RADIATION THERAPY

CLINICAL

EDUCATION
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ADMISSION AND STUDENT RESPONSIBILITIES

Admission to Clinical Education Courses

Admission to all clinical education courses is limited to individuals who have met the following criteria:

• Successfully completed all radiologic sciences courses required to that point. A single grade of “D” is permissible in a RADS course EXCEPT for RADS 3000 and RADS 3071, which must earn a grade of “C” or better.
• Concurrently enrolled in all required RADS and non-RADS courses for that semester
• Permission of faculty of record

Clinical Grading and Grading Forms

Each student and clinical supervisor will be provided a clinical course syllabus at the beginning of each semester during clinical orientation. Each syllabus will present details concerning grading criteria, objectives, and will contain grading information needed for the semester. Required forms and supplemental information will be posted on the corresponding online course page. It is the responsibility of the student to check their email in the online course on a daily basis for updates from the clinical coordinator.
COMPETENCY BASED CLINICAL EDUCATION

Philosophy of Competency Based Clinical Education

Clinical Education is a competency-based system. By that, it is meant that students progress through the clinical education system based on demonstration of acquired skills. Additionally, competency based education implies that the student is introduced to new information and skills in a step-wise, planned fashion with skill verification at each level before students may progress to the next level.

Competency based clinical education begins before the student ever enters a clinical education course. For each skill or procedure, the student follows the following process:

- Receives didactic (classroom) instruction
- Observes demonstrations during scheduled labs
- Participates in role-playing with other students
- Reviews anatomy and pathology
- Demonstrates peer positioning in lab

Clinic Committee Role

The clinic committee’s purpose is to review the clinical education process to assure that the student graduates with the best possible education, necessary skills and proper attitudes. The committee also has the function of reviewing the process to assure that clinical education is carried out at all clinical education centers in as uniform a manner as possible. Another function of the committee is to act as a review body for any disciplinary action specific to the clinical education process. (Student representatives are excluded from these proceedings.) The clinic committee is made up of Radiologic Science faculty and Preceptors from each clinical facility. One student representative from the junior and senior class may be invited to attend a portion of the meeting. The clinical coordinator serves as chair for the meeting. The committee will consider requests from students for changes in the clinical education system or in the handling of specific student situations.

Clinical Evaluations

The clinical evaluations will be used to evaluate the relevant personal traits (affective objectives) in the clinical setting. Each student will receive an evaluation for each assigned rotation. An evaluation MUST come from the radiation therapist to which the student is assigned. Students will be assigned to specific clinical areas by the clinical supervisor at each clinical site. In the event an evaluation is submitted from someone other than their assigned therapist or clinical supervisor, the evaluation will not be counted in the student’s clinical grade.

Grading criteria for evaluations and competencies can be found at the back of this manual.
Evaluators are encouraged to complete evaluation forms immediately after completion of a competency and/or the assigned rotation and discuss the evaluation with the student. Evaluations are submitted online to an electronic database and forwarded to the student following review by the clinical coordinator. If a student has completed a competency attempt and NOT received the evaluation by email within 48 hours, they must notify the clinical coordinator so that follow-up with the radiation therapist can occur. Students will receive no credit for attempts completed unless the form has been electronically submitted.

**Clinical Affective Objectives**

While in the clinical setting, the student will:

1. Maintain appropriate dress and hygiene habits
2. Communicate with faculty, staff and patients in a clear and concise manner
3. Show initiative by performing above and beyond assigned tasks
4. Follow directions
5. Come prepared to clinic by having all necessary items
6. Conduct oneself in a professional manner
7. Demonstrate an excellent attitude by being interested in learning new skills and accepting constructive criticism
8. Follow thru on all tasks to completion
9. Work well with others by being willing to help staff and other students
10. Maintain self-confidence by not being overly confident or possessing no confidence
11. Be in attendance in clinic and in assigned area
12. Retain composure under most conditions by not becoming agitated or upset when confronted with new or difficult situations

**Special Grading Criteria**

The final examination grade for Clinical Education V will be the score earned for the Marilyn B. Buck Professional Poster Presentation held in the Spring Semester.
CLINICAL POLICIES

Dress Code

A uniform is an external indication of professionalism. Consequently, all uniforms must be neat, clean, and professional in appearance. The department will select the uniform style to be purchased by the student. Uniforms will be worn with white leather lace-up athletic shoes and white socks or stockings. Underwear must be worn and will not show through the uniform. Students are required to purchase the program approved uniforms and lab coat(s).

Hair will be neat, clean and of acceptable length (acceptable length will be determined by the Radiologic Sciences faculty) at all times. While in the clinic, the hair will be kept away from the face and off the collar. Hair adornments or accessories may not be worn in the clinic. Hair barrettes must match hair color or uniform color and be of acceptable size. Makeup may only be used discreetly; heavy eye shadow, mascara and rouge shall be avoided. Male students will maintain a neat hairstyle consistent with good taste. Male students having a beard or a mustache will keep it clean and neatly trimmed.

All fingernails shall be short, neat, and clean. Nail polish and/or acrylic nails are not acceptable in clinical education centers. Perfumes, colognes and any other fragrances may not be used in the clinical education center.

Jewelry is limited to a watch, one (1) ring to include either a wedding set, engagement ring or class ring, one(1) pair of small stud earrings in the ear lobe, which are not to hang below the ear lobe. No other piercing may be adorned with jewelry while in clinical education courses.

Personal cell phones and/or pagers may not be worn in the clinical education centers.

