

Standards for an Accredited Educational Program in Radiologic Sciences

EFFECTIVE JANUARY 1, 2002

Adopted by:
**The Joint Review Committee on Education
in Radiologic Technology: January 1996; Revised 2001**

Essentials initially adopted:

Radiography-1944; Revised 1955, 1969, 1978, 1983, 1990, 1994

Radiation Therapy-1968; Revised 1976, 1981, 1988, 1994



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

The Joint Review Committee on Education in Radiologic Technology (JRCERT) is recognized by the United States Department of Education to accredit educational programs in radiography and radiation therapy. The JRCERT awards accreditation to programs demonstrating substantial compliance with these **STANDARDS**.

Statement on Assessment of Program Effectiveness ¹

The Joint Review Committee on Education in Radiologic Technology (**JRCERT**) believes that the accreditation process offers a means of providing public assurance that a program meets standards and of stimulating programmatic improvement. The **JRCERT Standards for an Accredited Educational Program in Radiologic Sciences (STANDARDS)** require a program to articulate its purposes; to demonstrate that it has adequate human, financial, and physical resources effectively organized for the accomplishment of its purposes; to document its effectiveness in accomplishing its purposes; and to provide assurance that it can continue to meet accreditation standards. A variety of assessment approaches in its evaluation processes strengthens a program's ability to document its effectiveness.

The **JRCERT** believes that assessment leads to programmatic improvement. The **JRCERT** does not prescribe a specific approach to assessment. That determination should be made by the program in terms of its own purposes and resources. Assessment is not an end in itself but a means of gathering information that can be used in evaluating the program's ability to accomplish its purposes. An effective assessment process provides information that assists program officials in making useful decisions about the program and in developing plans for its improvement.

The **JRCERT** expects programs to develop a system of planning and evaluation to demonstrate its effectiveness in relation to student achievement. The program is expected to describe and document student learning outcomes and the pursuit of academic excellence.

Introduction

The Standards for an Accredited Educational Program in Radiologic Sciences are directed at the assessment of program and student outcomes. Using these **STANDARDS**, the goals of the accreditation process are to: protect the student and the public, stimulate programmatic improvement, provide protective measures for federal funding or financial aid, and promote academic excellence.

Each **STANDARD** is titled and includes a narrative statement, supported by objectives, describing the outcome required for compliance with the **STANDARD**. Selected key terms are underlined and defined in the Glossary to clarify the meaning. The definitions contained in the Glossary are considered a component of the **STANDARDS** and, as such, must be satisfied to comply with the **STANDARDS**.

¹This Statement is based on a similar Statement developed by the Commission on Institutions of Higher Education, North Central Association of Colleges and Schools. The **JRCERT** acknowledges, with thanks, the permission of the North Central Association for its use.

Standards for an Accredited Educational Program in Radiologic Sciences

Table of Contents

Standard One: Mission/Goals, Outcomes, and Effectiveness	1
The program, in support of its mission and goals, develops and implements a system of planning and evaluation to determine its effectiveness and uses the results for program improvement.	
Standard Two: Program Integrity	2
The program demonstrates integrity in representations to communities of interest and the public, in pursuit of educational excellence, and in treatment of and respect for students, faculty, and staff.	
Standard Three: Organization and Administration	3
Organizational and administrative structures support quality and effectiveness of the educational process.	
Standard Four: Curriculum and Academic Practices	4
The program’s curriculum and academic practices promote the synthesis of theory, use of current technology, competent clinical practice, and professional values.	
Standard Five: Resources and Student Services	5
The program’s learning resources, learning environments, and student services are sufficient to support its mission and goals.	
Standard Six: Human Resources	6
The program has sufficient qualified faculty and staff with delineated responsibilities to support the program’s mission and goals.	
Standard Seven: Students	9
The program’s and sponsoring institution’s policies and procedures serve and protect the rights, health, and educational opportunities of all students.	
Standard Eight: Radiation Safety	10
Program policies and procedures are in compliance with federal and state radiation protection laws.	
Standard Nine: Fiscal Responsibility	11
The program and the sponsoring institution have adequate financial resources, demonstrate financial stability, and comply with obligations for Title IV federal funding, if applicable.	
Glossary	12
Awarding, Maintaining, and Administering Accreditation	15

Standard One: Mission/Goals, Outcomes, and Effectiveness

The program, in support of its mission and goals, develops and implements a system of planning and evaluation to determine its effectiveness and uses the results for program improvement.

