

Standards for an Accredited Limited Scope X-ray Machine Operator Educational Program

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Adopted by:
**The Joint Review Committee on Education
in Radiologic Technology – October 2011**



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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**.

Introductory Statement

The Joint Review Committee on Education in Radiologic Technology (JRCERT) **Standards for an Accredited Educational Program in Limited X-ray Machine Operator** are designed to promote academic excellence, patient safety, and quality healthcare. The **STANDARDS** require a program to articulate its purposes; to demonstrate that it has adequate human, physical, and financial resources effectively organized for the accomplishment of its purposes; to document its effectiveness in accomplishing these purposes; and to provide assurance that it can continue to meet accreditation standards.

The JRCERT accreditation process offers a means of providing assurance to the public that a program meets specific quality standards. The process helps to maintain program quality and stimulates program improvement through program assessment.

There are six (6) standards. Each standard is titled and includes a narrative statement supported by specific objectives. Each objective, in turn, includes the following clarifying elements:

- **Explanation** - provides clarification on the intent and key details of the objective.
- **Required Program Response** - requires the program to provide a brief narrative and/or documentation that demonstrates compliance with the objective.
- **Possible Site Visitor Evaluation Methods** - identifies additional materials that may be examined and personnel who may be interviewed by the site visitors at the time of the on-site evaluation to help determine if the program has met the particular objective. Review of additional materials and/or interviews with listed personnel is at the discretion of the site visit team.

Following each standard, the program must provide a **Summary** that includes the following:

- Major strengths related to the standard
- Major concerns related to the standard
- The program's plan for addressing each concern identified
- Describe any progress already achieved in addressing each concern
- Describe any constraints in implementing improvements

The submitted narrative response and/or documentation, together with the results of the on-site evaluation conducted by the site visit team, will be used by the JRCERT Board of Directors in determining the program's compliance with the STANDARDS.

The curricular requirements, including didactic and clinical components, are established using the American Society of Radiologic Technologists (ASRT) curriculum document. Programs must address all areas of the didactic component that will prepare students for examinations offered by appropriate state agency(ies). Programs must have clinical policies/procedures to assure students are performing examinations consistent with Federal and state laws in which the clinical education setting(s) are located.

Standards for an Accredited Limited X-ray Machine Operator Educational Program

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Standard One

Integrity

Standard One: **The program demonstrates integrity in the following:**

- **Representations to communities of interest and the public,**
- **Pursuit of fair and equitable academic practices, and**
- **Treatment of, and respect for, students, faculty, and staff.**

Objectives:

In support of **Standard One**, the program:

- 1.1 Adheres to high ethical standards in relation to students, faculty, and staff.
- 1.2 Provides equitable learning opportunities for all students.
- 1.3 Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.
- 1.4 Limits required clinical assignments for students to not more than 10 hours per day and the total didactic and clinical involvement to not more than 40 hours per week.
- 1.5 Assures the security and confidentiality of student records, instructional materials, and other appropriate program materials.
- 1.6 Has a grievance procedure that is readily accessible, fair, and equitably applied.
- 1.7 Assures that students are made aware of the JRCERT **Standards for an Accredited Limited Scope X-ray Machine Operator Educational Program** and the avenue to pursue allegations of non-compliance with the **STANDARDS**.
- 1.8 Has publications that accurately reflect the program's policies, procedures, and offerings.
- 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.
- 1.10 Makes the program's mission statement, goals, and student learning outcomes readily available to students, faculty, administrators, and the general public.
- 1.11 Documents that the program engages the communities of interest for the purpose of continuous program improvement.
- 1.12 Has student recruitment and admission practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
- 1.13 Has student recruitment and admission practices that are consistent with published policies of the sponsoring institution and the program.

- 1.14 Has program faculty recruitment and employment practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
- 1.15 Has procedures for maintaining the integrity of distance education courses.

1.1 Adheres to high ethical standards in relation to students, faculty, and staff.

Explanation:

High ethical standards help assure that the rights of students, faculty, and staff are protected. Policies and procedures must be fair, equitably applied, and promote professionalism.

Required Program Response:

- Describe the procedure for making related policies and procedures known.
- Provide copies of policies and procedures that assure equitable treatment of students, faculty, and staff.

Possible Site Visitor Evaluation Methods:

- Review of student handbook
- Review of employee/faculty handbook
- Review of course catalog
- Review of student records
- Interviews with faculty
- Interviews with students
- Interviews with staff

1.2 Provides equitable learning opportunities for all students.

Explanation:

The provision of equitable learning activities promotes a fair and impartial education and reduces institutional and/or program liability. The program must provide equitable learning opportunities for all students regarding learning activities and clinical assignments. If evening and/or weekend rotations are utilized, this opportunity must be equitably provided for all students.

Required Program Response:

Describe how the program assures equitable learning opportunities for all students.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review of master plan of education
- Review of course objectives
- Review of student clinical assignment schedules
- Interviews with faculty
- Interviews with clinical mentors
- Interviews with clinical staff
- 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 education settings that provide opportunities for competency achievement. Clinical education settings may include hospitals, clinics, imaging centers, physician offices, 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 education setting must be supported by sufficient human and physical resources. The number of students assigned to the clinical education setting must not exceed the number of radiography clinical staff assigned to the facility. The student to radiography clinical staff ratio must be 1:1. Radiography clinical staff are defined as (1) a radiographer who holds current American Registry of Radiologic Technologists registration or an unrestricted state license for the state in which the clinical education setting is located or (2) a limited X-ray machine operator licensed in the state for which the clinical education setting is located and consistent with state law defining scope of practice.

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.

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 education settings.
- Describe how the program assures that all students have sufficient access to clinical education settings that provide opportunities for competency achievement.
- 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 mentors
- Interviews with students

1.4 Limits required clinical assignments for students to not more than 10 hours per day and the total didactic and clinical involvement to not more than 40 hours per week.

Explanation:

This limitation helps assure that students are treated ethically. For the safety of students and patients, not more than ten (10) clinical hours shall be scheduled in any one day. Scheduled didactic and clinical hours combined cannot exceed forty (40) hours per week. Hours exceeding these requirements must be limited, voluntary on the student's part, and must assure a focus on patient safety.

