Standard 1

List the major strengths of this standard in order of importance

1. One strength is the program's transparency with students, faculty, and the public. The program's mission statement, goals, and student learning outcomes are easily accessible. The AAS Information Packet provides prospective students with a comprehensive overview of the program's structure, costs, and effectiveness.

2. The program adheres to high ethical standards for administration, faculty, and students. Program officials are dedicated to providing quality and equitable education for all students in the classroom and clinical settings. Policies are written and enforced with the full cooperation of faculty and clinical site personnel.

List the major concerns of this standard in order of importance

There are no concerns for Standard 1.

Provide the program's plan for addressing each concern identified

Describe any progress already achieved in addressing each concern

Describe any constraints in implementing improvements

Objective 1.1

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

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

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

Narrative
University policies for students are available in the CMU catalog and The Maverick Guide (student handbook). The CMU Professional Personnel Employment Handbook sets forth policies and procedures applicable to professional personnel employed by the university. The employment handbook supplements the policies set forth in the Trustees' Policy Manual and is intended to be consistent with those policies in all respects. Prospective students can find information about the program in the AAS Information Packet available on the Health Science Department/Radiologic Technology Program website. For students enrolled in the program, the AAS Student Handbook houses policies for didactic and clinical environments.

Supporting Documentation
CMU General Policy Statements (Catalog pgs. 1-10)
CMU Maverick Guide Table of Contents
CMU Personnel Handbook Table of Contents
AAS Information Packet
AAS Student Handbook

Objective 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 breast imaging, 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.

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

Possible Site Visitor Evaluation Methods
- Review of master plan of education
- Review of course objectives
- Review of student clinical assignment schedules
- Interviews with faculty
- Interviews with clinical preceptors
- Interviews with clinical staff
- Interviews with students

Narrative
All didactic and laboratory courses are taught in the same space during regular daytime hours. Students take all didactic courses together. The campus laboratory is available to all first year students to practice positioning skills Monday through Friday from 8:00 a.m. to 5:00 p.m. when there is no class scheduled in the laboratory.

During the first two semesters of the program, clinical experiences for all first year students are in a hospital setting (located in the local vicinity) during daytime hours. During the final three semesters of the program, all second year students rotate through the same clinical experiences based on site location, type of experience, time of day, and number of days. For example, all second year students complete a four-week rotation in surgery, an eight-week rotation at a remote clinical site, and a four-week evening rotation.

Program faculty use the same grading scale and post grading criteria in syllabi.

Supporting Documentation - optional
First Year Clinical Schedule Fall 2013
Second Year Clinical Schedule 2013

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

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

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

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

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

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

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

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

Programs may permit students to make up clinical time during term or scheduled breaks; however, they may not be assigned to clinical settings on holidays that are observed by the sponsoring institution. Program faculty need not be physically present; however, students must be able to contact program faculty during makeup assignments. Also, the program must assure that its liability insurance covers students during these makeup assignments.

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

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

Narrative

The program randomly assigns first semester students to one of four local clinical sites. When possible, the program randomly assigns second semester students to a local clinical site that is different from the first rotation, with one exception. In fall 2013, the program modified this process due to changes in requirements for students completing clinical experiences at the Veteran's Administration Medical Center (VAMC). Until 2012, all students completed mandatory VAMC entrance paperwork, online assessments, background checks, and fingerprinting as a group during the first few weeks of the program. The mandatory requirements were effective for the duration of the program. In 2012, the VAMC began to require new entrance paperwork and online assessments, another background check, and second fingerprinting for students experiencing a six-month interruption. To eliminate unnecessary costs to the VAMC, now only students assigned to the VAMC complete the mandatory paperwork, fingerprinting, and background checks. Four, first year students complete the first two semesters at the facility and do not return during the remainder of the program.