Objectives:

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

- 1.1 Has a mission statement that defines its purpose and scope.
- 1.2 Has written goals that outline what the program is designed to achieve.
- 1.3 Makes its mission statement and goals readily available to students, faculty, administrators, and the general public.
- 1.4 Develops and implements an assessment plan that identifies benchmarks for the measurement of outcomes in relation to its mission statement and goals and includes:
 - program completion rate;
 - clinical performance and clinical competence;
 - problem solving skills and critical thinking;
 - communication skills;
 - professional development and growth;
 - graduate satisfaction; and
 - employer satisfaction.
- 1.5 Documents outcomes consistent with each of the following JRCERT policies:
 - over the past five years, credentialing examination pass rate average of not less than 75% at first attempt; and
 - over the past five years, job placement rate of not less than 75% within six months of graduation.
- 1.6 Regularly solicits feedback from students, faculty, radiologists/radiation oncologists, graduates, employers, and other communities of interest.
- 1.7 Analyzes and uses feedback from communities of interest and outcome data for continuous improvement of its policies, procedures, and educational offerings.
- 1.8 Periodically evaluates its mission statement, goals, and assessment plan and makes revisions as necessary to achieve continuous quality improvement.

Standard Two: Program Integrity

The program demonstrates integrity in representations to communities of interest and the public, in pursuit of educational excellence, and in treatment of and respect for students, faculty, and staff.

Objectives:

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

- 2.1 Adheres to high ethical standards in relation to students, faculty, and staff.
- 2.2 Has program faculty recruitment and employment practices that are nondiscriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, and national origin.
- 2.3 Publishes statements accurately reflecting the program's offerings.
- 2.4 Has due process procedures that are readily accessible, fair, and equitably applied.
- 2.5 Has a policy that assures timely and appropriate resolution of complaints regarding allegations of non-compliance with JRCERT **STANDARDS** and maintains a record of such complaints and their resolution.
- 2.6 Regularly evaluates program policies, procedures, and publications and revises as appropriate.
- 2.7 Documents the continuing accreditation of the sponsoring institution.
- 2.8 Documents the continuing recognition of each clinical education setting by applicable regulatory agencies.
- 2.9 Maintains JRCERT recognition of all clinical education settings.
- 2.10 Maintains JRCERT recognition of all applicable faculty appointments.
- 2.11 Complies with requirements to achieve and maintain JRCERT accreditation.

Standard Three: Organization and Administration

Organizational and administrative structures support quality and effectiveness of the educational process.

Objectives:

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

- 3.1 Has organizational and administrative structures that support the program's mission and student learning outcomes.
- 3.2 Establishes and maintains affiliation agreements with clinical education settings.
- 3.3 Assures the security and confidentiality of student records, instructional materials, and other appropriate program materials.
- 3.4 Assures an appropriate relationship between program length and the subject matter taught and the objectives for the degree or credential offered.
- 3.5 Measures the length of all didactic and clinical courses in clock hours or credit hours.

Standard Four: Curriculum and Academic Practices

The program's curriculum and academic practices promote the synthesis of theory, use of current technology, competent clinical practice, and professional values.