Required Program Response:

- Describe the process for assuring that time limitations are not exceeded.
- Provide documentation that required student clinical assignments do not exceed ten (10) hours in any one day and the total didactic and clinical involvement does not exceed forty (40) hours per week.

Possible Site Visitor Evaluation Methods:

- Review of master plan of education
- Review of published program materials
- Review of student schedules
- Interviews with faculty
- Interviews with clinical mentor(s)
- Interviews with clinical staff
- Interviews with students

1.5 Assures the security and confidentiality of student records, instructional materials, and other appropriate program materials.

Explanation:

Appropriately maintaining the security and confidentiality of student records and other program materials protects the student's right to privacy. Student records must be maintained in accordance with the Family Education Rights and Privacy Act (Buckley Amendment). If radiation monitoring reports contain students' dates of birth and/or social security numbers, this information must be maintained in a secure and confidential manner.

Required Program Response:

Describe how the program maintains the security and confidentiality of student records and other program materials.

Possible Site Visitor Evaluation Methods:

- Review of institution's/program's published policies/procedures
- Review of student academic and clinical records
- Tour of program offices
- Tour of clinical education setting(s)
- Interviews with administrative personnel
- Interviews with faculty
- Interviews with clinical mentor(s)
- Interviews with clinical staff
- 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 mentors, diagnostic imaging department director, dean). The procedure must assure timely resolution. The program must maintain a record of the student's formal grievance and its resolution. Records must be retained in accordance with the institution's/program's retention policies/procedures.

Required Program Response:

Provide a copy of the grievance procedure.

Possible Site Visitor Evaluation Methods:

- Review of institutional catalog
- Review of student handbook
- Review of formal grievance records, if applicable
- Interviews with faculty
- Interviews with students

1.7 Assures that students are made aware of the JRCERT Standards for an Accredited Limited X-ray Machine Operator Educational Program and the avenue to pursue allegations of non-compliance with the STANDARDS.

Explanation:

The program must assure students are cognizant of the **STANDARDS** and must provide contact information for the JRCERT.

Students have the right to submit allegations against a JRCERT-accredited program if there is reason to believe that the program has acted contrary to JRCERT accreditation standards or that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students.

Contact of the JRCERT should not be a step in the formal institutional/program grievance procedure. The individual must first attempt to resolve the complaint directly with institution/program officials by following the grievance procedures provided by the institution/program. If the individual is unable to resolve the complaint with institution/program officials or believes that the concerns have not been properly addressed, he or she may submit allegations of non-compliance directly to the JRCERT.

Required Program Response:

- Describe the procedure for making students aware of the **STANDARDS**.
- Describe how students are provided contact information for the JRCERT.

Possible Site Visitor Evaluation Methods:

- Review of program publications
- Interviews with faculty
- Interviews with students

1.8 Has publications that accurately reflect the program's policies, procedures, and offerings.

Explanation:

Maintaining published information regarding the program's current policies, procedures, and offerings provides interested parties with an accurate overview of program requirements and expectations.

Required Program Response:

Provide program publications that reflect program policies, procedures and offerings.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review of student handbook
- Interviews with faculty
- Interviews with students

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 available to students, faculty, and the general public to assure that they are adequately informed. 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.

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 education 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
- Interviews with faculty
- Interviews with Admissions personnel
- Interviews with Registrar
- Interviews with students

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. This may be accomplished in a variety of ways, including program publications and/or a Web site.

Example:

Mission:

The mission of the limited scope X-ray machine operator educational program is to prepare competent, entry-level limited scope machine operators 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 various patient conditions.
Students will evaluate 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
- Interviews with administrative personnel
- Interviews with faculty
- Interviews with students

1.11 Documents that the program engages the communities of interest for the purpose of continuous program improvement.

Explanation:

Communities of interest are defined as institutions, organizations, groups, and/or individuals interested in educational activities for limited X-ray machine operators. Obtaining formal feedback on program operations, student progress, employer needs, etc. from communities of interest allows the program to determine if it is meeting expectations and assures continuous program improvement. The program can use a variety of tools to obtain this feedback.

Required Program Response:

- Describe the process of obtaining feedback.
- Provide representative samples of appropriate meeting minutes, evaluations (e.g., course and faculty), and surveys (e.g., graduate and employer).

Possible Site Visitor Evaluation Methods:

- Review of meeting minutes
- Review of evaluations
- Review of surveys
- Interviews with members of various communities of interest

1.12 Has student recruitment and admission practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.

Explanation:

Non-discriminatory practices assure applicants have equal opportunity for admission. Statistical information such as race, color, religion, gender, age, disability, national origin, and any other protected class may be collected; however, this information must be voluntarily provided by the student. Use of this information in the student selection process is discriminatory.

Required Program Response:

- Describe how admission practices are non-discriminatory.
- Provide institutional and/or program admission policies.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review of student records
- Interviews with faculty
- Interviews with Admissions personnel
- Interviews with students

1.13 Has student recruitment and admission practices that are consistent with published policies of the sponsoring institution and the program.

Explanation:

Defined admission practices facilitate objective student selection. In considering applicants for admission, the program must follow published policies and procedures.

Required Program Response:

- Describe the implementation of institutional and program admission policies.
- Provide institutional and program admission policies.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Interviews with faculty
- Interviews with Admissions personnel
- Interviews with students

1.14 Has program faculty recruitment and employment practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.

Explanation:

Recruitment and employment practices that are non-discriminatory assure fairness and integrity. Equal opportunity for employment must be offered to each applicant. Employment practices must be applied equitably to all faculty.

Required Program Response:

- Describe how non-discriminatory employment practices are assured.
- Provide copies of employment policies and procedures that assure non-discriminatory practices.

Possible Site Visitor Evaluation Methods:

- Review of employee/faculty handbook
- Review of employee/faculty application form
- Review of institutional catalog
- Interviews with faculty

1.15 Has procedures for maintaining the integrity of distance education courses.

Explanation:

Programs that offer distance education must have processes in place that assure that the students who register in the distance education courses are the same students that participate in, complete, and receive the credit. Programs must verify the identity of students by using methods such as, but not limited to: secure log-ins, pass codes, and/or proctored exams. These processes must protect the student's privacy. Student costs associated with distance education must be disclosed.

