8. Positions patient for anatomic area of interest, respecting patient ability and comfort.

Specific Criteria
The medical dosimetrist:
1. Collaborates with the medical physicist and radiation therapist to fabricate individualized immobilization, custom blocks and other beam-modifying devices.
2. Consults with the radiation oncologist regarding an optimal treatment plan for the patient.
3. Collaborates with the radiation therapist, medical physicist and radiation oncologist regarding the simulation process and procedures.
4. Prepares and positions the patient for simulation and treatment using appropriate positioning aids and immobilization devices.

5. Reviews simulation images with the radiation therapist, medical physicist and radiation oncologist.

6. Develops a treatment plan as directed and prescribed by the radiation oncologist.

7. Adheres to established best practice protocols, guidelines and radiation oncologist directives.

8. Calculates treatment unit parameters and doses to treatment volumes and points of interest.

9. Reviews treatment planning data for accuracy and appropriateness prior to input into the patient’s chart and initial treatment.

10. Develops a manual or computer-generated brachytherapy treatment plan as prescribed by a radiation oncologist.

11. Prepares or assists in preparing brachytherapy sources and equipment.

12. Ensures an independent machine-setting check is completed before treatment is delivered.
Medical Dosimetrist Clinical Performance Standards

Standard Five – Evaluation

The medical dosimetrist 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 medical dosimetrist:
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
None Added.
Medical Dosimetrist Clinical Performance Standards

Standard Six – Implementation

The medical dosimetrist 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 medical dosimetrist:
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 medical dosimetrist:
1. Reviews and implements treatment field changes indicated on simulation or portal images.
2. Evaluates reports from the clinical staff regarding deviations from standards or treatment plans and makes adjustments as necessary.
3. Develops additional treatment plans to achieve an optimal dose distribution.
4. Adapts procedures to equipment limitations and patient needs.
5. Ensures accuracy in the transfer and documentation of treatment parameters, according to departmental policies.
6. Works with radiation oncologists, medical physicists and radiation therapists to compensate for treatment inaccuracies.
Medical Dosimetrist Clinical Performance Standards

Standard Seven – Outcomes Measurement

The medical dosimetrist reviews and evaluates the outcome of the procedure.

Rationale
To evaluate the quality of care, the medical dosimetrist 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 medical dosimetrist:
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.

Specific Criteria
None Added.
Medical Dosimetrist Clinical Performance Standards

Standard Eight – Documentation

The medical dosimetrist 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 medical dosimetrist:
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 Medical Dosimetrist:
1. Reports deviations from the standard or planned treatment.
Medical Dosimetrist Quality Performance Standards

Standard One – Assessment

The medical dosimetrist 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 medical dosimetrist:

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 medical dosimetrist:

1. Assesses the environment for any potential radiation hazards.

2. Participates in radiation protection, patient safety, risk management and quality management activities according to departmental policies.
Medical Dosimetrist Quality Performance Standards

Standard Two – Analysis/Determination

The medical dosimetrist 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 medical dosimetrist:
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 medical dosimetrist:
1. Verifies the treatment summary and the mathematical accuracy of the prescription.
2. Reviews the treatment record and verifies calculations before and/or after treatment delivery.
Medical Dosimetrist Quality Performance Standards

Standard Three – Education

The medical dosimetrist informs the patient, public and other health care providers about procedures, equipment and facilities.

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 medical dosimetrist:
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
The medical dosimetrist:
1. Addresses concerns from the patient and significant others about appropriate and essential uses of radiation in treatment of diseases.

2. Assists in developing and producing educational materials for patients and the public regarding radiation therapy treatments.
Medical Dosimetrist Quality Performance Standards

Standard Four – Performance

The medical dosimetrist performs quality assurance activities.