Objectives:

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

- 4.1 Maintains a master plan of education.
- 4.2 Follows a JRCERT recognized and accepted curriculum that prepares the student to practice in the professional discipline.
- 4.3 Provides a curriculum that promotes professional values, life-long learning, and competency in critical thinking and problem solving skills.
- 4.4 Provides a well-structured, competency based curriculum that supports the program's mission and goals.
- 4.5 Has a curriculum that reflects assessment of affective, cognitive, and psychomotor domains.
- 4.6 Provides learning opportunities in current and developing imaging and/or therapeutic technologies.
- 4.7 Provides equitable learning opportunities.

Standard Five: Resources and Student Services

The program's learning resources, learning environments, and student services are sufficient to support its mission and goals.

Objectives:

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

- 5.1 Provides classrooms, laboratories, clinical education settings, administrative and faculty offices, and other facilities to support its mission and goals.
- 5.2 Provides clinical observation sites, as appropriate.
- 5.3 Has clinical education settings that provide students with a variety and volume of procedures for competency achievement.
- 5.4 Reviews, evaluates, and maintains learning resources to assure the achievement of student learning outcomes and program goals.
- 5.5 Reviews, evaluates, and maintains student services to assure the achievement of student learning outcomes and program goals.

Standard Six: Human Resources

The program has sufficient qualified faculty and staff with delineated responsibilities to support the program's mission and goals.

Objectives:

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

6.1 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 counseling;

Documents the equivalent of three years full-time experience in the professional discipline;

Documents two years experience as an instructor in a JRCERT accredited program;

Holds American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

- Didactic Program Faculty:

Is qualified to teach the subject;

Is knowledgeable of course development, instruction, evaluation, and academic counseling;

Holds appropriate professional credentials, if applicable.

- Full-Time Clinical Coordinator:

Holds, at a minimum, a baccalaureate degree;

Is proficient in curriculum development, supervision, instruction, evaluation, and counseling;

Documents the equivalent of two years full-time experience in the professional discipline;

Documents a minimum of one year of experience as an instructor in a JRCERT accredited program;

Holds American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

- Radiography Clinical Instructor(s) or Radiation Therapy Clinical Supervisor(s):

Is proficient in supervision, instruction, and evaluation;

Documents the equivalent of two years full-time experience in the professional discipline;

Holds American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

- Clinical Staff:

Hold American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

6.2 Documents administrative, faculty, and clinical staff responsibilities are delineated and support the fulfillment of the program's mission and goals.

- Program Director:

Organizes, administers, reviews, develops, and assures program effectiveness;

Conducts on-going program assessment;

Participates in budget planning;

Evaluates and assures clinical education effectiveness;

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

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

- Didactic Faculty:

Prepare and maintain course outlines and objectives, instruct and evaluate students, and report progress;

Cooperate with the program director in periodic review and revision of course materials;

Maintain appropriate expertise and competencies through continuing professional development.

- Clinical Coordinator:

Correlates clinical education with didactic education;

Evaluates students;

Coordinates clinical education and evaluates its effectiveness;

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

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

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

- Radiography Clinical Instructor(s) or Radiation Therapy Clinical Supervisor(s):

Is knowledgeable of program goals;

Understands the clinical objectives and clinical evaluation system;

Provides students with clinical instruction/supervision;

Evaluates students' clinical competence;

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

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

- Clinical Staff:

Understand the clinical competency system;

Support the educational process;

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

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

6.4 Provides support services to meet all educational, program, and administrative requirements.

6.5 Provides faculty with opportunities for continued professional development.

6.6 Evaluates didactic and clinical faculty performance regularly to assure instructional responsibilities are performed.

Standard Seven: Students

The program's and sponsoring institution's policies and procedures serve and protect the rights, health and educational opportunities of all students.