Students may not use the telephone in the clinical education center for personal business (making or receiving). Pay phones may be used for necessary personal business with permission of the clinical faculty.

Students may not chew gum, eat or drink beverages while in the clinical setting.

The clinical instructors, individual hospitals and/or radiology departments may have dress codes that supersede the above dress code.

Dosimeters And Dosimetry Reports

Students without dosimeters will not be allowed in the clinical education center or into energized laboratory activities. Dosimeters are to be worn at the level of the collar outside of the lead aprons. Dosimeters will be exchanged on or around the first class day of each quarter. Students are responsible for making the exchange. If they have not
If a student is missing a dosimeter the following action will be taken:

- The student will be removed from the clinic/lab.
- Occurrence will be noted in Progress Notes.

If the dosimeter is lost or damaged beyond usefulness, the student will be required to pay the $25.00 replacement cost of the badge and will not be allowed into clinic until a replacement badge is obtained.

The department receives a dosimetry (dosimeter) report at the end of each quarter for the previous measurement period. After review by the Radiation Safety Officer (RSO), the report will be posted in the laboratory prep room with all personal information blacked out. If any student exceeds more than 50 mrem for a given month, the RSO will meet with the student to try and determine what is causing the higher than expected dose. Corrective actions will be discussed with the student. If any student exceeds a dose of 100 mrem per month, the RSO will begin a formal process of determining why the dose is unacceptably high, why it happened, and how to prevent it from happening again. The meeting(s) with the student in question and the finding from the RSO will be documented in the student’s permanent record.

Identification

Students are required to wear appropriate identification in the clinical education centers at all times. Proper identification includes a regulation name badge and Department of Radiologic Sciences arm-patch. Students not having proper identification on the uniform will be removed from the clinical education center. In the event the nametag becomes defective or lost, the student must report this to the Clinical Coordinator and a new badge must be ordered and proof shown to the clinical coordinator or clinical supervisor within two (2) days.

Supervision Of Students Policy

Students may not perform procedures on any patient unless directly supervised by a qualified radiation therapist or faculty member. Direct supervision is defined as having a registered radiation therapist present during the performance of the procedure; review the procedure in relation to the student’s achievement; evaluate the condition of the patient in relation to the student’s knowledge; and approve the procedure.

Clinical Assignments

The Clinical Coordinator makes assignments to specific Clinical Education sites. Students are assigned based on the needs of the student and may be rotated from center to center as needed. The clinical supervisor at the clinical education center will make
specific assignments within each facility. These assignments are based on the student's clinical needs during the course of their clinical education.

The normal clinical schedule is typically from 7-8 in the morning to 3-5 during weekday afternoons. In addition, the location of some clinical sites may require students to travel up to 150 miles from campus. Students should make arrangements to fulfill all clinical hours that are assigned. Students will not be assigned more than forty hours per week, and no more than twelve (10) hours per day. Students are not permitted to enter clinical education centers at times other than scheduled clinical rotations without permission of the clinical faculty.

In the event that a student has been barred from all of the clinical sites by departmental administrators or their designate, that student will be removed from the Department of Radiologic Sciences as that student will have no opportunity to meet clinical requirements necessary for graduation.

Clinical Attendance Policy

Attendance is mandatory when a student is assigned to a clinical rotation/site. Student evaluations and/or objectives will reflect the failure to attend clinic when scheduled, tardiness, and removal from the clinic for lack of preparedness or dress code violations. The clinical faculty reserves the right to send students home. Students have 16 hours of leave time per clinical course. Leave time may be used with prior approval and must be used in increments of 4 hours or more. **Leave time in excess of 16 hours must be made up. This may require students to attend clinic during holidays or breaks and may result in the student receiving an incomplete if the time cannot be made up during the normal term.** Students must call their clinical supervisor and email the clinical coordinator if they are going to be absent from clinic. Clinical supervisors and department faculty will provide students with a telephone number where they can be reached.

Clinical Attendance Documentation

All students are required to document their clinical time. This documentation is achieved by completing supplied time sheets and having the time initialed by the assigned therapist or clinical supervisor. If clinic time is not documented, the student will be considered absent that day. In addition, the student must notify the clinical coordinator through the VISTA course if they are absent from clinic.

Returning to Clinic after Medical Illness

In the event a student misses clinic for two consecutive days resulting from a medically diagnosed illness; the student shall present the Clinical Supervisor/Program Coordinator with a medical release from his/her physician.
Altering Clinical Schedules Due To Conflicts

A student's clinical schedule may be modified slightly due to conflicts with other required courses if the following criteria are met:

- The conflict course is a degree requirement for Department of Radiologic Sciences
- Not offered at night
- Is a Regents Class/Examination requirement.

Scheduling accommodations are NOT made for work conflicts, daycare conflicts, etc. Students must make arrangements to be in attendance for clinical assignments during the required times.

Continuing Education Units

When a student attends a local, state, or national professional meeting, they will be given an excused absence from clinic if the meeting is held on a normally schedule clinic day. If the meeting is held on a weekend, the student will be awarded credit for an extra day of leave from clinic. In order for the student to earn an extra leave day, it must be at least ½ day in length and the clinical coordinator must be presented with proof of the student’s attendance.