Required Program Response:

- Describe the process for assuring the integrity of distance education courses.
- Provide published program materials that outline procedures for maintaining integrity of distance education courses.
- Provide published program materials that identify associated fees for students enrolled in distance education courses.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review the process of student identification
- Review of student records
- Interviews with faculty
- Interviews with students

Summary for Standard One

1. List the major strengths of **Standard One**, in order of importance.
2. List the major concerns of **Standard One**, in order of importance.
3. Provide the program's plan for addressing each concern identified.
4. Describe any progress already achieved in addressing each concern.
5. Describe any constraints in implementing improvements.

Standard Two:
Resources

Standard Two: **The program has sufficient resources to support the quality and effectiveness of the educational process.**

Objectives:

In support of **Standard Two**, the program:

Administrative Structure

- 2.1 Has an appropriate organizational structure and sufficient administrative support to achieve the program's mission.
- 2.2 Provides an adequate number of faculty to meet all educational, program, administrative, and accreditation requirements.
- 2.3 Provides faculty with opportunities for continued professional development.
- 2.4 Provides clerical support services, as needed, to meet all educational, program, and administrative requirements.

Learning Resources/Services

- 2.5 Assures JRCERT recognition of all clinical education settings.
- 2.6 Provides classrooms, laboratories, and administrative and faculty offices to facilitate the achievement of the program's mission.
- 2.7 Reviews and maintains program learning resources to assure the achievement of student learning.
- 2.8 Provides access to student services in support of student learning.

Fiscal Support

- 2.9 Has sufficient ongoing financial resources to support the program's mission.
- 2.10 For those institutions and programs for which the JRCERT serves as a gatekeeper for Title IV financial aid, maintains compliance with United States Department of Education (USDE) policies and procedures.

2.1 Has an appropriate organizational structure and sufficient administrative support to achieve the program's mission.

Explanation:

The program's relative position in the organizational structure helps facilitate appropriate resources and assures focus on the program. To operate effectively, the program must have sufficient institutional administrative support. Both organizational structure and administrative support enable the program to meet its mission and promote student learning.

Required Program Response:

- Describe the program's relationship to the organizational and administrative structures of the sponsoring institution and how this supports the program's mission.
- Provide institutional and program organizational charts.

Possible Site Visitor Evaluation Methods:

- Review of organizational charts of institution and program
- Review of meeting minutes
- Review of published program materials
- Review of master plan of education
- Interviews with faculty and institutional officials
- Interviews with clinical mentor(s)

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. If the sponsoring institution has a radiography program, the program director of the radiography program may also be identified as the program director of the LXMO program. Faculty teaching loads and release time must be consistent with those of comparable faculty in other health science (allied health) programs in the same institution.

If the sponsoring institution has a radiography program, the clinical coordinator of the radiography program may also be identified as the clinical coordinator of the LXMO program; however, a full-time equivalent clinical coordinator is required if the LXMO program has more than eight (8) active clinical education settings or more than twenty (20) students enrolled in the clinical component. The clinical coordinator position may be shared by no more than four (4) appointees. If a clinical coordinator is required, the program director may not be identified as the clinical coordinator. The clinical coordinator may not be identified as the program director.

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

A minimum of one clinical mentor must be designated at each recognized clinical education setting. The same clinical mentor may be identified at more than one site as long as a ratio of one full-time equivalent clinical mentor for every ten (10) 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 (allied health) program 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 education settings
- Interviews with faculty
- Interviews with clinical mentor(s)
- Interviews with students

2.3 Provides faculty with opportunities for continued professional development.

Explanation:

Continued professional development results in more knowledgeable, competent, and proficient faculty. Opportunities that enhance and advance educational, technical, and professional knowledge must be available to program faculty.

Required Program Response:

Describe how continued professional development opportunities are made available to faculty.

Possible Site Visitor Evaluation Methods:

- Review of institutional and program policies
- Review of program budget or other fiscal appropriations
- Review of evidence of faculty participation in professional development activities
- Interviews with administrative personnel
- Interviews with faculty

2.4 Provides clerical support services, as needed, to meet all educational, program, and administrative requirements.

Explanation:

Clerical support services necessary to assist in meeting educational, program, and administrative requirements of the program must be provided as appropriate.

Required Program Response:

Describe the availability and use of clerical support services.

Possible Site Visitor Evaluation Methods:

- Review of program's staffing plan
- Interviews with administrative personnel
- Interviews with faculty
- Interviews with students

2.5 Assures JRCERT recognition of all clinical education settings.

Explanation:

JRCERT recognition helps assure an appropriate learning environment for student clinical education. All clinical education settings must be recognized by the JRCERT. Recognition of a clinical education setting must be obtained prior to student placement. A minimum of one (1) clinical mentor must be identified for each recognized clinical education setting.

An observation site is used for student observation of the operation of equipment and/or procedures. If the program uses observation sites, these sites do not require recognition by the JRCERT. These sites provide opportunities for observation of clinical procedures that may not be available at recognized clinical education settings. Students may not assist in, or perform, any aspects of patient care during observational assignments. Assignments to these clinical education settings should be limited.

Facilities where students are participating in service learning projects or community-based learning opportunities do not require recognition.

Required Program Response:

- Assure all clinical education settings are recognized by the JRCERT.
- Describe how observation sites, if used, enhance student clinical education.

Possible Site Visitor Evaluation Methods:

- Review of JRCERT database
- Review of clinical records
- Interviews with faculty
- Interviews with clinical mentors
- Interviews with clinical staff
- Interviews with students

2.6 Provides classrooms, laboratories, and administrative and faculty offices to facilitate the achievement of the program's mission.

Explanation:

Learning environments are defined as places, surroundings, or circumstances where knowledge, understanding, or skills are studied or observed such as classrooms and laboratories. Provision of appropriate learning environments facilitates achievement of the program's mission. Although a dedicated classroom and/or laboratory are not required, scheduled accessibility to facilities conducive to student learning must be assured. Faculty office space should be conducive to planning and scholarly activities. Space should be made available for private student advisement.