Objectives:

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

- 7.1 Has student recruitment and admission practices that are consistent with published policies of the program and sponsoring institution.
- 7.2 Uses student recruitment and admission practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, and national origin.
- 7.3 Makes available to prospective students accurate information about admission policies, transfer credit, tuition and fees, refund policies, academic calendars, academic policies, graduation requirements, and student services.
- 7.4 Makes available to enrolled students accurate information about admission policies, transfer credit, tuition and fees, refund policies, academic calendars, academic policies, grading policies, graduation requirements, and student services.
- 7.5 Provides timely and supportive academic, behavioral, and clinical advisement to students enrolled in the program.
- 7.6 Provides student academic and clinical activities that are educationally valid and support attainment of student learning outcomes.
- 7.7 Safeguards the health and safety of students associated with educational activities through implemented policies and procedures in regard to workplace hazards, harassment, communicable diseases, and substance abuse.
- 7.8 Limits required clinical and academic involvement for students to not more than 40 hours per week.

Standard Eight: Radiation Safety

Program policies and procedures are in compliance with federal and state radiation protection laws.

Objectives:

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

- 8.1 Safeguards the health and safety of students associated with educational activities through the implementation of published policies and procedures that are in compliance with Nuclear Regulatory Commission regulations and state laws as applicable.
- 8.2 Has a pregnancy policy that is published and made known to accepted and enrolled female students that:
 - is consistent with applicable federal regulations and state laws;
 - includes notice of voluntary disclosure; and
 - provides options for student continuance in the program.
- 8.3 Assures that students use equipment and accessories, employ techniques, and perform procedures in accordance with accepted equipment use and radiation safety practices to minimize radiation exposure to patients, selves, and others.
- 8.4 Assures that radiation therapy procedures are performed under the direct supervision of a qualified practitioner.
- 8.5 Assures that medical imaging procedures are performed under the direct supervision of a qualified practitioner until a radiography student achieves competency.
- 8.6 Assures that medical imaging procedures are performed under the indirect supervision of a qualified practitioner after a radiography student achieves competency.
- 8.7 Assures that radiography students repeating unsatisfactory radiographs are under the direct supervision of a qualified practitioner.
- 8.8 Maintains documentation that learning environments are in compliance with applicable state and federal radiation safety laws.

Standard Nine: Fiscal Responsibility

The program and the sponsoring institution have adequate financial resources, demonstrate financial stability, and comply with obligations for Title IV federal funding, if applicable.

Objectives:

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

- 9.1 Has sufficient on-going financial resources to support the program's mission and goals.
- 9.2 Provides the program director an opportunity to participate in the budget planning process.
- 9.3 For those institutions and programs for which the JRCERT or a mixed accreditor serves as gatekeeper for Title IV financial aid, maintains compliance with USDE policies and procedures.

Glossary

Affiliation Agreement - A formal written understanding between an institution sponsoring the program and an independent clinical education setting.

American Registry of Radiologic Technologists Certification or Equivalent - Certification by the American Registry of Radiologic Technologists or unrestricted state license to operate radiation producing equipment.

Assessment - The systematic collection, review, and use of information to improve student learning, educational quality, and program effectiveness.

Assessment Plan - Provides direction for actions and is a way to determine progress. At a minimum, an assessment plan should include goals, evaluation criteria and benchmarks, outcomes, and a plan of action.

Clinical Coordinator - Required if the program has 6 or more clinical education settings or more than 30 students enrolled in the clinical component. The clinical coordinator may not serve as program director. The clinical coordinator position may be considered equal to a full-time equivalent but may be shared by no more than four appointees.

Clinical Instructor(s) - In radiography one full-time equivalent clinical instructor for every 10 students involved in the competency achievement process.

Clinical Supervisor(s) - In radiation therapy, one clinical supervisor for each clinical education setting.

Clinical Education Setting - A facility recognized by the JRCERT as meeting appropriate qualifications for delivering clinical education and evaluation of clinical competency. A minimum of one clinical instructor/supervisor is designated at each site.

Clinical Observation Site - An observation site is used for student observation of the operation of equipment and/or procedures.

Clinical Staff - For radiography, the ratio of students to staff prior to student competency achievement in a given examination or procedure shall not exceed 1:1. For radiation therapy, the ratio of students to staff shall always be 1:1.

