Modified Standards Revision Draft I

Standards for an Accredited Educational Program in Radiography, Radiation Therapy, Magnetic Resonance, and Medical Dosimetry

The Joint Review Committee on Education in Radiologic Technology (JRCERT) is dedicated to excellence in education and to the quality and safety of patient care through the accreditation of educational programs in the radiologic sciences.

The JRCERT is the only agency recognized by the United States Department of Education (USDE) and the Council on Higher Education Accreditation (CHEA) for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. The JRCERT awards accreditation to programs demonstrating substantial compliance with these STANDARDS.
Modified Standards Revision
Draft I

At the October 2012 Board meeting, the JRCERT Board of Directors performed a comprehensive review of the STANDARDS (2011) and commissioned a modified revision of specific objectives, consistent with JRCERT Policy Statement 10.604, Procedure 10.604B. The current number of Interpretations poses a potential threat to the integrity and longevity of the STANDARDS; therefore, said interpretations shall be incorporated into each respective objective. It is also an opportune time to clarify any other issues identified by our educational programs, the United States Department of Education (USDE), or the Council for Higher Education Accreditation (CHEA).

Each objective is clearly identified as applicable to the Standards for an Accredited Educational Program in Radiography, Radiation Therapy, Magnetic Resonance and/or Medical Dosimetry.

The specific objectives contained in this document are the only content that will be considered for comments during the feedback period.

Please provide comments no later than March 1, 2013. Comments should be sent via e-mail to Standards.Revision@jrcert.org.

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**Standards Revision Timeframe**

- **Fall 2012**  
  Announcement of Standards Revision
- **Late Fall – Early Winter 2012**  
  Identify specific objectives, Board Discussion, Develop Draft 1
- **January 2013**  
  Draft 1 posted to Web site, Notification to Communities of Interest with request for input (response deadline March 1)
- **Jan – April 2013**  
  Presentations at meetings to which JRCERT representation is requested
- **Spring 2013**  
  Standards Committee preparation of Draft 2 for Board consideration at April 2013 meeting
- **May 2013**  
  Draft 2 posted to Web site, Notification to Communities of Interest with request for input (response deadline September 1)
- **May – Oct 2013**  
  Presentations at meetings to which JRCERT representation is requested
- **Fall 2013**  
  Board discussion of input and adoption of final version
- **December 1, 2013**  
  Revised Standards effective
**Radiography**

1.3 **Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.**

*Explanation:*
Programs must have a process in place to provide timely, appropriate, and educationally valid clinical experiences to all students admitted to the program. Students must have sufficient access to clinical settings that provide a wide range of procedures for competency achievement including mobile, surgical, and trauma examinations. Clinical settings may include hospitals, clinics, specialty/imaging centers, orthopedic centers, and other facilities. With the exception of observation site assignments, students must be provided the opportunity to complete required program competencies during clinical assignments. Clinical placement must be non-discriminatory in nature and solely determined by the program.

*Assignments to clinical settings such as rehabilitation centers, long term care facilities, physician’s offices, outpatient clinics, and/or pediatric facilities, while clinically valid, should not be for extended periods of time.*

A meaningful clinical education plan assures that activities are educationally valid and prevents the use of students as replacements for employees. The maximum number of students assigned to a clinical setting must be supported by sufficient human and physical resources. The number of students assigned to the clinical setting must not exceed the number of clinical staff assigned to the radiography department. The student to radiography clinical staff ratio must be 1:1. However, it is acceptable that more than one student may be temporarily assigned to one technologist during uncommonly performed procedures.

Students assigned to advanced imaging modalities, such as computed tomography, magnetic resonance, angiography, and sonography, are not included in the calculation of the authorized clinical capacity (unless the clinical setting is recognized exclusively for advanced imaging modality rotations). Once the students have completed the advanced imaging assignments, the program must assure that there are sufficient clinical staff to support the students upon reassignment to the radiography department.

The utilization of clinical assignments such as file room, reception area, and patient transportation should be limited.

Additionally, traditional programs that require students to participate in clinical education during evenings and/or weekends must assure that:

- students’ clinical clock hours spent in evening and/or weekend assignments must not exceed 25% of the total clinical clock hours.
- program total capacity is not increased through the use of evening and/or weekend assignments.

The JRCERT defines the operational hours of traditional programs as Monday - Friday, 5:00 a.m. - 7:00 p.m.

*Students are allowed to make up clinical time during term or scheduled breaks; however, they may not be assigned to clinical settings on holidays that are observed by the sponsoring institution. Program faculty from the sponsoring institution must be available during any makeup assignments. Also, the program must assure that its liability insurance covers students during these makeup assignments.*

**Required Program Response:**

- Describe the process for student clinical placement.
- Provide current student assignment schedules in relation to student enrollment.
- Describe how the program assures a 1:1 student to radiography clinical staff ratio at all clinical settings.
- Describe how the program assures that all students have access to a sufficient variety and volume of procedures to achieve program competencies.
- Submit evening and/or weekend rotation(s) calculations, if applicable.
**Possible Site Visitor Evaluation Methods:**

- Review of published program materials
- Review listing of enrolled students in relation to clinical assignments, including evening and/or weekend, if applicable
- Review of clinical placement process
- Review of student clinical records
- Interviews with faculty
- Interviews with clinical instructors
- Interviews with students
Radiation Therapy

1.3 Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.