Required Program Response:

Describe how classrooms, laboratories, and administrative and faculty offices facilitate the achievement of the program's mission.

Possible Site Visitor Evaluation Methods:

- Tour of the classroom, laboratories, and administrative and faculty offices
- Interviews with faculty
- Interviews with students

2.7 Reviews and maintains program learning resources to assure the achievement of student learning.

Explanation:

The review and maintenance of learning resources promotes student knowledge of current and developing imaging technologies. The program must provide learning resources to support and enhance the educational program. These resources must include:

- a print or electronic library with a variety of materials published within the last five years,
- computer access, and
- additional learning aids (e.g., educational software, classroom/laboratory accessory devices, etc.).

The JRCERT does not endorse any specific learning resources.

Required Program Response:

- Describe the available learning resources.
- Describe the procedure for review and maintenance of learning resources.

Possible Site Visitor Evaluation Methods:

- Tour of learning facilities
- Review of learning resources
- Review of surveys
- Review of meeting minutes
- Interviews with faculty
- Interviews with students

2.8 Provides access to student services in support of student learning.

Explanation:

The provision of appropriate student services promotes student achievement. At a minimum, the program must provide access to information for:

- personal counseling,
- requesting accommodations for disabilities as defined by applicable federal (Americans with Disabilities Act) and state laws, and
- financial aid.

Additional student services may be provided at the discretion of the program. These services should be sufficient to assure student learning.

All services provided must be made known to students and the general public.

Required Program Response:

- Describe the students' access to student services.
- Provide published program materials that outline accessibility to student services.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Interviews with faculty
- Interviews with students

2.9 Has sufficient ongoing financial resources to support the program's mission.

Explanation:

Adequate, ongoing funding is necessary to accomplish the program's mission and to support student learning. The sponsoring institution must demonstrate ongoing financial commitment to the program and its students by providing adequate human and physical resources.

Required Program Response:

- Describe the adequacy of financial resources.
- Provide copies of the program's budget and/or expenditure records.

Possible Site Visitor Evaluation Methods:

- Review of program budget and/or other fiscal appropriations
- Interviews with administrative personnel
- Interviews with faculty

2.10 For those institutions and programs for which the JRCERT serves as gatekeeper for Title IV financial aid, maintains compliance with United States Department of Education (USDE) policies and procedures.

Explanation:

A gatekeeper is defined as an agency holding responsibility for oversight of the distribution, record keeping, and repayment of Title IV financial aid. The program must comply with USDE requirements to participate in Title IV financial aid.

If the program has elected to participate in Title IV financial aid and the JRCERT is identified as the gatekeeper, the program must: maintain financial documents including audit and budget processes confirming appropriate allocation and use of financial resources, have a monitoring process for student loan default rates, have an appropriate accounting system providing documentation for management of Title IV financial aid and expenditures, and inform students of responsibility for timely repayment of Title IV financial aid.

Required Program Response:

- Provide evidence that Title IV financial aid is managed and distributed according to the USDE regulations to include:
 - recent student loan default data and
 - results of financial or compliance audits.
- Describe how the program informs students of their responsibility for timely repayment of financial aid.

Possible Site Visitor Evaluation Methods:

- Review of records
- Interviews with administrative personnel
- Interviews with faculty
- Interviews with students

Summary for Standard Two

1. List the major strengths of **Standard Two**, in order of importance.
2. List the major concerns of **Standard Two**, in order of importance.
3. Provide the program's plan for addressing each concern identified.
4. Describe any progress already achieved in addressing each concern.
5. Describe any constraints in implementing improvements.

Standard Three
Curriculum and Academic Practices

Standard Three: **The program’s curriculum and academic practices prepare students for professional practice.**

Objectives:

In support of **Standard Three**, the program:

- 3.1 Has a program mission statement that defines its purpose and scope and is periodically reevaluated.
- 3.2 Provides a well-structured, competency-based curriculum that prepares students to practice as a limited scope X-ray machine operator.
- 3.3 Assures an appropriate relationship between program length and the subject matter taught for the terminal award offered.
- 3.4 Measures the length of all didactic and clinical courses in clock hours or credit hours.
- 3.5 Maintains a master plan of education.
- 3.6 Provides timely and supportive academic, behavioral, and clinical advisement to students enrolled in the program.
- 3.7 Documents that the responsibilities of faculty and clinical staff are delineated and performed.
- 3.8 Evaluates program faculty and clinical mentor performance regularly to assure instructional responsibilities are performed.

3.1 Has a program mission statement that defines its purpose and scope and is periodically reevaluated.

Explanation:

The program's mission statement should be consistent with that of its sponsoring institution. The program's mission statement should clearly define the purpose or intent toward which the program's efforts are directed. Periodic evaluation assures that the program's mission statement is effective.

Required Program Response:

- Provide a copy of the program's mission statement.
- Provide meeting minutes that document periodic reevaluation of the mission statement.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review of meeting minutes
- Review of master plan of education
- Interviews with faculty

3.2 Provides a well-structured, competency-based curriculum that prepares students to practice as a limited scope X-ray machine operator.

Explanation:

The well-structured curriculum must be comprehensive, appropriately sequenced, include current information, and provide for evaluation of student achievement. A competency-based curriculum allows for effective student learning by providing a knowledge foundation prior to performance of procedures. Continual refinement of the competencies achieved is necessary so that students can demonstrate enhanced performance in a variety of situations and patient conditions. In essence, competency-based education is an ongoing process, not an end product.

Programs must follow a JRCERT-adopted curriculum. An adopted curriculum is defined as:

- the latest American Society of Radiologic Technologists LXMO curriculum and/or
- another curriculum adopted by the JRCERT Board of Directors following review and recommendation by the JRCERT Standards Committee.

The curricular requirements, including didactic and clinical components, are established using the American Society of Radiologic Technologists (ASRT) curriculum document. Programs must address all areas of the didactic component that will prepare students for examinations offered by appropriate state agency(ies). Programs must have clinical policies/procedures to assure students are performing examinations consistent with Federal and state laws in which the clinical education setting(s) are located.