Early Clinic Release Policy

If a student misses less than a total of six (6) clinical days from CE I, II, III and IV and earns an 80 or higher on the first Exit Examination, they may exit Clinical Education V as soon as all clinical course requirements have been met.
FORMS
# Treatment Competency Form

**Student Name:** _______________  **Class:** _______________  **Clinic Site:** _______________

**Evaluator:** _______________  **Procedure:** _______________  **Date:** _______________

**Patient’s Last Name:** _______________

<table>
<thead>
<tr>
<th>Activity</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed chart prior to preparing the room</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Prepared the room</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Greeted and assisted correct patient to and from treatment area</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Explained procedure and confirmed patient understanding</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Attended to patient comfort and modesty</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Positioned patient to reproduce set-up indicated in the treatment chart</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Verified SSDs</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Positioned treatment machine to reproduce set-up indicated in the chart</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Assured that field light aligned with skin marks or tattoos</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Properly utilized the back pointer</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Used / Verified correct wedge</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Utilized appropriate shielding and positioned it correctly</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Properly utilized bolus material</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Maintained patient markings</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Rechecked set-up</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Instructed patient to remain still during treatment</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Verified field placement using image guidance as required</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Performed appropriate shifts as required</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Obtained check film or weekly port film (As needed)</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Set / Verified appropriate controls on treatment unit console (mu/time)</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Monitored treatment dose rate/console indicators</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Recorded all pertinent data into treatment chart</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Referred patient to appropriate medical personnel for problems the patient was encountering</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Completed procedure within an appropriate amount of time</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Rank the Students level of proficiency for this procedure

- **Excellent 4**
- **Above average 3**
- **Below average 2**
- **Poor 1**

Rank the students knowledge and understanding relative to this procedure

- **Excellent 4**
- **Above average 3**
- **Below average 2**
- **Poor 1**

Comments

Online Track Via 3/2/09
ARMSTRONG Radiation Therapy Program  
Treatment Competency Checklist

Student Name: _______________________________

<table>
<thead>
<tr>
<th>Brain</th>
<th>Date</th>
<th>Evaluator</th>
<th>Clinical Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain Primary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain Metastatic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total CNS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP/PA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple Fields</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelvis Treatments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP/PA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple field - supine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple field - prone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inguinal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head and Neck Treatments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laterals only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple fields including supraclavicular</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast Treatments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangentials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supraclavicular</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posterior Axilla</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nodal Treatments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mantle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP/PA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple Fields</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Para-Aortic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electron Fields</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Field</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abutting Fields</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skeletal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total body, Mantle, and Total CNS procedures may be performed under simulated conditions. Four additional procedures may also be performed under simulated conditions. At least fifteen procedures must be performed on patients.

4/1/09
Simulation Competency Form

Student Name: ______________ Class: ______________ Clinic Site: ______________
Evaluator: ______________ Procedure: ______________ Date: ______________

Patient’s Last Name: ______________

<table>
<thead>
<tr>
<th>Task</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtained and reviewed proper information (imaging studies, chart, etc.) prior to simulation.</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Acquired special instructions from the physician as needed.</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Prepared the room.</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Greeted and assisted correct patient to and from treatment area</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Explained procedure and confirmed patient understanding</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Obtained or verified consent</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Attends to patient comfort and modesty.</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Managed the patient as the situation required (contrast reactions, medical conditions, etc.)</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Fabricated and /or utilized immobilization devices as needed</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Positioned and immobilized the patient using lasers / fiducials etc.</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Instructed patient to remain still during procedure</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Determined the appropriate region of interest using anatomical landmarks</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Utilized preset protocols or adjusted parameters to obtain scan (slice thickness, field of view)</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Performed scan of the region of interest</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Monitored the patient and equipment during the procedure.</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Marked isocenter and / or other required markings on the patient</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Transmitted network images to server</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Printed images as needed</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Recorded positioning and equipment setup parameters</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Acquired and labeled necessary photos</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Scheduled patient for the appropriate follow-up procedure(s)</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Released patient or referred to appropriate personnel for education</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Demonstrated appropriate radiation protection methods to limit patient and personnel exposure</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Completed procedure within an appropriate amount of time</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Rank the Students level of proficiency for this procedure
- Excellent 4
- Above average 3
- Below average 2
- Poor 1

Rank the students knowledge and understanding relative to this procedure
- Excellent 4
- Above average 3
- Below average 2
- Poor 1

Comments

Online Track Via 3/2/09
# Isocenter Shift Competency Form

Student Name: ____________________  Class: ______________ Class: ______________  Clinic Site: ______________

Evaluator: ____________________ Procedure: ____________________ Date: ______________

Patient’s Last Name: ____________________

<table>
<thead>
<tr>
<th>Activity</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed positioning and plan documentation prior to.</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Prepared the room (supplies, immobilization devices etc).</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Greeted and assisted correct patient to and from treatment area.</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Explained procedure and confirmed patient understanding.</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Attended to patient comfort and modesty.</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Positioned and immobilized the patient according to the treatment plan / documentation</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Set machine parameters according to planning documentation</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Aligned the patient according to planning documentation (fiducials, SSDs, etc.)</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Instructed patient to remain still during treatment</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Monitored patient and equipment during procedure</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Performed shift correction as needed</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Verified correct alignment of treatment portals or isocenter</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Obtained check films / images of the treatment portals or isocenter</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Processed film or image (manual or digital)</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Obtained physician approval of images / portal alignment</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Recorded revised patient / machine setup parameters as needed</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Stored verification images appropriately (manual or digital)</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Initiated patient treatment or obtained a daily treatment time</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Referred patient to appropriate medical personnel if encountering problems</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Completed procedure within an appropriate amount of time</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Rank the Students level of proficiency for this procedure
Exellent 4  Above average 3  Below average 2  Poor 1