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 medical dosimetrist:
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 medical dosimetrist:
1. Adheres to radiation safety rules and standards.
2. Makes the recommendation to discontinue patient treatment until equipment is operating properly.
3. Demonstrates safe handling, storing and disposal of brachytherapy sources.
Medical Dosimetrist Quality Performance Standards

Standard Five – Evaluation

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

Specific Criteria
The medical dosimetrist:
1. Reviews treatment calculations and ensures the validity of the treatment plan.
2. Ensures treatment parameters have been transferred correctly to the oncology information system.
3. Acquires data necessary to perform accurate patient protocol plans and participates in implementation of the plan.
4. Reviews treatment deviations and assists in determining possible causes and solutions.
Medical Dosimetrist Quality Performance Standards

Standard Six – Implementation

The medical dosimetrist 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 medical dosimetrist:

1. Assists in supporting the quality assurance action plan.
2. Implements the quality assurance action plan.

Specific Criteria
None Added.
Medical Dosimetrist Quality Performance Standards

Standard Seven – Outcomes Measurement

The medical dosimetrist 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 medical dosimetrist:
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.
Medical Dosimetrist Quality Performance Standards

Standard Eight – Documentation

The medical dosimetrist 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 medical dosimetrist:
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 medical dosimetrist:
1. Reports any treatment deviations in accordance with departmental, institutional and national quality assurance guidelines.
Medical Dosimetrist Professional Performance Standards

Standard One – Quality

The medical dosimetrist 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 medical dosimetrist:
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. Anticipates and responds to patient needs.
5. Respects cultural variations.

Specific Criteria
The medical dosimetrist:
1. Applies professional judgment and discretion while performing virtual or computer-aided simulations and during treatment planning.
Medical Dosimetrist Professional Performance Standards

Standard Two – Self-Assessment

The medical dosimetrist 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 medical dosimetrist:

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.
Medical Dosimetrist Professional Performance Standards

Standard Three – Education

The medical dosimetrist 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 medical dosimetrist:

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.
Medical Dosimetrist Professional Performance Standards

Standard Four – Collaboration and Collegiality

The medical dosimetrist 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 medical dosimetrist:

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 medical dosimetrist:

1. Interacts with all members of the radiation oncology team.
Medical Dosimetrist Professional Performance Standards

Standard Five – Ethics

The medical dosimetrist 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 medical dosimetrist:

1. Provides health care services with respect for the patient’s dignity, age-specific needs and culture.


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.
Medical Dosimetrist Professional Performance Standards

Standard Six – Research and Innovation

The medical dosimetrist 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 medical dosimetrist:
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 with colleagues through publication, presentation and collaboration.

5. Adopts new best practices.


Specific Criteria
None Added.
Medical Dosimetrist Advisory Opinion Statements

Placement of Personal Radiation Monitoring Devices.
Main Motion C-14.09

Rescind the Position Statement titled “Campaign Guidelines”
The Practice Standards Council moves to rescind the position statement titled “Campaign Guidelines.”

Campaign Guidelines
It is the position of the American Society of Radiologic Technologists (ASRT) that members running for national office or chapter delegate positions shall limit their campaign activities to ASRT-published candidate position statements and the use of the ASRT Communities Social Networking tool to ensure fairness and equal opportunity for all candidates.

Main Motion C-14.10

Adopt the Position Statement titled “Digital Image Cropping or Masking”
The Commission moves to adopt the following position statement:

Digital Image Cropping or Masking
It is the position of the American Society of Radiologic Technologists that a digital image should not be cropped or masked such that it eliminates areas of exposure from the image that is presented for interpretation. Pre-exposure collimation of the x-ray beam is necessary to comply with the principle of as low as reasonably achievable (ALARA). To determine that exposed anatomy on an image is not significant or of diagnostic value is a medical decision and is therefore outside of the scope of practice for a radiologic technologist.

Motion 5
Motion to amend by adding “in radiography” after “masking” in the title.

Digital Image Cropping or Masking in Radiography
It is the position of the American Society of Radiologic Technologists that a digital image should not be cropped or masked such that it eliminates areas of exposure from the image that is presented for interpretation. Pre-exposure collimation of the x-ray beam is necessary to comply with the principle of as low as reasonably achievable (ALARA). To determine that exposed anatomy on an image is not significant or of diagnostic value is a medical decision and is therefore outside of the scope of practice for a radiologic technologist.

Main Motion C-14.11

Amend the Position Statement titled “State Agency Recognition of Joint Review Committees”
The Commission moves to amend the position statement titled “State Agency Recognition of Joint Review Committees” by striking “radiologic sciences” and inserting “medical imaging and radiation therapy” after “of” and before “educational.”