All students must complete an eight-week "out-of-town" rotation some time during the third, fourth, or fifth semesters. Beginning in the third semester, the program affords second year students an opportunity to indicate a first and second choice clinical site where they would like to complete the eight-week out-of-town clinical rotation. The program allows students to indicate a preference because one of the out-of-town rotations is far enough out of town to preclude the drive each day. The two and one-half to three hour or more commute is a burden particularly for students with young children. This site provides housing for students during the days they are completing a clinical rotation, so it is convenient for those students who do not have commitments in the local area. Additionally, some students in the program live in the "out-of-town" clinical locations. The program gives these students opportunity to complete some additional clinical rotations in a clinical site in the area where they live. The program always reserves the right to schedule students' clinical rotations. All students complete the orthopedic clinic, computed tomography/vascular interventional, and specialized areas rotations in the local area.

The program assures a 1:1 student to radiography clinical staff ratio at all clinical settings by monitoring the clinical sites. During the first two semesters, the clinical coordinator is present in one of the four clinical sites during the entire time students are completing clinical experiences. The clinical coordinator spends an equal amount of time with each student and visits each clinical site at least once a week. The second year clinical instructor contacts each student weekly and site visits students in the local area. The

program director travels to the distant sites yearly. The program also assures the required ratio by asking advisory committee members to identify changes in the facility.

The program assures that all students have access to a sufficient variety and volume of procedures to achieve program competencies by rotating students through different clinical sites and providing students opportunity to focus on different types of learning experiences. All second year students complete the same clinical rotations during the final three semesters of the program. All students complete four-week rotations in one of two orthopedic clinics, surgery, emergency room, and mobile imaging rotations. All students complete six-day observational rotations in computed tomography and vascular interventional imaging. All students complete three-day observational rotations in the specialty areas of nuclear medicine, radiation oncology, magnetic resonance imaging, and ultrasonography. All students complete the observational rotations in the same facility.

Supporting Documentation

First Year Clinical Schedule Fall
2009
2012

First Year Clinical Schedule Spring
2010
2012

Second Year Clinical Schedule
2008
2013

Second Year Special Areas Schedule
2011

Objective 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.

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

Possible Site Visitor Evaluation Methods
- Review of master plan of education
- Review of published program materials
- Review of student schedules
- Interviews with faculty
- Interviews with clinical instructors(s)
- Interviews with clinical staff
- Interviews with students

Narrative
The program schedules students for no more than eight hours per day of didactic and clinical education during the first two semesters. During the first semester, the program schedules a maximum of six hours per day of didactic education Monday through Thursday and one eight-hour clinical day per week (Thursday or Friday). Students with clinical assignments on Thursday cannot register for didactic courses offered on Thursday.

During the second semester, the program schedules a maximum of six hours per day of didactic education Monday through Thursday and one four-hour and one eight-hour clinical day per week (Wednesday/Thursday or Thursday/Friday). Students with eight-hour clinical assignments on Wednesday and four-hour clinical assignments on Thursday cannot register for didactic courses offered on Wednesday and they can register for two didactic hours on Thursday. Students with four-hour clinical assignments on Friday can only register for two didactic hours on Thursday.

During the third semester, the program schedules most second year students for eight, 40-hour weeks. The only time students may opt for four, ten-hour days per week are those with out-of-town schedules during the third (summer) semester.

During the fourth and fifth semesters, the program schedules students for three, eight-hour days Monday through Thursday and four hours of didactic education on Friday.

Supporting Documentation
Degree Requirements and Program Progression for AAS in Radiologic Technology, AAS Student
    Handbook (page 8)
First Year Students Fall Schedule Template
First Year Students Spring Schedule Template

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

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

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

Possible Site Visitor Evaluation Methods
- Review of institution's/program's published policies/procedures
- Review of student academic and clinical records
- Tour of program offices
- Tour of clinical education setting(s)
- Interviews with administrative personnel
- Interviews with faculty
- Interviews with clinical instructor(s)
- Interviews with clinical staff
- Interviews with students

Narrative
The program recently adopted an electronic database for student program records. Access to the secure database (WebXtender) is limited to professional staff and faculty. Paper copies of documents are stored in a secure space or shredded. Faculty return graded academic materials directly to the student or the materials are stored in a secure area for one year before being shredded. Clinical instructors in rural facilities mail graded materials directly to the clinical instructor.