Rank the students knowledge and understanding relative to this procedure
Exellent 4  Above average 3  Below average 2  Poor 1

Comments

Online Track Via 3/2/09
ARMSTRONG Radiation Therapy Program
Simulation Competency Checklist

Student Name: ____________________

<table>
<thead>
<tr>
<th></th>
<th>Date CT or conventional</th>
<th>Evaluator CT or conventional</th>
<th>Date Isocenter Shift</th>
<th>Evaluator Isocenter Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head and Neck</td>
<td></td>
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<tr>
<td>Pelvis</td>
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<tr>
<td>Abdomen</td>
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<tr>
<td>Breast</td>
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<tr>
<td>Brain</td>
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<tr>
<td>Chest</td>
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<tr>
<td>Skeletal</td>
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</tbody>
</table>

Please note: All simulation procedures must be performed on patients. These competencies may be completed via CT simulation, conventional simulation or a combination of the two. Please refer to the following objectives to clarify steps that must be completed for each simulation method.

<table>
<thead>
<tr>
<th>Conventional Simulation Objectives</th>
<th>CT Simulation Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assure that therapist and patient follow ALARA principles.</td>
<td>1. Assure that therapist and patient follow ALARA principles.</td>
</tr>
<tr>
<td>2. Operate simulator, check lasers, ODI, field size, etc.</td>
<td>2. Operate CT scanner, perform daily QC as needed (lasers, phantom scans, etc.).</td>
</tr>
<tr>
<td>3. Explain procedure to patient, prepare items needed for simulation, and monitor equipment during procedure.</td>
<td>3. Explain procedure to patient, prepare items needed for simulation, and monitor equipment during procedure.</td>
</tr>
<tr>
<td>5. Determine potential treatment fields from simulation films and diagnostic studies.</td>
<td>5. Perform CT scan for region of interest; participate in determining treatment fields (on film or digitally).</td>
</tr>
<tr>
<td>6. Obtain contour and measurements used to design the treatment plan.</td>
<td>6. Review and discuss CT scan and treatment plan with appropriate personnel.</td>
</tr>
<tr>
<td>7. Obtain orthogonal films.</td>
<td>7. Utilize preset protocols or adjust imaging parameters (eg. Slice level, FOV) to obtain image.</td>
</tr>
<tr>
<td>10. Demonstrate appropriate patient care, education, and monitoring.</td>
<td>10. Demonstrate appropriate patient care, education, and monitoring.</td>
</tr>
</tbody>
</table>

4/1/09
Armstrong Atlantic State University
Radiation Therapy Program
Clinical Case Study Form

Student Name:___________ Date:______ Semester:__________

Clinic Site: _________ Competency Category ________________

Patient Initials:__ Gender:____ Age:___

Anatomic Treatment Site:_____________

Primary Cancer:___________ Histology:____________________
Stage/Grade:__________

**Presenting Symptoms**

**Pertinent Medical History**

**Treatment to Date**

- Surgery

- Chemotherapy

- Radiation Therapy

**Supportive Care**

**Radiation Therapy Treatment**

Palliation or Cure (Circle one) External beam or brachytherapy (Circle one)

What energy (or isotope) was prescribed by the physician?

Why was this energy selected for this patient?
For the initial course, state the dose and fractionation schedule.
How many reductions will occur and why?

State the dose and fractionation schedule for each reduction.

What is the total dose to this treatment site at the completion of treatment?

Describe the patient’s position, including immobilization devices used. Include any explanation for unusual positions.

Describe the technique and/or beam arrangement planned for this patient for the initial course as well as the reductions.

What are the critical organ(s) in the fields?

Describe any side effects experienced by this patient.

**Route of Spread – circle all that apply**

- Hematogenous
- Peritoneal seeding
- Direct Invasion
- Lymphatic *(If applicable, list the draining nodes)*

**Most Common Site of Metastasis**

**Skin/Nutritional Instructions**

**Prognosis**
References
Simulation Clinical Evaluation (Basic Practice)

To be completed for Clinic I and II (RADS 3301 and 3302)
Each Item is rated on a scale from 1-10
(0-Extremely Deficient, 4-Poor, 7-Below Average, 8-Average, 9-Good, 10-Exceptional)

Section 1 - Clinical Performance
1. Performs operations associated with local (in-room) controls
2. Performs operations associated with console controls
3. Correctly positions and immobilizes patients prior to simulation
4. Consistently sets machine parameters according to planning protocols
5. Monitors patient during simulation

Section 2 - Retention and Application
1. Consistently remembers required information
2. Forms understanding of key concepts within an appropriate time frame
3. Is knowledgeable regarding topographic and cross-sectional anatomy

Section 3 - Preparedness
1. Arrives in the clinic prepared to interact with patients
2. Arrives in the clinic prepared to with health care professionals
3. Demonstrates an ability to prioritize / organize clinical procedures and / or educational activities

Section 4 - Communication
1. Asks questions related to appropriate information
2. Asks questions at the appropriate time
3. Asks questions with appropriate frequency
4. Can answer questions appropriately
5. Uses correct terminology etc. when communicating with health care professionals
6. Listens appropriately when patients or staff address them

Section 5 - Dependability
1. Is responsible regarding clinical time
2. Is at the appropriate location during procedures (in room / at console etc.)