**State Agency Recognition of Joint Review Committees**
It is the position of the American Society of Radiologic Technologists that state agencies accept accreditation of medical imaging and radiation therapy educational programs by Joint Review Committees or equivalent to meet state standards.

**Main Motion C-14.12**

**Amend the Position Statement titled “Unification of the Profession”**
The Commission moves to amend the position statement titled “Unification of the Profession” by striking “radiologic sciences” and inserting “medical imaging and radiation therapy” after “the” and before “profession” and inserting “s” to the word “profession.”

**Unification of the Profession**
It is the position of the American Society of Radiologic Technologists that the Society foster unification of the medical imaging and radiation therapy professions.

**Main Motion C-14.13**

**Amend the Position Statement titled “Degree Requirements for Radiologic Science Program Directors and Clinical Coordinators”**
The Commission moves to amend the position statement titled “Degree Requirements for Radiologic Science Program Directors and Clinical Coordinators” by striking “radiologic sciences” and inserting “medical imaging and radiation therapy” after “that” and before “program.”

**Motion 6**
Amendment to strike “Radiologic Science” and insert “Medical Imaging and Radiation Therapy” in the title.

**Degree Requirements for Medical Imaging and Radiation Therapy Program Directors and Clinical Coordinators**
It is the position of the American Society of Radiologic Technologists that medical imaging and radiation therapy program directors hold a minimum of a master’s degree and that clinical coordinators hold a minimum of a baccalaureate degree.

**Main Motion C-14.14**

**Amend the Position Statement titled “Level of Education for the Radiologic Science Profession”**
The Commission moves to amend the position statement titled “Level of Education for the Radiologic Science Profession” by striking “radiologic sciences” and inserting “medical imaging
and radiation therapy” in the title, striking “radiologic sciences” and inserting “medical imaging and radiation therapy” after “of” and before “education” and inserting “related” after “contains” and before “upper” and striking “in radiologic science” at the end of the statement.

Motion 7
Amendment to insert an “s” at the end of “Profession” in the title.

Level of Education for the Medical Imaging and Radiation Therapy Professions
It is the position of the American Society of Radiologic Technologists that the baccalaureate degree is the professional level of medical imaging and radiation therapy education if it contains related upper division coursework.

Main Motion C-14.15
Amend the position statement titled “Monitoring Patient Exposure During Utilization of Digital Radiography Systems”
The Commission moves to amend the position statement titled “Monitoring Patient Exposure During Utilization of Digital Radiography Systems” by striking “images printed to film” and inserting “all imaging studies” after “for” and before “and” and striking “in either case” after “and” and before “should.”

Monitoring Patient Exposure During Utilization of Digital Radiography Systems
It is the position of the American Society of Radiologic Technologists that health care facilities using digital radiography systems monitor patient exposure. Exposure indicator data should be included in the Digital Imaging Communication in Medicine (DICOM) header for images sent to picture archiving and communication systems (PACS) or in the patient demographics field for all imaging studies and should be part of the permanent patient record. The exposure indicator should not be altered to modify image appearance and should accurately record the exposure or exposure factors used in producing the image. Health care facilities should collect patient exposure range distributions and reject analyses as part of the quality assurance program. This exposure data should be reviewed routinely by the health care facility.

Main Motion C-14.16
Remove Recognition of RCIS from Cardiovascular Interventional Practice Standards
I move the House of Delegates direct the Practice Standards Council Cardiovascular Interventional Subcommittee to amend the Cardiovascular Interventional Practice Standards by removing recognition of the registered cardiovascular invasive specialist certification as a post–primary certification for cardiovascular interventional technologists.

Motion 8
Motion to amend C-14.16 by striking the word “direct” after the word “Delegates” and before the words “the Practice Standards Council” and inserting “strongly recommends”; and deleting the word “to” after “Subcommittee” and before “amend.”

I move the House of Delegates strongly recommends the Practice Standards Council
Cardiovascular Interventional Subcommittee amend the Cardiovascular Interventional Practice Standards by removing recognition of the registered cardiovascular invasive specialist certification as a post–primary certification for cardiovascular interventional technologists.