Use of a standard curriculum promotes consistency in limited X-ray machine operator education and prepares the student to practice in the discipline. At a minimum, the curriculum should promote qualities that are necessary for students/graduates to practice competently, make good decisions, assess situations, provide appropriate patient care, and communicate effectively. Expansion of the curricular content beyond the minimum is at the discretion of the program.

The program must submit the latest curriculum analysis grid (available at www.jrcert.org).

Required Program Response:

- Describe how the program's curriculum is structured.
- Describe the program's competency-based system.
- Submit current curriculum analysis grid.
- Describe how the program's curriculum is delivered, including the method of delivery for distance education courses.
- Identify which courses, if any, are offered via distance education.
- Describe alternative learning options, if applicable (e.g., part-time, evening and/or weekend curricular track).

Possible Site Visitor Evaluation Methods:

- Review of master plan of education
- Review of didactic and clinical curriculum sequence
- Review of analysis of graduate and employer surveys
- Interviews with faculty
- Interviews with students
- Observation of a portion of any course offered via distance delivery
- Review of part-time, evening and/or weekend curricular track, if applicable

3.3 Assures an appropriate relationship between program length and the subject matter taught for the terminal award offered.

Explanation:

Program length must be consistent with the terminal award. The JRCERT defines program length as the duration of the program, which may be stated as total academic or calendar year(s), total semesters, trimesters, or quarters.

Required Program Response:

Describe the relationship between the program length and the terminal award offered.

Possible Site Visitor Evaluation Methods:

- Review of course catalog
- Review of published program materials
- Review of class schedules
- Interviews with faculty
- Interviews with students

3.4 Measures the length of all didactic and clinical courses in clock hours or credit hours.

Explanation:

Defining the length of didactic and clinical courses facilitates student transfer of credit and the awarding of financial aid. The formula for calculating assigned clock/credit hours must be consistently applied for all didactic and all clinical courses, respectively.

Required Program Response:

- Describe the method used to award credit hours for lecture, laboratory and clinical courses.
- Provide a list of all didactic and clinical courses with corresponding clock or credit hours.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review of class schedules
- Interviews with faculty
- Interviews with students

3.5 Maintains a master plan of education.

Explanation:

A master plan provides an overview of the program and allows for continuity among, and documentation of, all aspects of the program. In the event of new faculty and/or leadership to the program, the master plan provides the information needed to understand the program and its operations.

The plan should be evaluated annually, updated, and must include the following:

- course syllabi (didactic and clinical courses) and
- program policies and procedures.

While there is no prescribed format for the master plan, the component parts should be identified and readily available. If the components are not housed together, the program must list the location of each component. If the program chooses to use an electronic format, the components must be accessible by all program faculty.

Required Program Response:

- Identify the location of the component parts of the master plan of education.
- Provide a Table of Contents for the program's master plan.

Possible Site Visitor Evaluation Methods:

- Review of master plan of education
- Interview with program director
- Interviews with faculty

3.6 Provides timely and supportive academic, behavioral, and clinical advisement to students enrolled in the program.

Explanation:

Appropriate advisement promotes student achievement. Student advisement should be formative, summative, and must be shared with students in a timely manner. Programs are encouraged to develop written advisement procedures.

Required Program Response:

- Describe procedures for advisement.
- Provide sample records of student advisement.

Possible Site Visitor Evaluation Methods:

- Review of students' records
- Interviews with faculty
- Interviews with clinical mentor(s)
- Interviews with students

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

- 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.

- 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 Mentor(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.

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

3.8 Evaluates program faculty and clinical mentor performance regularly to assure instructional responsibilities are performed.

Explanation:

The performance of program faculty and clinical mentors must be regularly evaluated. 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 with program faculty and clinical mentors to assure continued professional development.

Required Program Response:

- Describe the evaluation process.
- Describe how evaluation results are shared with program faculty and clinical mentors.
- Provide samples of evaluations of program faculty.
- Provide samples of evaluations of clinical mentors.

Possible Site Visitor Evaluation Methods:

- Review of program evaluation materials
- Review of clinical mentor evaluation
- Interviews with administrative personnel
- Interviews with program faculty
- Interviews with clinical mentor(s)
- Interviews with students

Summary for Standard Three

1. List the major strengths of **Standard Three**, in order of importance.
2. List the major concerns of **Standard Three**, in order of importance.
3. Provide the program's plan for addressing each concern identified.
4. Describe any progress already achieved in addressing each concern.
5. Describe any constraints in implementing improvements.

Standard Four
Health and Safety

Standard Four: **The program's policies and procedures promote the health, safety, and optimal use of radiation for students, patients, and the general public.**

Objectives:

In support of **Standard Four**, the program:

- 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.
- 4.2 Has a published pregnancy policy that is consistent with applicable federal regulations and state laws, made known to accepted and enrolled female students, and contains the following elements:
 - Written notice of voluntary declaration,
 - Option for student continuance in the program without modification, and
 - Option for written withdrawal of declaration.
- 4.3 Assures that students employ proper radiation safety practices.
- 4.4 Assures that medical imaging procedures are performed under the direct supervision of qualified clinical staff until a student achieves competency.
- 4.5 Assures that medical imaging procedures are performed under the indirect supervision of qualified clinical staff after a student achieves competency.
- 4.6 Assures that students are directly supervised by qualified clinical staff when repeating unsatisfactory images.
- 4.7 Assures sponsoring institution's policies safeguard the health and safety of students.
- 4.8 Assures that students are oriented to clinical education setting policies and procedures in regard to health and safety.

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 for incidents in which dose limits are exceeded.

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

4.2 Has a published pregnancy policy that is consistent with applicable federal regulations and state laws, made known to accepted and enrolled female students, and contains the following elements:

- **Written notice of voluntary declaration,**
- **Option for student continuance in the program without modification, and**
- **Option for written withdrawal of declaration.**

Explanation:

Appropriate radiation safety practices help assure that radiation exposure to the student and fetus are kept as low as reasonably achievable (ALARA). The policy must include appropriate information regarding radiation safety for the student and fetus. The program must allow for student continuance in the clinical component of the program without modification. The program may offer clinical component options such as: (1) clinical reassignments and/or (2) leave of absence.