Explanation:
Programs must have a process in place to provide timely, appropriate, and educationally valid clinical experiences to all students admitted to the program. Students must have sufficient access to clinical settings that provide a wide range of procedures for competency achievement. Clinical settings may include hospitals and free-standing radiation therapy centers. With the exception of observation site assignments, students must be provided the opportunity to complete required program competencies during clinical assignments. Clinical placement must be non-discriminatory in nature and solely determined by the program.

A meaningful clinical education plan assures that activities are educationally valid and prevents the use of students as replacements for employees. The maximum number of students assigned to a clinical setting must be supported by sufficient human and physical resources. The number of students assigned to the clinical education setting cannot exceed the total number of linear accelerators and simulators.

Students assigned to dosimetry, patient care, and/or advanced treatment modalities are not included in the calculation of the authorized clinical capacity. Once the students have completed these assignments/rotations, the program must assure that there is sufficient clinical staff to support the students upon reassignment to the radiation therapy department.

The utilization of clinical assignments such as patient transport, block/mold room, nursing, brachytherapy, and treatment planning should be limited.

Additionally, traditional programs that require students to participate in clinical education during evenings and/or weekends must assure that:
- students’ clinical clock hours spent in evening and/or weekend assignments must not exceed 25% of the total clinical clock hours.
- program total capacity is not increased through the use of evening and/or weekend assignments.

The JRCERT defines the operational hours of traditional programs as Monday - Friday, 5:00 a.m.- 7:00 p.m.

Students are allowed to make up clinical time during term or scheduled breaks; however, they may not be assigned to clinical settings on holidays that are observed by the sponsoring institution. Program faculty from the sponsoring institution must be available during any makeup assignments. Also, the program must assure that its liability insurance covers students during these makeup assignments.

Required Program Response:
- Describe the process for student clinical placement.
- Provide current student assignment schedules in relation to student enrollment.
- Describe how the program assures that the number of students assigned to the clinical setting does not exceed the total number of linear accelerators and simulators.
- Describe how the program assures that all students have access to a sufficient variety and volume of procedures to achieve program competencies.
- Submit evening and/or weekend rotation(s) calculations, if applicable.
Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review listing of enrolled students in relation to clinical assignments, including evening and/or weekend, if applicable
- Review of clinical placement process
- Review of student clinical records
- Interviews with faculty
- Interviews with clinical supervisors
- Interviews with students
1.3 Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.

**Explanation:**

Programs must have a process in place to provide timely, appropriate, and educationally valid clinical experiences to all students admitted to the program. Students must have sufficient access to clinical settings that provide a wide range of procedures for competency achievement. Clinical settings may include hospitals, clinics, specialty/imaging centers, orthopedic centers, and other facilities. With the exception of observation site assignments, students must be provided the opportunity to complete required program competencies during clinical assignments. Clinical placement must be non-discriminatory in nature and solely determined by the program.

A meaningful clinical education plan assures that activities are educationally valid and prevents the use of students as replacements for employees. The maximum number of students assigned to a clinical setting must be supported by sufficient human and physical resources. The student to magnet ratio must be 1:1. However, it is acceptable that more than one student may be temporarily assigned to one magnet during uncommonly performed procedures.

The utilization of clinical assignments such as file room, reception area, patient transportation, and other imaging modalities should be limited.

Additionally, traditional programs that require students to participate in clinical during evenings and/or weekends must assure that:

- students’ clinical clock hours spent in evening and/or weekend assignments must not exceed 25% of the total clinical clock hours.
- program total capacity is not increased through the use of evening and/or weekend assignments.

The JRCERT defines the operational hours of traditional programs as Monday - Friday, 5:00 a.m - 7:00 p.m.

**Students are allowed to make up clinical time during term or scheduled breaks; however, they may not be assigned to clinical settings on holidays that are observed by the sponsoring institution. Program faculty from the sponsoring institution must be available during any makeup assignments. Also, the program must assure that its liability insurance covers students during these makeup assignments.**

**Required Program Response:**

- Describe the process for student clinical placement.
- Provide current student assignment schedules in relation to student enrollment.
- Describe how the program assures a 1:1 student to magnet ratio at all clinical settings.
- Describe how the program assures that all students have access to a sufficient variety and volume of procedures to achieve program competencies.
- Submit evening and/or weekend rotation(s) calculations, if applicable.

**Possible Site Visitor Evaluation Methods:**

- Review of published program materials
- Review of listing of enrolled students in relation to clinical assignments, including evening and/or weekend, if applicable
- Review process of clinical placement
- Review of student clinical records
- Interviews with faculty
- Interviews with clinical preceptors
- Interviews with students
Medical Dosimetry Only

1.3 Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.

Explanation:
Programs must have a process in place to provide timely, appropriate, and educationally valid clinical experiences to all students admitted to the program. Students must have sufficient access to an adequate variety and volume of planning processes to become competent in clinical practice. Clinical settings must provide a sufficient variety and volume to allow all students to achieve required program competencies. Clinical settings may include hospitals, clinics, specialty centers, and other facilities. With the exception of observation site assignments, students must be provided the opportunity to complete required program competencies during clinical assignments. Clinical placement must be non-discriminatory in nature and solely determined by the program.

Assignments to a treatment planning laboratory (ies), while educationally valid, should not completely replace assignments to clinical settings.

A meaningful clinical education plan assures that activities are educationally valid and prevents the use of students as replacements for employees. The medical dosimetry student to clinical staff ratio shall always be no more than 2:1.