Section 6 - Initiative
1. Seeks learning/practice opportunities without being prompted
2. Attempts to exceed minimum standards

Section 7 - Professionalism and interactions
1. Personal appearance conveys professionalism
2. Projects appropriate level of confidence when interacting with patients
3. Projects appropriate level of confidence when interacting with health professionals
4. Uses constructive criticism to improve clinical performance
5. Demonstrates honesty and integrity while interacting with others
6. Shows a sense of respect for authority
7. Handles conflict appropriately
Treatment Clinical Evaluation (Basic Practice)

To be completed for Clinic I and II (RADS 3301 and 3302)
Each Item should be rated on a scale from 1-10
(0-Extremely Deficient, 4-Poor, 7-Below Average, 8-Average, 9-Good, 10-Exceptional)

Section 1 - Clinical Performance
1. Performs operations associated with machine controls
2. Performs operations associated with console controls
3. Consistently places patient in correct position for treatment
4. Consistently sets machine parameters correctly prior to treatment delivery
5. Consistently plans for or delivers accurate treatment
6. Monitors patient during simulation or treatment delivery

Section 2 - Retention and Application
1. Consistently remembers required information
2. Forms understanding of key concepts within an appropriate time frame
3. Is knowledgeable regarding topographic and cross-sectional anatomy

Section 3 - Preparedness
1. Arrives in the clinic prepared to interact with patients
2. Arrives in the clinic prepared to with health care professionals
3. Demonstrates an ability to prioritize / organize clinical procedures and / or educational activities

Section 4 - Communication
1. Asks questions related to appropriate information
2. Asks questions at the appropriate time
3. Asks questions with appropriate frequency
4. Can answer questions appropriately
5. Uses correct terminology etc. when communicating with health care professionals
6. Listens appropriately when patients or staff address them

Section 5 - Dependability
1. Is responsible regarding clinical time
2. Is at the appropriate location during procedures (in room / at console etc.)

Section 6 - Initiative
1. Seeks learning/practice opportunities without being prompted
2. Attempts to exceed minimum standards

Section 7 - Professionalism and interactions
1. Personal appearance conveys professionalism
2. Projects appropriate level of confidence when interacting with patients
3. Projects appropriate level of confidence when interacting with health professionals
4. Uses constructive criticism to improve clinical performance
5. Demonstrates honesty and integrity while interacting with others
6. Shows a sense of respect for authority
7. Handles conflict appropriately
Simulation Clinical Evaluation (Advanced Practice)

To be completed for Clinic III, IV & V (RADS 4303, 4304 & 4305)
Each Item should be rated on a scale from 1-10
(0-Extremely Deficient, 4-Poor, 7-Below Average, 8-Average, 9-Good, 10-Exceptional)

Section 1 - Clinical Performance
1. Performs simulation procedures efficiently and accurately
2. Monitors patient during simulation
3. Manages patient / clinical records appropriately
4. Assesses the physiological needs of each patient as related to cancer care.
5. Assesses the psychological needs of each patient as related to cancer care

Section 2 - Retention and Application
1. Is knowledgeable regarding topographic and cross-sectional anatomy
2. Consistently demonstrates understanding of key factors and concepts associated with radiation therapy practice
3. Applies appropriate concepts in new or differing situations

Section 3 - Preparedness
1. Arrives in the clinic prepared to interact with patients
2. Arrives in the clinic prepared to with health care professionals
3. Demonstrates an ability to prioritize / organize clinical procedures and / or educational activities

Section 4 - Communication
1. Can communicate (describe / verbalize) key concepts related to radiation oncology practice
2. Uses a level of communication appropriate for patient understanding
3. Provides each patient with information and resources as needed
4. Listens appropriately when patients or staff address them

Section 5 - Dependability
1. Is responsible regarding clinical time
2. Is attentive to room conditions (cleanliness / order) of the sim room
3. Is attentive to the availability of room supplies and linen.
4. Is an effective member of the oncology team

Section 6 - Initiative
1.Attempts to solve problems in an appropriate manner without being prompted
2. Attempts to exceed minimum standards

Section 7 - Professionalism and interactions
1. Personal appearance conveys professionalism
2. Projects appropriate level of confidence when interacting with patients
3. Projects appropriate level of confidence when interacting with health professionals
4. Uses constructive criticism to improve clinical performance
5. Demonstrates honesty and integrity while interacting with others
6. Shows a sense of respect for authority
7. Handles conflict appropriately
Treatment Clinical Evaluation (Advanced Practice)

To be completed for Clinic III, IV & V (RADS 4303, 4304 & 4305)
Each Item should be rated on a scale from 1-10
(0-Extremely Deficient, 4-Poor, 7-Below Average, 8-Average, 9-Good, 10-Exceptional)

Section 1 - Clinical Performance
1. Consistently plans for or delivers accurate treatment
2. Monitors patient during simulation or treatment delivery
3. Manages patient / clinical records appropriately
4. Assesses the physiological needs of each patient as related to cancer care.
5. Assesses the psychological needs of each patient as related to cancer care

Section 2 - Retention and Application
1. Is knowledgeable regarding topographic and cross-sectional anatomy
2. Consistently demonstrates understanding of key factors and concepts associated with radiation therapy practice
3. Applies appropriate concepts in new or differing situations

Section 3 - Preparedness
1. Arrives in the clinic prepared to interact with patients
2. Arrives in the clinic prepared to with health care professionals
3. Demonstrates an ability to prioritize / organize clinical procedures and / or educational activities

Section 4 - Communication
1. Can communicate (describe / verbalize) key concepts related to radiation oncology practice
2. Uses a level of communication appropriate for patient understanding
3. Provides each patient with information and resources as needed
4. Listens appropriately when patients or staff address them