Required Program Response:

- Describe how the pregnancy policy is made known to accepted and enrolled female students.
- Provide a copy of the program's pregnancy policy.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review of student records
- Interviews with faculty
- Interviews with clinical mentor(s)
- 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 education settings. 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. Student utilization of energized laboratories must be under the supervision of a registered radiographer who is readily available. If a registered 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 mentor(s)
- Interviews with clinical staff
- Interviews with students

4.4 Assures that medical imaging procedures are performed under the direct supervision of qualified clinical staff until a student achieves competency.

Explanation:

Direct supervision assures patient safety and proper educational practices. The JRCERT defines direct supervision as student supervision by qualified clinical staff who:

- reviews the procedure in relation to the student's achievement,
- evaluates the condition of the patient in relation to the student's knowledge,
- is physically present during the conduct of the procedure, and
- reviews and approves the procedure and/or image.

Students must be directly supervised until competency is achieved.

Required Program Response:

- Describe how the direct supervision requirement is enforced and monitored in the clinical education setting.
- Provide documentation that the program's direct supervision requirement is made known to students, clinical mentors, 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 mentor(s)
- Interviews with clinical staff
- Interviews with students

4.5 Assures that medical imaging procedures are performed under the indirect supervision of qualified clinical staff after a student achieves competency.

Explanation:

Indirect supervision promotes patient safety and proper educational practices. The JRCERT defines indirect supervision as that supervision provided by qualified clinical staff immediately available to assist students regardless of the level of student achievement. “Immediately available” is interpreted as the physical presence of qualified clinical staff adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use on patients.

Required Program Response:

- Describe how the indirect supervision requirement is enforced and monitored in the clinical education setting.
- Provide documentation that the program’s indirect supervision requirement is made known to students, clinical mentors, 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 mentor(s)
- Interviews with clinical staff
- Interviews with students

4.6 Assures that students are directly supervised by qualified clinical staff when repeating unsatisfactory images.

Explanation:

The presence of qualified clinical staff during the repeat of an unsatisfactory image assures patient safety and proper educational practices. Qualified clinical staff must be physically present during the conduct of a repeat image and must approve the student's procedure prior to re-exposure.

Required Program Response:

- Describe how the direct supervision requirement for repeat images is enforced and monitored in the clinical education setting.
- Provide documentation that the program's direct supervision requirement for repeat images is made known to students, clinical mentors, 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 mentor(s)
- Interviews with clinical staff
- Interviews with students

4.7 Assures sponsoring institution's policies safeguard the health and safety of students.

Explanation:

Appropriate sponsoring institutional policies and procedures assure that students are protected. These policies must, at a minimum, address emergency preparedness, harassment, communicable diseases, and substance abuse. Policies and procedures must meet federal and/or state requirements as applicable. Enrolled students must be informed of policies and procedures.

Required Program Response:

Provide program policies that safeguard the health and safety of students.

Possible Site Visitor Evaluation Methods:

- Review of published program materials
- Review of student records
- Interviews with faculty
- Interviews with students

4.8 Assures that students are oriented to clinical education setting policies and procedures in regard to health and safety.

Explanation:

Appropriate orientation assures that students are cognizant of clinical policies and procedures. The policies and procedures must, at a minimum, address the following: hazards (fire, electrical, chemical), emergency preparedness, medical emergencies, HIPAA, and Standard Precautions.

Required Program Response:

- Describe the process for orienting students to clinical education settings.
- Provide documentation that students are apprised of policies and procedures specific to each clinical education setting.

Possible Site Visitor Evaluation Methods:

- Review of orientation process
- Review of student records
- Interviews with faculty
- Interviews with clinical mentor(s)
- Interviews with students

Summary for Standard Four

1. List the major strengths of **Standard Four**, in order of importance.
2. List the major concerns of **Standard Four**, in order of importance.
3. Provide the program's plan for addressing each concern identified.
4. Describe any progress already achieved in addressing each concern.
5. Describe any constraints in implementing improvements.

Standard Five
Assessment

Standard Five: **The program develops and implements a system of planning and evaluation of student learning and program effectiveness outcomes in support of its mission.**

Objectives:

In support of **Standard Five**, the program:

Student Learning

5.1 Develops an assessment plan that, at a minimum, measures the program's student learning outcomes in relation to the following goals: clinical competence, critical thinking, professionalism, and communication skills.

Program Effectiveness

5.2 Documents the following program effectiveness data:

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

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.

Analysis and Actions

5.4 Analyzes and shares student learning outcome data and program effectiveness data to foster continuous program improvement.

5.5 Periodically evaluates its assessment plan to assure continuous program improvement.

5.1 Develops an assessment plan that, at a minimum, measures the program's student learning outcomes in relation to the following goals: clinical competence, critical thinking, professionalism, and communication skills.

Explanation:

Assessment is the systematic collection, review, and use of information to improve student learning and educational quality. An assessment plan helps assure continuous improvement and accountability. Minimally, the plan must include a separate goal in relation to each of the following: clinical competence, critical thinking, professionalism, and communication skills. The plan must include student learning outcomes, measurement tools, benchmarks, and identify timeframes and parties responsible for data collection.

For additional information regarding assessment, please refer to www.jrcert.org.

Required Program Response:

Provide a copy of the program's current assessment plan.

Possible Site Visitor Evaluation Methods:

- Review of assessment plan
- Review of assessment tools
- Interviews with faculty

5.2 Documents the following program effectiveness data:

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

Explanation:

Program effectiveness measures must be reported annually on JRCERT Program Effectiveness Data (PED) form.

State licensing examination pass rates are defined as the number of graduates who pass, on first attempt, the limited X-ray machine operator certification examination compared with the number of graduates who take the examination.

Job placement rate is defined as the number of graduates employed as a limited scope X-ray machine operator compared to the number of graduates actively seeking employment as a limited scope X-ray machine operator.

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.

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

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.