Activities that have minimal educational value must be limited in scope.

Traditional programs that require students to participate in clinical education during evenings and/or weekends must assure that:
- students’ clinical clock hours spent in evening and/or weekend assignments must not exceed 25% of the total clinical clock hours.
- program total capacity is not increased through the use of evening and/or weekend assignments.

The JRCERT defines the operational hours of traditional programs as Monday - Friday, 5:00 a.m. - 7:00 p.m.

Students are allowed to make up clinical time during term or scheduled breaks; however, they may not be assigned to clinical settings on holidays that are observed by the sponsoring institution. Program faculty from the sponsoring institution must be available during any makeup assignments. Also, the program must assure that its liability insurance covers students during these makeup assignments.

Required Program Response:
- Describe the process for student clinical placement.
- Provide current student assignment schedules in relation to student enrollment.
- Describe how the program assures a 2:1 student to clinical staff ratio at all clinical settings.
- Describe how the program assures that all students have access to a variety and volume of procedures to achieve program competencies.
- Submit evening and/or weekend rotation(s) calculations, if applicable.

Possible Site Visitor Evaluation Methods:
- Review of published program materials
- Review of listing of enrolled students in relation to clinical assignments, including evening and weekend, if applicable
- Review process of clinical placement
- Review of student clinical records
- Interviews with faculty
- Interviews with clinical preceptors
- Interviews with students
1.6 Has a grievance procedure that is readily accessible, fair, and equitably applied.

Explanation:
A grievance is defined as a claim by a student that there has been a violation, misinterpretation, or inequitable application of any existing policy, procedure, or regulation. The program must have procedures to provide students an avenue to pursue grievances. The procedure must outline the steps for formal resolution of any grievance. The final step in the process must not include any individual(s) directly associated with the program (e.g., program director, clinical coordinator, clinical instructors, diagnostic imaging department director). The procedure must assure timely resolution. The program must maintain a record of all student’s formal grievances and their resolution since the last on-site evaluation. The records must include information on how the grievance was resolved and assurance that there are no trends that could negatively affect the quality of the educational program. Records must be retained in accordance with the institution’s/program’s retention policies/procedures.

Additionally, the program must have a procedure to address any complaints beyond those that require invoking the grievance procedure. The program must determine if a pattern of complaint exists that could negatively affect the quality of the educational program (e.g., cleanliness of the classroom).

Required Program Response:
Describe the nature of any formal grievance(s) that would jeopardize the program’s ability to meet its mission.
Describe the nature of any complaint(s) that would jeopardize the program’s ability to meet its mission.
Provide a copy of the grievance procedure.
Provide a copy of any formal grievance(s) resolution since the last on-site evaluation.

Possible Site Visitor Evaluation Methods:
- Review of institutional catalog
- Review of student handbook
- Review of formal grievance(s) record(s), if applicable
- Review of complaint(s) record(s), if applicable
- Interviews with faculty
- Interviews with students
Radiography, Therapy, Magnetic Resonance, and Medical Dosimetry

1.9 Makes available to students, faculty, and the general public accurate information about admission policies, tuition and fees, refund policies, academic calendars, academic policies, clinical obligations, grading system, graduation requirements, and the criteria for transfer credit.

Explanation:
The institutional and/or program policies must be published and made readily available to students, faculty, and the general public on the institution’s/program’s Web site to assure transparency and accountability of the educational program. Requiring the general public to contact the institution/program to request program information is not adequate. Policy changes must be made known to students, faculty, and the general public in a timely fashion. It is recommended that revision dates be identified on program publications.

The program must establish and publicly disclose the criteria used when determining the transfer of credit earned from other programs/institutions. Also, programs must publicly disclose a list of institutions with which the program has established an articulation agreement.

The program’s academic calendar must be published and, at a minimum, identify specific start and end dates for each term, holidays recognized by the sponsoring institution, and breaks.

Student clinical obligations (e.g., drug screening, background checks, and associated fees) must be clearly identified in appropriate program publications. Additionally, if evening and/or weekend clinical assignments are required or if students must travel to geographically-dispersed clinical settings, this information must also be included.

Required Program Response:
- Describe how institutional and/or program policies are made known to students, faculty, and the general public.
- Provide publications that include these policies.

Possible Site Visitor Evaluation Methods:
- Review of institutional materials
- Review of published program materials
- Review of program’s Web site
- Interviews with faculty
- Interviews with Admissions personnel
- Interviews with Registrar
- Interviews with students
Radiography, Therapy, Magnetic Resonance, and Medical Dosimetry
Note: Mission, Goals, and SLOs will remain Standards-specific in final document

1.10 Makes the program’s mission statement, goals, and student learning outcomes readily available to students, faculty, administrators, and the general public.

Explanation:
Program accountability is enhanced by making its mission statement, goals, and student learning outcomes available to the program’s communities of interest on the institution’s/program’s Web site to assure transparency and accountability of the educational program. This may be accomplished in a variety of ways, including program publications and/or a Web site. Requiring the general public to contact the institution/program to request program information is not adequate.

Example:

Mission:
The mission of the radiography program is to prepare competent, entry-level radiographers able to function within the healthcare community.

Goal: Students will be clinically competent.
Student Learning Outcomes: Students will apply positioning skills.
Students will select technical factors.
Students will utilize radiation protection.

Goal: Students will demonstrate communication skills.
Student Learning Outcomes: Students will demonstrate written communication skills.
Students will demonstrate oral communication skills.