Communities of Interest - Institutions, organizations, groups and/or individuals interested in educational activities in radiologic sciences.

Competency Based - Student attainment of a specified level of proficiency.

Credentialing Examination Pass Rate - The number of graduates who pass the American Registry of Radiologic Technologists Credentialing examination or an unrestricted state licensing examination compared with the number of graduates who take the examination.

Direct Supervision - Student supervision by a qualified practitioner 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 present during the procedure, and reviews and approves the procedure. A qualified radiographer is present during student performance of a repeat of any unsatisfactory radiograph.

Due Process - The formal procedure for resolution of a grievance or complaint that identifies timeframes for completion of each step and provides for a final appeal to a source external to the program.

Gatekeeper - An agency with responsibility for oversight of the distribution, record keeping, and repayment of Title IV financial aid.

Goals - Ends or results the program wants to achieve.

Indirect Supervision - For radiography, that supervision provided by a qualified practitioner immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the physical presence of a qualified practitioner 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.

Job Placement Rate - The number of students employed in the radiologic sciences compared to the number of students actively seeking employment in the radiologic sciences.

Learning Environment - Places, surroundings or circumstances where knowledge, understanding, or skills are studied or observed such as classrooms, laboratories and clinical education settings.

Learning Resources - Media and reference materials utilized to support and enhance the educational program and scholarly activity.

Master Plan of Education - Documentation of the entire course of study that includes at a minimum: didactic and clinical curricula, program policies and procedures, and strategies for assessing program effectiveness.

Mission Statement - A means to communicate an educational vision and purpose.

Mixed Accreditor - An accrediting agency whose responsibilities for accreditation include situations where the agency accredits the only educational program in an institution. Where there are multiple educational programs in an institution, the agency selected as the institutional accreditor.

Outcomes - Results, end products, or actual consequences resulting from the educational process. Outcomes include what the students demonstrated/accomplished or what the program achieved.

Program Completion Rate - The number of students who complete the program compared to the number of students initially enrolled in the program.

Program Length - Duration of the program which may be stated as total academic or calendar year(s), or total semesters, trimesters, or quarters.

Qualified Practitioner - A radiation therapist or radiographer possessing American Registry of Radiologic Technologists certification or equivalent and active registration in the pertinent discipline and practicing in the profession.

Recognized and Accepted Curriculum - 1) The latest American Society of Radiologic Technologists professional curriculum and/or 2) other professional curriculum adopted by the JRCERT Board of Directors following review and recommendation by the JRCERT Standards Committee.

Sponsoring Institution - The facility or organization that has primary responsibility for the educational program and grants the terminal award. A sponsoring institution must be accredited by a recognized agency or meet equivalent standards. Educational programs may be established in: community and junior colleges; senior colleges and universities, hospitals, medical schools, postsecondary vocational/technical schools and institutions; military/governmental facilities; proprietary schools; and consortia (two or more academic or clinical institutions that have formally agreed to sponsor the development and continuation of an educational program). Consortia must be structured to recognize and perform the responsibilities and functions of a sponsoring institution.

Title IV Financial Aid- Monies for education loaned or granted by the Federal government, e.g. Perkins loans, Stafford loans, PLUS loans, Pell grants, Supplemental Educational Opportunity grants and work-study programs.

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, and clinical supervisor(s) or clinical instructor(s).
- d. Paying JRCERT fees within a reasonable period of time.
- e. Returning, by the established deadline, a completed Annual Report.

Programs are required to comply with these and other administrative requirements for maintaining accreditation. Additional information on policies and procedures is available from the JRCERT.

Program failure to meet administrative requirements for maintaining accreditation may lead to being placed on Administrative Probationary Accreditation and ultimately to 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 Educational Program in Radiologic Sciences**.

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.

All other JRCERT accreditation actions are final.

Procedures for reconsideration and appeal are published in the JRCERT Accreditation Handbook and are available upon request.

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, N.E.
 Albuquerque, NM 87123-3917
 (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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