Possible Site Visitor Evaluation Methods:

- Review of PED form
- Interviews with faculty

5.3 Makes available to the general public program effectiveness data (state licensing 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. The JRCERT will post five-year average state licensing examination pass rate, five-year average job placement rate, and annual program completion rate 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 samples of publications that document the availability of program effectiveness data via the JRCERT URL address.

Possible Site Visitor Evaluation Methods:

- Review of program publications
- Review of Web site
- Interviews with faculty
- Interviews with students

5.4 Analyzes and shares student learning outcome data and program effectiveness data to foster continuous program improvement.

Explanation:

Analysis of student learning outcome data and program effectiveness data allows the program to identify strengths and areas for improvement to bring about systematic program improvement. This analysis also provides a means of accountability to communities of interest. It is the program's prerogative to determine its communities of interest.

The analysis must be reviewed with the program's communities of interest. One method to accomplish this would be the development of an assessment committee. The composition of the assessment committee may be the program's advisory committee or a separate committee that focuses on the assessment process. The committee should be used to provide feedback on student achievement and assist the program with strategies for improving its effectiveness. This review should occur at least annually and must be formally documented.

For additional information regarding assessment, please refer to www.jrcert.org.

Required Program Response:

- Describe how the program analyzes student learning outcome data and program effectiveness data to identify areas for program improvement.
- Describe how the program shares its student learning outcome data and program effectiveness data with its communities of interest.
- Describe examples of changes that have resulted from the analysis of student learning outcome data and program effectiveness data and discuss how these changes have led to program improvement.
- Provide a copy of the program's actual student learning outcome data since the last accreditation award. This data may be documented on previous assessment plans or on a separate document.
- Provide documentation that student learning outcome data and program effectiveness data has been shared with communities of interest.

Possible Site Visitor Evaluation Methods:

- Review of student learning outcome data and program effectiveness data to support the assessment plan
- Review of representative samples of measurement tools used for data collection
- Review of aggregate data
- Review of meeting minutes related to the assessment process
- Interviews with faculty

5.5 Periodically evaluates its assessment plan to assure continuous program improvement.

Explanation:

Identifying and implementing needed improvements in the assessment plan leads to programmatic improvement and renewal. As part of the assessment cycle, the program should review its assessment plan to assure that assessment measures are adequate and that the assessment process is effective in measuring student learning outcomes. At a minimum, this evaluation must occur at least every two years and be documented in meeting minutes.

For additional information regarding assessment, please refer to www.jrcert.org.

Required Program Response:

- Describe how this evaluation has occurred.
- Provide documentation that the plan is evaluated at least once every two years.

Possible Site Visitor Evaluation Methods:

- Review of meeting minutes related to the assessment process
- Review of assessment committee meeting minutes, if applicable
- Interviews with faculty

Summary for Standard Five

1. List the major strengths of **Standard Five**, in order of importance.
2. List the major concerns of **Standard Five**, in order of importance.
3. Provide the program's plan for addressing each concern identified.
4. Describe any progress already achieved in addressing each concern.
5. Describe any constraints in implementing improvements.

Standard Six
Institutional/Programmatic Data

Standard Six: **The program complies with JRCERT policies, procedures, and STANDARDS to achieve and maintain specialized accreditation.**

Objectives:
In support of **Standard Six**, the program:

Sponsoring Institution

- 6.1 Documents the continuing institutional accreditation of the sponsoring institution.
- 6.2 Documents that the program's energized laboratories are in compliance with applicable state and/or federal radiation safety laws.

Personnel

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

Clinical Education Settings

- 6.4 Establishes and maintains affiliation agreements with clinical education settings.
- 6.5 Documents that clinical education settings are in compliance with applicable state and/or federal radiation safety laws.

Program Sponsorship, Substantive Changes, and Notification of Program Officials

- 6.6 Complies with requirements to achieve and maintain JRCERT accreditation.

6.1 Documents the continuing institutional accreditation of the sponsoring institution.

Explanation:

The goal of accreditation is to ensure that the education provided by institutions meets acceptable levels of quality. The sponsoring institution must be accredited by:

- an agency recognized by the United States Department of Education (USDE) and/or Council for Higher Education Accreditation (CHEA),
- The Joint Commission (TJC), or
- equivalent standards.

Required Program Response:

Provide documentation of current institutional accreditation for the sponsoring institution. This may be a copy of the award letter, certificate, or printout of the institutional accreditor's Web page.

6.2 Documents that the program's energized laboratories are in compliance with applicable state and/or federal radiation safety laws.

Explanation:

Compliance with applicable laws promotes a safe environment for students and others. Records of compliance must be maintained for the program's energized laboratories.

Required Program Response:

Provide certificates and/or letters for each energized laboratory documenting compliance with state and/or federal radiation safety laws.

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

- Program Director:

Holds, at a minimum, a baccalaureate degree,

Is proficient in curriculum design, program administration, evaluation, instruction, and academic advising,

Documents three years clinical experience in the professional discipline,

Documents one year of experience as an instructor in a JRCERT-accredited program, and

Holds American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted state license for the state in which the program is located).

- Clinical Coordinator:

Holds, at a minimum, a associate 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 American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted state license for the state in which the program is located).

- Full-time Didactic Program Faculty:

Holds, at a minimum, a associate 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 (1) American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted state license for the state in which the program is located) or (2) state license as a limited scope X-ray machine operator for the state in which the program is located.

- 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 Mentor(s):

Is proficient in supervision, instruction, and evaluation,

Documents two years clinical experience in the professional discipline, and

Holds (1) American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted state license for the state in which the clinical education setting is located) or (2) state license as a limited scope X-ray machine operator for the state in which the clinical education setting is located.

- Clinical Staff:

Holds (1) American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted state license for the state in which the clinical education setting is located) or (2) state license as a limited scope X-ray machine operator for the state in which the clinical education setting is located.

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 assignment. Clinical mentors and clinical staff supervising students' performance in the clinical component of the program must document ARRT registration (or equivalent) or other appropriate credentials (LXMO state license). Appropriate credentials, other than ARRT registration (or equivalent), may be used for qualified health care practitioners supervising students in specialty areas (i.e., registered nurse supervising students performing patient care skills,).