Goal: Students will develop critical thinking skills.
Student Learning Outcomes: Students will adapt standard procedures for non-routine patients.
Students will critique images to determine diagnostic quality.

Goal: Students will model professionalism.
Student Learning Outcomes: Students will demonstrate work ethics.
Students will summarize the value of life-long learning.

Required Program Response:
- Describe how the program makes its mission statement, goals, and student learning outcomes available to students, faculty, administrators, and the general public.
- Provide copies of publications that contain the program’s mission statement, goals, and student learning outcomes.

Possible Site Visitor Evaluation Methods:
- Review of published program materials
- Review of program’s Web site
- Interviews with administrative personnel
- Interviews with faculty
- Interviews with students
Magnetic Resonance Only

2.2 Provides an adequate number of faculty to meet all educational, program, administrative, and accreditation requirements.

Explanation:
An adequate number of faculty promotes sound educational practices. A full-time program director is required. The program director may also be identified as the radiography program director. Faculty teaching loads and release time must be consistent with those of comparable faculty in other health science programs in the same institution.

Additionally, an full-time equivalent educational coordinator is required if the program has more than eight (8) active clinical settings. The educational coordinator may also be identified as the radiography clinical coordinator. The educational coordinator position may be shared by no more than four (4) appointees. If an educational coordinator is required, the program director may not be identified as the educational coordinator. The educational coordinator may not be identified as the program director.

The program director and educational coordinator may perform clinical instruction; however, they may not be identified as clinical preceptors.

A minimum of one clinical preceptor must be designated at each recognized clinical setting. The same clinical preceptor may be identified at more than one site as long as a ratio of one full-time equivalent clinical preceptor for every five (5) students is maintained.

Required Program Response:
- Provide, if available, institutional policies in relation to teaching loads and release time.
- Describe faculty teaching loads and release time in relation to a comparable health science programs within the institution.
- Describe the adequacy of the number of faculty and clinical staff to meet identified accreditation requirements and program needs.

Possible Site Visitor Evaluation Methods:
- Review institutional policies in relation to teaching loads and release time.
- Review of master plan of education
- Review of position descriptions
- Review of clinical settings
- Interviews with faculty
- Interviews with clinical preceptor(s)
- Interviews with students
2.2 Provides an adequate number of faculty to meet all educational, program, administrative, and accreditation requirements.

Explanation:
An adequate number of faculty promotes sound educational practices. A full-time program director is required. The program director may also be identified as the radiation therapy program director. Faculty teaching loads and release time must be consistent with those of comparable faculty in other health science programs in the same institution.

Additionally, an full-time equivalent educational coordinator is required if the program has more than thirty (30) students enrolled in the clinical component of the program. The educational coordinator may also be identified as the radiation therapy clinical coordinator. The educational coordinator position may be shared by no more than four (4) appointees. If an educational coordinator is required, the program director may not be identified as the educational coordinator. The educational coordinator may not be identified as the program director.

The program director and educational coordinator may perform clinical instruction; however, they may not be identified as clinical preceptors.

A minimum of one clinical preceptor must be designated at each recognized clinical setting. The same clinical preceptor may be identified at more than one site as long as a ratio of one full-time equivalent clinical preceptor for every five (5) students is maintained.

Required Program Response:
- Provide, if available, institutional policies in relation to teaching loads and release time.
- Describe faculty teaching loads and release time in relation to a comparable health science programs within the institution.
- Describe the adequacy of the number of faculty and clinical staff to meet identified accreditation requirements and program needs.

Possible Site Visitor Evaluation Methods:
- Review institutional policies in relation to teaching loads and release time.
- Review of master plan of education
- Review of position descriptions
- Review of clinical settings
- Interviews with faculty
- Interviews with clinical preceptor(s)
- Interviews with students
Radiography and Radiation Therapy
Note: Final Draft will reflect Standards-specific language regarding clinical instructor or clinical supervisor.

3.8 Documents that the responsibilities of faculty and clinical staff are delineated and performed.

- Full-time Program Director:
  Assures effective program operations,
  Oversees ongoing program assessment,
  Participates in budget planning,
  Maintains current knowledge of the professional discipline and educational methodologies through continuing professional development, and
  Assumes the leadership role in the continued development of the program.

- Full-time Clinical Coordinator:
  Correlates clinical education with didactic education,
  Evaluates students,
  Participates in didactic and/or clinical instruction,
  Supports the program director to help assure effective program operation,
  Coordinates clinical education and evaluates its effectiveness,
  Participates in the assessment process,
  Cooperates with the program director in periodic review and revision of clinical course materials,
  Maintains current knowledge of the discipline and educational methodologies through continuing professional development, and
  Maintains current knowledge of program policies, procedures, and student progress.

- Full-time Didactic Program Faculty:
  Prepares and maintains course outlines and objectives, instructs and evaluates students, and reports progress,
  Participates in the assessment process,
  Supports the program director to help assure effective program operation,
  Cooperates with the program director in periodic review and revision of course materials, and
  Maintains appropriate expertise and competence through continuing professional development.
• Part-time Didactic Program Faculty:

Prepares and maintains course outlines and objectives, instructs and evaluates students, and reports progress,

Participates in the assessment process, when appropriate,

Cooperates with the program director in periodic review and revision of course materials, and

Maintains appropriate expertise and competence through continuing professional development.