Section 5 - Dependability
1. Is responsible regarding clinical time
2. Is attentive to room conditions (cleanliness / order) of the treatment room
3. Is attentive to the availability of room supplies and linen.
4. Is an effective member of the oncology team

Section 6 - Initiative
1. Attempts to solve problems in an appropriate manner without being prompted
2. Attempts to exceed minimum standards

Section 7 - Professionalism and interactions
1. Personal appearance conveys professionalism
2. Projects appropriate level of confidence when interacting with patients
3. Projects appropriate level of confidence when interacting with health professionals
4. Uses constructive criticism to improve clinical performance
5. Demonstrates honesty and integrity while interacting with others
6. Shows a sense of respect for authority
7. Handles conflict appropriately
Student Evaluation of Clinical Experience Form

<table>
<thead>
<tr>
<th>Clinic Site</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please circle a number from 1-5 indicating your feelings toward the following statements regarding clinical instruction in the hospital affiliates. The number 1 being the lowest rating and the number 5 being the highest.</td>
<td></td>
</tr>
</tbody>
</table>

1. The amount of time spent in the Clinical Education Center was adequate. How many hours per week would be best at this point in the Program? 1 2 3 4 5

2. The clinical procedures were explained sufficiently to allow for thorough understanding. Which procedures, if any, could be explained better? 1 2 3 4 5

3. The therapists were interested and willing to take time to give instructions and assistance. What additional assistance could the therapists provide the student? 1 2 3 4 5

4. The clinical supervisor was interested and willing to take time to give instructions and assistance. What additional assistance could the clinical supervisor provide the student? 1 2 3 4 5

5. You were allowed ample opportunity to “work hands on” 1 2 3 4 5

6. Your time was well spent in the clinic. 1 2 3 4 5

7. The general radiation protection procedures of the department were adequate. How might the radiation protection procedures be improved? 1 2 3 4 5

8. The therapists demonstrated proper patient care. 1 2 3 4 5

9. You received adequate instruction from the therapists in each of the following areas:
   - A. patient positioning 1 2 3 4 5
   - B. equipment operation 1 2 3 4 5
   - C. radiation protection 1 2 3 4 5
   - D. patient management 1 2 3 4 5

10. You received adequate critique from the clinical supervisor in each of the following areas:
    - A. patient positioning 1 2 3 4 5
    - B. equipment operation 1 2 3 4 5
    - C. radiation protection 1 2 3 4 5
    - D. patient management 1 2 3 4 5

11. Performance time (length of time required to perform a procedure) was appropriately stressed 1 2 3 4 5

12. You were directly supervised by a qualified radiation therapist or faculty member at all times 1 2 3 4 5
13. What did you like best about clinic?

14. What did you like least about clinic?

18. What suggestions do you have for improving student clinical experiences?

________________________________________                          ________________
Signature                                                                 Date
Student Counseling Form

______ Midterm Counseling _________ Final Counseling______ Special Counseling

Student Name: ___________________________ Date:_________________

As of the above date, your progress during this term is as follows:

Course:

Objectives:

Competencies:

Case studies:

Clinical Evaluations:

Comments:

Student Signature: ____________________________________________

Instructor Signature: _________________________________________
# Radiation Therapy
## Time and Attendance Record

<table>
<thead>
<tr>
<th>Date</th>
<th>Name of Student</th>
<th>Time In</th>
<th>Therapist Initials</th>
<th>Time Out</th>
<th>Therapist Initials</th>
</tr>
</thead>
<tbody>
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Comments_______________________________________________________________

<table>
<thead>
<tr>
<th>Date</th>
<th>Name of Student</th>
<th>Time In</th>
<th>Therapist Initials</th>
<th>Time Out</th>
<th>Therapist Initials</th>
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Comments_______________________________________________________________

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<tr>
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Comments_______________________________________________________________
Leave of Absence Request

Name: _____________________________________________________________________
Date of Application: _________________________
Start date of leave: __________________________
Term of planned return: _______________________
Clinical Education course last enrolled: _________________________________________
Reason for leave of absence: ____________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
By my signature below, I agree to the stipulations of the leave of absence listed:
1. Readmission to the Department of Radiologic Sciences is not guaranteed.
2. Readmission will only be considered if I formally apply for readmission no later than midterm of the semester before my planned return. Application for readmission includes attaching a current copy of my transcript to the application.
3. All requests for readmission are on a space available basis and I may not be readmitted if no seat is available.
4. In order to qualify for readmission, I must have a minimum GPA of 2.0.
5. In order to qualify for readmission, I must have completed all non-RADS courses except as noted below:

____________________________________________________________________________
6. If I am denied readmission because of the unavailability of a seat, I may still enroll in didactic courses and apply for readmission in subsequent semesters.
7. In the event I am not re-enrolled in the Department of Radiologic Sciences on the date stated above or refused readmission due to GPA or non-completion of courses, I have no further right to apply for readmission.
8. If I am readmitted, I understand that I may be required to repeat 1 or more clinical education classes as determined by the faculty and will be held to the current Program Manual and university catalog.

I accept the stipulations listed above if granted the Leave of Absence.