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 (1) current registration by the American Registry of Radiologic Technologists (or equivalent) or (2) state license as a limited scope X-ray machine operator for the state in which the program is located.
- For all currently recognized program officials [program director, clinical coordinator (if applicable), full-time didactic faculty, and all clinical mentors], submit a current (1) registration by the American Registry of Radiologic Technologists (or equivalent) or (2) state license as a limited scope X-ray machine operator for the state in which the program or clinical education settings are located.

6.4 Establishes and maintains affiliation agreements with clinical education settings.

Explanation:

Formalizing relations between the program and the clinical education setting helps assure the quality of clinical education by delineating appropriate responsibilities of the program and the clinical education setting. An appropriate termination clause assures that students will have an opportunity to complete the clinical education component. The JRCERT defines an affiliation agreement as a formal written understanding between an institution sponsoring the program and an independent clinical education setting.

An affiliation agreement must identify the responsibilities of all parties and, specifically, must address student supervision, student liability, and provide adequate notice of termination of the agreement. An affiliation agreement is not needed for clinical education settings owned by the sponsoring institution; however, a memorandum of understanding between the clinical education setting and the sponsoring institution is recommended. At a minimum, the memorandum should address responsibilities of both parties and student supervision.

Required Program Response:

Provide copies of current, signed affiliation agreements with each clinical education setting.

6.5 Documents that clinical education settings are in compliance with applicable state and/or federal radiation safety laws.

Explanation:

Compliance with applicable laws promotes a safe environment for students and others. Records of compliance must be maintained for each clinical education setting. Clinical education settings may be recognized by The Joint Commission (TJC) or an equivalent agency, or may hold a state-issued license.

Required Program Response:

Provide letters, certificates, or printouts of Web pages demonstrating the current recognition status of each clinical education setting.

6.6 Complies with requirements to achieve and maintain JRCERT accreditation.

Explanation:

Programs must comply with JRCERT policies and procedures to maintain accreditation. JRCERT accreditation requires that the sponsoring institution has primary responsibility for the educational program and grants the terminal award.

Sponsoring institutions may include educational programs established in vocational/technical schools, colleges, universities, hospitals, or military facilities. The JRCERT also recognizes a consortium as an appropriate sponsor of an educational program. A consortium is two or more academic or clinical institutions that have formally agreed to sponsor the development and continuation of an educational program. The consortium must be structured to recognize and perform the responsibilities and functions of a sponsoring institution.

The JRCERT does not recognize branch campuses. The JRCERT requires that each program location have a separate accreditation award.

Additionally, the JRCERT will not recognize a healthcare system as the program sponsor. A healthcare system consists of multiple institutions operating under a common governing body or parent corporation. A specific facility within the healthcare system must be identified as the sponsor.

The JRCERT requires programs to maintain a current and accurate database. Updates should be reflected within thirty (30) days of effective change date. Additionally, the JRCERT requires notification of substantive changes within thirty (30) days of implementation.

Required Program Response:

- Report any database changes.
- Report any substantive change not previously submitted.

Summary for Standard Six

1. List the major strengths of **Standard Six**, in order of importance.
2. List the major concerns of **Standard Six**, in order of importance.
3. Provide the program's plan for addressing each concern identified.
4. Describe any progress already achieved in addressing each concern.
5. Describe any constraints in implementing improvements.

Awarding, Maintaining, and Administering Accreditation

A. Program/Sponsoring Institution Responsibilities

1. Applying for Accreditation

The accreditation review process conducted by the Joint Review Committee on Education in Radiologic Technology (JRCERT) can be initiated only at the written request of the chief executive officer or an officially designated representative of the sponsoring institution.

This process is initiated by submitting an application and self-study report, prepared according to JRCERT guidelines, to:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182

2. Administrative Requirements for Maintaining Accreditation

- a. Submitting the self-study report or a required progress report within a reasonable period of time, as determined by the JRCERT.
- b. Agreeing to a reasonable site visit date before the end of the period for which accreditation was awarded.
- c. Informing the JRCERT, within a reasonable period of time, of changes in the institutional or program officials, program director, clinical coordinator, full-time didactic faculty, and clinical mentor(s).
- d. Paying JRCERT fees within a reasonable period of time.
- e. Returning, by the established deadline, a completed Annual Report.
- f. Returning, by the established deadline, any other information requested by the JRCERT.

Programs are required to comply with these and other administrative requirements for maintaining accreditation. Additional information on policies and procedures is available at www.jrcert.org.

Program failure to meet administrative requirements for maintaining accreditation will lead to being placed on Administrative Probationary Accreditation and result in Withdrawal of Accreditation.

B. JRCERT Responsibilities

1. Administering the Accreditation Review Process

The JRCERT reviews educational programs to assess compliance with the **Standards for an Accredited Limited Scope X-ray Machine Operator Educational Program**.

The accreditation process includes a site visit.

Before the JRCERT takes accreditation action, the program being reviewed must respond to the report of findings.

The JRCERT is responsible for recognition of clinical education settings.

2. Accreditation Actions

JRCERT accreditation actions for Probation may be reconsidered following the established procedure.

JRCERT accreditation actions for Accreditation Withheld or Accreditation Withdrawn may be appealed following the established procedure. Procedures for appeal are available at www.jrcert.org.

All other JRCERT accreditation actions are final.

A program or sponsoring institution may, at any time prior to the final accreditation action, withdraw its request for initial or continuing accreditation.

Educators may wish to contact the following organizations for additional information and materials:

accreditation: Joint Review Committee on Education in Radiologic Technology
 20 North Wacker Drive, Suite 2850
 Chicago, IL 60606-3182
 (312) 704-5300
 www.jrcert.org

curriculum: American Society of Radiologic Technologists
 15000 Central Avenue, S.E.
 Albuquerque, NM 87123-3909
 (505) 298-4500
 www.asrt.org

certification: American Registry of Radiologic Technologists
 1255 Northland Drive
 St. Paul, MN 55120-1155
 (651) 687-0048
 www.arrt.org

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