• Clinical Instructor(s):

Is knowledgeable of program goals,

Understands the clinical objectives and clinical evaluation system,

Understands the sequencing of didactic instruction and clinical education,

Provides students with clinical instruction and supervision,

Evaluates students’ clinical competence,

Maintains competency in the professional discipline and instructional and evaluative techniques through continuing professional development, and

Maintains current knowledge of program policies, procedures, and student progress.

• Clinical Staff:

Understand the clinical competency system,

Understand requirements for student supervision,

Support the educational process, and

Maintain current knowledge of program policies, procedures, and student progress.

Explanation:
The clear delineation of responsibilities facilitates accountability. Faculty and clinical staff responsibilities must be clearly delineated and must support the program’s mission.

Full- and part-time status is determined by, and consistent with, the sponsoring institution’s definition. For other than regular academic terms (i.e., summer session) when students are enrolled in didactic courses, the program director must be available to fulfill the responsibilities of the position. Additionally, when students are enrolled in clinical courses, the clinical coordinator must be available to fulfill the responsibilities of the position.

During summer term(s) when students are enrolled in didactic and/or clinical components, the program director and/or clinical coordinator responsibilities must be fulfilled, respectively.

Required Program Response:
Provide documentation that faculty and clinical staff positions are clearly delineated

**Possible Site Visitor Evaluation Methods:**

- Review of position descriptions
- Review of handbooks
- Interviews with faculty and clinical staff to assure responsibilities are being performed
- Interviews with students
Magnetic Resonance and Medical Dosimetry

3.8 Documents that the responsibilities of faculty and clinical staff are delineated and performed.

- **Full-time** Program Director:

  Assures effective program operations,

  Oversees ongoing program assessment,

  Participates in budget planning,

  Maintains current knowledge of the professional discipline and educational methodologies through continuing professional development, and

  Assumes the leadership role in the continued development of the program.

- **Full-time** Educational Coordinator:

  Correlates clinical education with didactic education,

  Evaluates students,

  Participates in didactic and/or clinical instruction,

  Supports the program director to help assure effective program operation,

  Coordinates clinical education and evaluates its effectiveness,

  Participates in the assessment process,

  Cooperates with the program director in periodic review and revision of clinical course materials,

  Maintains current knowledge of the discipline and educational methodologies through continuing professional development, and

  Maintains current knowledge of program policies, procedures, and student progress.

- **Full-time** Didactic Program Faculty:

  Prepares and maintains course outlines and objectives, instructs and evaluates students, and reports progress,

  Participates in the assessment process,

  Supports the program director to help assure effective program operation,

  Cooperates with the program director in periodic review and revision of course materials, and
Maintains appropriate expertise and competence through continuing professional development.

- Part-time Didactic Program Faculty:

  Prepares and maintains course outlines and objectives, instructs and evaluates students, and reports progress,

  Participates in the assessment process, when appropriate,

  Cooperates with the program director in periodic review and revision of course materials, and

  Maintains appropriate expertise and competence through continuing professional development.

- Clinical Preceptor(s):

  Is knowledgeable of program goals,

  Understands the clinical objectives and clinical evaluation system,

  Understands the sequencing of didactic instruction and clinical education,

  Provides students with clinical instruction and supervision,

  Evaluates students’ clinical competence,

  Maintains competency in the professional discipline and instructional and evaluative techniques through continuing professional development, and

  Maintains current knowledge of program policies, procedures, and student progress.

- Clinical Staff:

  Understand the clinical competency system,

  Understand requirements for student supervision,

  Support the educational process, and

  Maintain current knowledge of program policies, procedures, and student progress.

**Explanation:**
The clear delineation of responsibilities facilitates accountability. Faculty and clinical staff responsibilities must be clearly delineated and must support the program’s mission.

Full- and part-time status is determined by, and consistent with, the sponsoring institution’s definition. During summer term(s) when students are enrolled in didactic and/or clinical components, the program director and/or clinical coordinator responsibilities must be fulfilled, respectively.
For other than regular academic terms (i.e., summer session) when students are enrolled in didactic courses, the program director must be available to fulfill the responsibilities of the position. Additionally, when students are enrolled in clinical courses, the educational coordinator must be available to fulfill the responsibilities of the position.

**Required Program Response:**
Provide documentation that faculty and clinical staff positions are clearly delineated.

**Possible Site Visitor Evaluation Methods:**
- Review of position descriptions
- Review of handbooks
- Interviews with faculty and clinical staff to assure responsibilities are being performed
- Interviews with students
3.9 Evaluates program faculty and clinical instructor performance and shares evaluation results regularly to assure instructional responsibilities are performed.

Explanation:
The performance of program faculty and clinical instructors must be regularly evaluated minimally once per year. Evaluation assures that instructional responsibilities are performed and provides administration and faculty with information to evaluate performance. Evaluation promotes proper educational methodology and increases program effectiveness. Evaluation results must be shared in a timely manner minimally once per year with program faculty and clinical instructors being evaluated to assure continued professional development. Any evaluation results that identify concerns must be discussed with faculty and clinical instructors as soon as possible.

Required Program Response:
- Describe the evaluation process.
- Describe how evaluation results are shared with program faculty and clinical instructors.
- Provide samples of evaluations of program faculty.
- Provide samples of evaluations of clinical instructors.