Signature _____________________________________________________________________

Approved □  Disapproved □

Reason: ____________________________________________________________________
Date: _________________________
Application for Readmission from Leave

Name____________________________________
Current Address _______________________________________________
Social Security Number ____________________ Date of Application ____________
Date of anticipated reentry (Semester/Year) ____________________________________
Date of departure from program (Semester/Year) __________________________________
Last RADS courses successfully completed (e.g., RAD 3150 & 3000):
_________________________________________________________________________

Reason for departure (check one): Approved leave of absence ☐ Suspension ☐

Current GPA: ___________________________
Current Hours completed: ___________________________
Currently enrolled classes: ___________________________

In order for your application for readmission to be considered, you must:
1. You must apply for readmission the semester before you wish to reenter the professional component but no later than midterm of that same semester. An application is not required to retake professional courses mandated by a suspension situation.
2. You must submit a current transcript with your application (a computer printout is NOT acceptable).
3. You must have a minimum GPA of 2.0.
4. You must have met all stipulations of your suspension or your leave.
5. All seats are on a space available basis. You are not guaranteed a seat in the Department of Radiologic Sciences based only on having met the criteria of your leave or suspension. If no seats are available, none will be awarded.
6. Seats are awarded on a competitive basis with GPA, hours of work completed, and reason for absence taken into consideration.
7. If you are denied readmission due to no availability of seats, you must reapply each semester you wish to be considered.
8. In the event you are denied readmission because of a failure to met the stipulation of the leave or suspension or because of a GPA below 2.0, the student may not apply for readmission again and the Department of Radiologic Sciences has no further obligation to that student.
9. In the event a student is denied readmission because of no space availability, the student may continue in the didactic (non-clinic) courses and reapply the next semester for a clinical seat. Students who are returning from a suspension may apply for readmission a maximum of 2 times. Students returning from a leave may apply for readmission as long as space is potentially available in the Department of Radiologic Sciences.

I understand and accept the above criteria. All statements above are true and accurate.
__________________________________________________Signature

Approved ☐ Disapproved ☐ Reason:_____________________________________
Date:____________
PREGANANCY DECLARATION FORM

I, ________________________________, officially declare myself to be pregnant. This information is being given to the Department of Radiologic Sciences in order to have appropriate measures taken relative to my pregnancy and potential radiation exposure.

The projected due date is ________________________________.

I understand that I must meet with the designated Radiation Safety Officer for the department and discuss the issues involved, the current research, required safety procedures during my pregnancy, and to review federal documentation relative to effects of radiation exposure to the embryo/fetus.

Signature:

__________________________________________  ________________________
Student                                           Date
Rising Senior Examination Report and Remediation Record

Student Name: 

Date: 

Based on the Rising Senior Examination, you were found to be deficient in the area(s) indicated below. As you have been found to be in need of remediation, you are required to contact the responsible faculty to arrange for remediation. By the end of the summer semester, you must be signed off as having successfully completed the required remediation as defined by the faculty member. If you are not signed off by all faculty by the end of the summer semester you will not be allowed to maintain your enrollment in any RADS class in the fall semester of your senior year.

<table>
<thead>
<tr>
<th>AREAS</th>
<th>Remediation Completed (Initials)</th>
<th>Date</th>
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<tbody>
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</table>
Policy Verification Form

I ____________________________, verify that I have read, 
(name) print 
understand, and am responsible for the departmental and 
clinical policies put forth in this manual. (Radiologic 
Sciences Department Manual [Radiation Therapy] 
_____________________.

____________________
Year

____________________
Student Signature

____________________
Date

Standards for an Accredited Educational Program in Radiation Therapy

EFFECTIVE JANUARY 1, 2011

Adopted by: 
The Joint Review Committee on Education
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.

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Introductory Statement

The Joint Review Committee on Education in Radiologic Technology (JRCERT) Standards for an Accredited Educational Program in Radiation Therapy 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.
Standards for an Accredited Educational Program in Radiation Therapy

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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.

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 Educational Program in Radiation Therapy 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.

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. For example, if an opportunity exists for students to observe or perform tomotherapy, then all students must be provided the same opportunity. If evening and/or weekend rotations are utilized, this opportunity must be equitably provided for all 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 a wide range of procedures for competency achievement. Clinical education settings may include hospitals and free-standing radiation therapy centers. With the exception of observation site assignments, students must be provided the opportunity to complete required program competencies during clinical assignments. Clinical placement must be non-discriminatory in nature and solely determined by the program.
A meaningful clinical education plan assures that activities are educationally valid and prevents the use of students as replacements for employees. The maximum number of students assigned to a clinical education setting must be supported by sufficient human and physical resources. The number of students assigned to the clinical education setting cannot exceed the total number of linear accelerators and simulators.

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

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

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

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

The JRCERT defines the operational hours of traditional programs as Monday - Friday, 5:00 a.m.- 7:00 p.m.
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 limitations must be voluntary on the student’s part.

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.

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 supervisors, radiation therapy department director). 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.

1.7 Assures that students are made aware of the JRCERT Standards for an Accredited Educational Program in Radiation Therapy 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.

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.

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.

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 radiation therapy program is to prepare competent, entry-level radiation therapists able to function within the healthcare community.

**Goal: Students will be clinically competent.**
Student Learning Outcomes: Students will position patients as directed in treatment record/plan.
Students will operate equipment to deliver prescribed therapeutic dose.
Students will utilize radiation safety.

**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 recognize setup discrepancies.
Students will design a treatment plan.

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

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 in radiation therapy. 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.

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.

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.

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.

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.
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.

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. 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. Additionally, a full-time equivalent clinical coordinator is required if the program has more than five (5) active clinical education settings or more than thirty (30) 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 supervisors.