Radiation monitoring reports that contain the student's date of birth and social security numbers remain in a secure area. The posted monthly dosimetry report does not contain the student name or any other identifying information. Students access personal monthly dosimetry reports based on a code.

Supporting Documentation - optional
CMU FERPA Policy Statement (Catalog page 3)
CMU Access to Student Educational Records (Maverick Guide, page 23)
Program Privacy of Student Records Policy (Student Handbook, page 14)

Objective 1.6
Has a grievance procedure that is readily accessible, fair, and equitably applied.

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

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

Required Program Response
- Describe the nature of any formal grievance(s) that would jeopardize the program's ability to meet its mission.
- Describe the nature of any complaint(s) that would jeopardize the program's ability to meet its mission.
- Provide a copy of the grievance procedure.
- Provide a copy of any formal grievance(s) resolution.

Possible Site Visitor Evaluation Methods
- Review of institutional catalog
- Review of student handbook
- Review of formal grievance(s) record(s), if applicable
- Review of complaint(s) record(s), if applicable
- Interviews with faculty
- Interviews with students

Narrative - optional
The program has not had a formal grievance filed that would jeopardize the program's ability to meet its mission.

The program has not had a complaint filed that would jeopardize the program's ability to meet its mission.

Supporting Documentation - required
CMU Student Complaint Policy (MavZone)
CMU Appeal Procedure for Sanctions for Academic Dishonesty (Maverick Guide, pages 17-18)
CMU Grade Appeal Procedure (Maverick Guide, pages 19-20)
CMU Student Complaint Policy (Catalog page 46)
Department Grievance and Appeals Policy (Student Handbook, page 10)

Objective 1.7

Assures that students are made aware of the JRCERT Standards for an Accredited Educational Program in Radiography and the avenue to pursue allegations of non-compliance with the STANDARDS.

Explanation

The program must assure students are cognizant of the STANDARDS and must provide contact information for the JRCERT. Students have the right to submit allegations against a JRCERT-accredited program if there is reason to believe that the program has acted contrary to JRCERT accreditation standards or that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students. Contact of the JRCERT should not be a step in the formal institutional/program grievance procedure.

The individual must first attempt to resolve the complaint directly with institution/program officials by following the grievance procedures provided by the institution /program.

If the individual is unable to resolve the complaint with institution/program officials or believes that the concerns have not been properly addressed, he or she may submit allegations of non-compliance directly to the JRCERT.

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

Possible Site Visitor Evaluation Methods
- Review of program publications
- Interviews with faculty
- Interviews with student

Narrative

The student handbook makes students aware of the STANDARDS. The student handbook includes contact information for the JRCERT.

Supporting Documentation - optional

Student Handbook JRCERT statement (Student Handbook, page 5)

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

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

Required Program Response
Provide program publications that reflect program policies, procedures and offerings.

Possible Site Visitor Evaluation Methods:
- Review of published program materials
- Review of student handbook
- Interviews with faculty
- Interviews with students

Narrative - optional
The program publishes the Information Packet on the Health Sciences Department website. Students admitted to the program have access to the Program Student Handbook from a secure website available to CMU students.

Supporting Documentation - required
Program Information Packet
Program Student Handbook

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

Explanation
The institutional and/or program policies must be published and made available to students, faculty, and the general public to assure that they are adequately informed. Policy changes must be made known to students, faculty, and the general public in a timely fashion. It is recommended that revision dates be identified on program publications. Student clinical obligations (e.g., drug screening, background checks, and associated fees) must be clearly identified in appropriate program publications. Additionally, if evening and/or weekend clinical assignments are required or if students must travel to geographically-dispersed clinical education settings, this information must also be included.