Possible Site Visitor Evaluation Methods:
- Review of program evaluation materials
- Review of clinical instructor evaluation
- Interviews with administrative personnel
- Interviews with program faculty
- Interviews with clinical instructor(s)
- Interviews with students
4.1 Assures the radiation safety of students through the implementation of published policies and procedures that are in compliance with Nuclear Regulatory Commission regulations and state laws as applicable.

Explanation:
Appropriate policies and procedures help assure that student radiation exposure is kept as low as reasonably achievable (ALARA). The program must maintain and monitor student radiation exposure data. This information must be made available to students within thirty (30) school days following receipt of data. The program must have a published protocol that identifies a threshold dose for incidents in which dose limits are exceeded. Programs are encouraged to identify a threshold dose below those identified in NRC regulations.

Required Program Response:
- Describe how the policies are made known to enrolled students.
- Describe how radiation exposure data is made available to students.
- Provide copies of appropriate policies.

Possible Site Visitor Evaluation Methods:
- Review of published program materials
- Review of student records
- Review of student dosimetry reports
- Interviews with faculty
- Interviews with students
4.3 Assures that students employ proper radiation safety practices.

Explanation:
The program must assure that students are instructed in the utilization of imaging equipment, accessories, optimal exposure factors, and proper patient positioning to minimize radiation exposure to patients, selves, and others. These practices assure radiation exposures are kept as low as reasonably achievable (ALARA).

Students must understand basic radiation safety practices prior to assignment to clinical settings. **Students should not hold patients or imaging receptors during any radiographic procedure.** As students progress in the program, they must become increasingly proficient in the application of radiation safety practices.

The program must also assure radiation safety in energized laboratories. Students’ utilization of energized laboratories must be under the supervision of a qualified radiographer who is readily available. If a qualified radiographer is not readily available to provide supervision, the radiation exposure mechanism must be disabled. Programs are encouraged to develop policies regarding safe and appropriate use of energized laboratories by students.

**Required Program Response:**
- Describe how the curriculum sequence and content prepares students for safe radiation practices.
- Provide the curriculum sequence.
- Provide policies/procedures regarding radiation safety.

**Possible Site Visitor Evaluation Methods:**
- Review of program curriculum
- Review of radiation safety policies/procedures
- Review of student handbook
- Review of student records
- Review of student dosimetry reports
- Interviews with faculty
- Interviews with clinical instructor(s)
- Interviews with clinical staff
- Interviews with students
4.4 Assures that all radiation therapy procedures are performed under the direct supervision of a qualified practitioner.

Explanation:
Direct supervision assures patient safety and proper educational practices. All radiation procedures require direct supervision. The JRCERT defines direct supervision as student supervision by a qualified practitioner (e.g., registered radiation therapist, credentialed medical physicist, licensed radiation oncologist) during all aspects of the procedure. Students must always be directly supervised during all patient procedures.

The JRCERT defines direct supervision as student supervision by a qualified practitioner who:
- is physically present during the conduct of the procedure, and
- reviews and approves the procedure and/or image.

Supervision of students over closed-circuit monitor(s) is not acceptable.

Required Program Response:
- Describe how the direct supervision requirement is enforced and monitored in the clinical setting.
- Provide documentation that the program’s direct supervision requirement is made known to students, clinical supervisors, and clinical staff.

Possible Site Visitor Evaluation Methods:
- Review of published program materials
- Review of student records
- Review of meeting minutes
- Interviews with faculty
- Interviews with clinical supervisor(s)
- Interviews with clinical staff
- Interviews with students
Radiography

5.2 Documents the following program effectiveness data:

- Five-year average credentialing examination pass rate of not less than 75 percent at first attempt within six months of graduation,
- Five-year average job placement rate of not less than 75 percent within twelve months of graduation,
- Annual Program completion rate,
- Graduate satisfaction, and
- Employer satisfaction.

Explanation:
Credentialing examination, job placement, and program completion data must be reported annually on JRCERT Program Effectiveness Data (PED) form. Graduate and employer satisfaction data must be collected as part of the program’s assessment process.

Credentialing examination pass rate is defined as the number of graduates who pass, on first attempt, the American Registry of Radiologic Technologists (ARRT) certification examination or an unrestricted state licensing examination compared with the number of graduates who take the examination within six months of graduation.

Job placement rate is defined as the number of graduates employed in the radiologic sciences compared to the number of graduates actively seeking employment in the radiologic sciences. The JRCERT has defined not actively seeking employment as: 1) graduate fails to communicate with program officials regarding employment status after multiple attempts, 2) graduate is unwilling to seek employment that requires relocation, 3) graduate is unwilling to accept employment due to salary or hours, 4) graduate is on active military duty, and/or 5) graduate is continuing education.

Program completion rate is defined as the number of students who complete the program within 150% of the stated program length. The program must establish a benchmark for its program completion rate. The program specifics the entry point (e.g., required orientation date, final drop/add date, final date to drop with 100% tuition refund, official class roster date, etc.) used in calculating program’s completion rate.

\[
PCR = \frac{\text{# of graduates in the cohort}}{\text{# of students initially enrolled in cohort} + \text{# of transfer students or re-admits}}
\]

Graduate and employer satisfaction may be measured through a variety of methods. The methods and timeframes for collection of the graduate and employer satisfaction data are the prerogative of the program.

Required Program Response:
- Provide a copy of the program’s current PED form.
- Provide outcome data in relation to graduate and employer satisfaction.