A minimum of one clinical supervisor must be designated at each recognized clinical education setting. The same clinical supervisor may be identified at more than one site as long as a ratio of one full-time equivalent clinical supervisor for every ten (10) students is maintained.

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.

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.

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 supervisor 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.

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

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.

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 therapeutic 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.

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.

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.

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.

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.
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 in the professional discipline.

3.3 Provides learning opportunities in current and developing therapeutic and/or imaging technologies.

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

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

3.6 Maintains a master plan of education.

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

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

3.9 Evaluates program faculty and clinical supervisor 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.


**3.2 Provides a well-structured, competency-based curriculum that prepares students to practice in the professional discipline.**

*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 professional curriculum and/or
- another professional curriculum adopted by the JRCERT Board of Directors following review and recommendation by the JRCERT Standards Committee.

Use of a standard curriculum promotes consistency in radiation therapy education and prepares the student to practice in the professional 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, communicate effectively, and keep abreast of current advancements within the profession. 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).

**3.3 Provides learning opportunities in current and developing therapeutic and/or imaging technologies.**

*Explanation:*
The program must provide learning opportunities in current and developing therapeutic and/or imaging technologies. It is the program’s prerogative to decide which technologies should be included in the didactic and/or clinical curriculum. Programs are not required to offer clinical rotations in developing therapeutic and/or imaging technologies; however, these clinical rotations are strongly encouraged to enhance student learning.

**3.4 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.

3.5 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.

3.6 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.

3.7 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.

3.8 Documents that the responsibility of faculty and clinical staff are delineated and performed.
• Full-time Program Director:

Assures effective program operations,

Oversees ongoing program assessment,

Participates in budget planning,

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

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

• Full-time Clinical Coordinator:

Correlates clinical education with didactic education,

Evaluates students,

Participates in didactic and/or clinical instruction,

Supports the program director to help assure effective program operation,

Coordinates clinical education and evaluates its effectiveness,

Participates in the assessment process,

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

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

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

• Full-Time Didactic Program Faculty:

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

Participates in the assessment process,

Supports the program director to help assure effective program operation,
Cooperates with the program director in periodic review and revision of course materials, and

Maintains appropriate expertise and competence through continuing professional development.

Part-Time Didactic Program Faculty:

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

Participates in the assessment process, when appropriate,

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

Maintains appropriate expertise and competence through continuing professional development.

• Clinical Supervisor(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.

3.9 Evaluates program faculty and clinical supervisor performance regularly to assure instructional responsibilities are performed.

Explanation:
The performance of didactic faculty and clinical supervisors 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 supervisors to assure continued professional development.
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 all radiation therapy procedures are performed under the direct supervision of a qualified practitioner.

4.5 Assures sponsoring institution’s policies safeguard the health and safety of students.

4.6 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.
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.

4.3 Assures that students employ proper radiation safety practices.

**Explanation:**
The program must assure that students are instructed in the utilization of therapeutic equipment, accessories, 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 qualified practitioner who is readily available. Programs are encouraged to develop policies regarding safe and appropriate use of energized laboratories by students.

4.4 Assures that all radiation therapy procedures are performed under the direct supervision of a qualified practitioner.

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

4.5 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.

4.6 **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.
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 credentialing 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 the 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](http://www.jrcert.org).

5.2  **Documents the following program effectiveness data:**

- Five-year average credentialing 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:**

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

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

Job placement rate is defined as the number of graduates employed in the radiologic sciences compared to the number of graduates actively seeking employment in the radiologic sciences.

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.

5.3 **Makes available to the general public the program effectiveness data (credentialing examination pass rate, job placement rate, and program completion rate) on an annual basis.**

*Explanation:* Program accountability is enhanced by making its effectiveness data available to the program’s communities of interest and the general public. The JRCERT will post five-year average credentialing 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.

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.

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.
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.

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.

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

- Full-time Program Director:
  
  Holds, at a minimum, a master’s degree,

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

  Documents three years clinical experience in the professional discipline,

  Documents two years of experience as a instructor in a JRCERT-accredited program, and

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

- Full-time Clinical Coordinator:
  
  Holds, at a minimum, a baccalaureate degree,

  Is proficient in curriculum development, supervision, instruction, evaluation, and academic advising,

  Documents two years clinical experience in the professional discipline,
Documents a minimum of one year of experience as a instructor in a JRCERT-accredited program, and

Holds American Registry of Radiologic Technologists current registration in radiation therapy 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 baccalaureate degree,

Is qualified to teach the subject,

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

Documents two years clinical experience in the professional discipline, and

Holds American Registry of Radiologic Technologists current registration in radiation therapy or equivalent (i.e., unrestricted state license 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 Supervisor(s):

Is proficient in supervision, instruction, and evaluation,

Documents two years clinical experience in the professional discipline, and

Holds American Registry of Radiologic Technologists current registration in radiation therapy or equivalent (i.e., unrestricted state license for the state in which the clinical education setting is located).

• Clinical Staff:
Holds American Registry of Radiologic Technologists current registration in radiation therapy or equivalent (i.e., unrestricted state license 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 supervisors and clinical staff supervising students’ performance in the clinical component of the program must document ARRT registration (or equivalent) or other appropriate credentials. Appropriate credentials, other than ARRT registration (or equivalent), may be used for qualified health care practitioners supervising students in specialty areas (e.g., registered nurse supervising student performance of patient care skills or certified medical dosimetrist supervising treatment planning activities).

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.

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.
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.
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 supervisor(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 Educational Program in Radiation Therapy.

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