Possible Site Visitor Evaluation Methods:
- Review of PED form
- Interviews with faculty
Radiation Therapy

5.2 Documents the following program effectiveness data:

- Five-year average credentialing examination pass rate of not less than 75 percent at first attempt within six months of graduation,
- Five-year average job placement rate of not less than 75 percent within twelve months of graduation,
- Annual Program completion rate,
- Graduate satisfaction, and
- Employer satisfaction.

Explanation:
Credentialing examination, job placement, and program completion data must be reported annually on JRCERT Program Effectiveness Data (PED) form. Graduate and employer satisfaction data must be collected as part of the program’s assessment process.

Credentialing examination pass rate is defined as the number of graduates who pass, on first attempt, the American Registry of Radiologic Technologists certification examination or an unrestricted state licensing examination compared with the number of graduates who take the examination within six months of graduation.

Job placement rate is defined as the number of graduates employed in the radiologic sciences compared to the number of graduates actively seeking employment in the radiologic sciences, radiation therapy. The JRCERT has defined not actively seeking employment as: 1) graduate fails to communicate with program officials regarding employment status after multiple attempts, 2) graduate is unwilling to seek employment that requires relocation, 3) graduate is unwilling to accept employment due to salary or hours, 4) graduate is on active military duty, and/or 5) graduate is continuing education.

Program completion rate is defined as the number of students who complete the program within 150% of the stated program length. The program must establish a benchmark for its program completion rate. The program specifies the entry point (e.g., required orientation date, final drop/add date, final date to drop with 100% tuition refund, official class roster date, etc.) used in calculating program’s completion rate.

\[
PCR = \frac{\text{# of graduates in the cohort}}{\text{# of students initially enrolled in cohort} + \text{# of transfer students or re-admits}}
\]

Graduate and employer satisfaction may be measured through a variety of methods. The methods and timeframes for collection of the graduate and employer satisfaction data are the prerogative of the program.

Required Program Response:
- Provide a copy of the program’s current PED form.
- Provide outcome data in relation to graduate and employer satisfaction.

Possible Site Visitor Evaluation Methods:
- Review of PED form
- Interviews with faculty
Magnetic Resonance

5.2 Documents the following program effectiveness data:

- Five-year average credentialing examination pass rate of not less than 75 percent at first attempt within six months of graduation,
- Five-year average job placement rate of not less than 75 percent within twelve months of graduation,
- Annual program completion rate,
- Graduate satisfaction, and
- Employer satisfaction.

Explanation:
Credentialing examination, job placement, and program completion data must be reported annually on JRCERT Program Effectiveness Data (PED) form. Graduate and employer satisfaction data must be collected as part of the program’s assessment process.

Credentialing examination pass rate is defined as the number of graduates who pass, on first attempt, the American Registry of Radiologic Technologists certification examination or equivalent compared with the number of graduates who take the examination within six months of graduation.

Job placement rate is defined as the number of graduates employed in magnetic resonance compared to the number of graduates actively seeking employment in magnetic resonance. The JRCERT has defined not actively seeking employment as: 1) graduate fails to communicate with program officials regarding employment status after multiple attempts, 2) graduate is unwilling to seek employment that requires relocation, 3) graduate is unwilling to accept employment due to salary or hours, 4) graduate is on active military duty, and/or 5) graduate is continuing education.

Program completion rate is defined as the number of students who complete the program within 150% of the stated program length. The program must establish a benchmark for its program completion rate. The program specifies the entry point (e.g., required orientation date, final drop/add date, final date to drop with 100% tuition refund, official class roster date, etc.) used in calculating program’s completion rate.

Calculated by dividing the number of students who complete the program within a cohort by the number who enrolled in the cohort initially and subsequently (for example, transfer students or re-admits). Students who leave or do not graduate on time for any reason, such as medical leave, personal choice, or course failure, are considered as not completing the program with the original cohort.

\[
PCR = \frac{\text{# of graduates in the cohort}}{\text{# of students initially enrolled in cohort}} \times \frac{\text{# of transfer students or re-admits}}{\text{# of students initially enrolled in cohort}}
\]

Graduate and employer satisfaction may be measured through a variety of methods. The methods and timeframes for collection of the graduate and employer satisfaction data are the prerogative of the program.

Required Program Response:
- Provide a copy of the program’s current PED form.
- Provide outcome data in relation to graduate and employer satisfaction.

Possible Site Visitor Evaluation Methods:
- Review of PED form
- Interviews with faculty
5.2 Documents the following program effectiveness data:

- Five-year average credentialing examination pass rate of not less than 75 percent at first attempt within six months of graduation,
- Five-year average job placement rate of not less than 75 percent within twelve months of graduation,
- Annual program completion rate,
- Graduate satisfaction, and
- Employer satisfaction.

**Explanation:**

Credentialing examination, job placement, and program completion data must be reported annually on JRCERT Program Effectiveness Data (PED) form. Graduate and employer satisfaction data must be collected as part of the program’s assessment process.

Credentialing examination pass rate is defined as the number of graduates who pass, on first attempt, the Medical Dosimetrist Certification Board (MDCB) certification examination or an unrestricted state licensing examination compared with the number of graduates who take the examination within six months of graduation.

Job placement rate is defined as the number of graduates employed in medical dosimetry compared to the number of graduates actively seeking employment in medical dosimetry. The JRCERT has defined not actively seeking employment as: 1) graduate fails to communicate with program officials regarding employment status after multiple attempts, 2) graduate is unwilling to seek employment that requires relocation, 3) graduate is unwilling to accept employment due to salary or hours, 4) graduate is on active military duty, and/or 5) graduate is continuing education.

Program completion rate is defined as the number of students who complete the program within 150% of the stated program length. The program must establish a benchmark for its program completion rate. The program specifies the entry point (e.g., required orientation date, final drop/add date, final date to drop with 100% tuition refund, official class roster date, etc.) used in calculating program’s completion rate.

Program completion rate is calculated by dividing the number of students who complete the program within a cohort by the number who enrolled in the cohort initially and subsequently (for example, transfer students, or re-admits). Students who leave or do not graduate on time for any reason, such as medical leave, personal choice, or course failure, are considered as not completing the program with the original cohort.

\[
PCR = \frac{\text{# of graduates in the cohort}}{\text{# of students initially enrolled in cohort + # of transfer students or re-admits}}
\]

Graduate and employer satisfaction may be measured through a variety of methods. The methods and timeframes for collection of the graduate and employer satisfaction data are the prerogative of the program.

**Required Program Response:**

- Provide a copy of the program’s current PED form.
- Provide outcome data in relation to graduate and employer satisfaction.

**Possible Site Visitor Evaluation Methods:**

- Review of PED form
- Interviews with faculty
5.3 Makes available to the general public program effectiveness data (credentialing examination pass rate, job placement rate, and program completion rate) on an annual basis.

Explanation:
Program accountability is enhanced by making its effectiveness data available to the program’s communities of interest and the general public. In efforts to increase accountability and transparency, the program must publish, at a minimum, its five-year average credentialing examination pass rate, five-year average job placement rate, and program completion rate data on its Web site to allow the public access to this data. The program effectiveness data should clearly identify the sample size associated with each associated measure (i.e., number of first time test takers, number of graduates actively seeking employment, number of graduates).

Additionally, the JRCERT will post five-year average credentialing examination pass rate, five-year average job placement rate, and annual program completion rate data at www.jrcert.org. The program must publish the JRCERT URL (www.jrcert.org) to allow the public access to this data.

Required Program Response:
Provide copies of publications that contain the program’s program effectiveness data (credentialing examination pass rate, job placement rate, and program completion rate).
Provide samples of publications that document the availability of program effectiveness data via the JRCERT URL address from the program’s Web site.

Possible Site Visitor Evaluation Methods:
- Review of program publications
- Review of Web site
- Interviews with faculty
- Interviews with students
Medical Dosimetry Only

6.2 Documents that all faculty and staff possess academic and professional qualifications appropriate for their assignments.

- **Full-time** Program Director:
  
  Holds, at a minimum, a masters degree,
  
  Is proficient in curriculum design, program administration, evaluation, instruction, and academic advising,
  
  Documents three years clinical experience in medical dosimetry and/or radiation therapy,
  
  Documents one year of experience as an instructor in a JRCERT-accredited program, and
  
  Holds Medical Dosimetrist Certification Board registration or equivalent; if the program director does not meet this qualification, an educational coordinator is required.

- **Full-time** Educational Coordinator:
  
  Holds, at a minimum, a baccalaureate degree,
  
  Is proficient in curriculum development, supervision, instruction, evaluation, and academic advising,
  
  Documents two years clinical experience in the professional discipline,
  
  Documents a minimum of one year of experience as an instructor in a JRCERT-accredited program, and
  
  Holds Medical Dosimetrist Certification Board registration or equivalent.

- Full-time Didactic Program Faculty:
  
  Holds, at a minimum, a baccalaureate degree,
  
  Is qualified to teach the subject,
  
  Is knowledgeable of course development, instruction, evaluation, and academic advising,
  
  Documents two years clinical experience in the professional discipline, and
  
  Holds Medical Dosimetrist Certification Board registration or equivalent.
Part-time Didactic Program Faculty

Holds academic and/or professional credentials appropriate to the subject content area taught and

Is knowledgeable of course development, instruction, evaluation, and academic advising,

Clinical Preceptor(s):

Is proficient in supervision, instruction, and evaluation,

Documents two years clinical experience in the professional discipline, and

Holds Medical Dosimetrist Certification Board registration or equivalent.

Clinical Staff:

Holds Medical Dosimetrist Certification Board registration or equivalent.

Explanation:

Appropriate knowledge, proficiency, and certification (if appropriate) provide a foundation that promotes a sound educational environment.

Faculty and staff must possess academic and professional qualification(s) appropriate for their respective assignment. Clinical preceptors and clinical staff supervising students’ performance in the clinical component of the program must document MDCB registration or equivalent. Equivalent qualifications are certification by the American Board of Radiology (ABR) as a radiation oncologist or the American Board of Medical Physicists as a medical physicist. Appropriate credentials, other than MDCB registration, may be used for qualified health care practitioners supervising students in specialty areas (e.g., registered nurse supervising students’ performance of patient care skills or a registered radiation therapist supervising students’ observation of therapeutic procedures).

Required Program Response:

- For all program officials not previously identified on the program’s database, submit a request for recognition of program officials including a current curriculum vitae, and documentation of current registration by the Medical Dosimetrist Certification Board * or equivalent.
- For all currently recognized program officials [program director, educational coordinator (if applicable), full-time didactic faculty, and all clinical preceptors], submit a current registration by the Medical Dosimetrist Certification Board * or equivalent.

*These documents may be copies of current registration cards or “Verification of CMD Credentials” page available at www.mdcb.org.