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

Possible Site Visitor Evaluation Methods
•Review of institutional materials
•Review of published program materials
•Interviews with faculty
•Interviews with Admissions personnel
•Interviews with Registrar
•Interviews with student

Narrative
Institutional policies (admission policies, tuition and fees, refund policies, academic policies, graduation requirements, and criteria for transfer credit) are made known to students, faculty, and the general public in the CMU Catalog, which are available from the CMU website. Academic calendars, tuition, and course offerings are published twice a year in the course schedule, which is available on the CMU website. Academic requirements including program sheets and program information are available from the CMU website. All incoming freshmen students are required to attend a student orientation program, which discloses information about the university, provides advising information, and guides student in the registration process. Transfer students are encouraged to attend the orientation.

General program policies (application process, clinical obligations, and graduation requirements) are made known to students, faculty, and the general public in the Program Information Packet, which is available from the CMU website. Revision dates are identified on program publications. The Information Packet also includes student associated program fees. The program director and clinical coordinator receive numerous phone calls, emails, and visits from students interested in the program. Once the student has declared a pre-major, they are assigned a program advisor. Detailed program policies (graduation requirements and grading policies) are made know to students and faculty in the Program Student Handbook.

Supporting Documentation
CMU Admissions Homepage
CMU Current Students Homepage
CMU Academic Requirements
CMU Course Registration Information
Program Information Packet
Program Student Handbook

Objective 1.10

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

Explanation

Program accountability is enhanced by making its mission statement, goals, and student learning outcomes available to the program's communities of interest on the institution's/program's Web site to assure transparency and of the educational program. Requiring the general public to contact the institution/program to request program information is not adequate.

Example:

Mission:

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

Goal: Students will be clinically competent.
Student Learning Outcomes:

•Students will apply positioning skills.
•Students will select technical factors.
•Students will utilize radiation protection.

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

•Students will demonstrate written communication skills.
•Students will demonstrate oral communication skills.

Goal: Students will develop critical thinking skills.
Student Learning Outcomes:

•Students will adapt standard procedures for non-routine patients.
•Students will critique images to determine diagnostic quality.

Goal: Students will model professionalism.
Student Learning Outcomes:

•Students will demonstrate work ethics.
•Students will summarize the value of life-long learning.

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

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review of institutional and/or program Web site
•Interviews with administrative personnel

•Interviews with faculty
•Interviews with students

Narrative
The program makes the mission statement, goals, and student learning outcomes available to students, faculty, administrators, and the general public from a link on the Radiologic Technology Program (Department of Health Sciences) website. The mission statement, goals, and student learning outcomes are in the Information Packet and Student Handbook. Each program syllabus contains the student learning outcomes.

Supporting Documentation
Program Mission Statement (Student Handbook)
Program Mission Statement Goals SLOs (Website)
Sample Student Learning Outcomes in Syllabus

Objective 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 radiography. Obtaining formal feedback on program operations, student progress, employer needs, etc. from communities of interest allows the program to determine if it is meeting expectations and assures continuous program improvement. The program can use a variety of tools to obtain this feedback.

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

Possible Site Visitor Evaluation Methods
•Review of meeting minutes
•Review of evaluations
•Review of surveys
•Interviews with members of various communities of interest

Narrative
The program solicits feedback from students through faculty, clinical site, and program evaluations. Faculty receive feedback from course evaluations each semester. The program also obtains feedback through exit, graduate, and employer surveys, which are sent out annually. The program has an advisory committee, which is comprised of representatives such as department administrators, affiliate clinical instructors, graduates and staff technologists.

Supporting Documentation
Sample Faculty/Course Evaluations
Clinical Site Evaluation Form
Exit Survey Form
Graduate Survey Form
Employer Survey Form
Sample Advisory Committee Minutes

Objective 1.12

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

Explanation

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

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

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review of student records
•Interviews with faculty
•Interviews with Admissions personnel
•Interviews with students

Narrative

CMU has non-discriminatory admission practices with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class. The program does not collect any legally protected information about the applicant. The majority of applicants are unknown to the selection committee (unless they were previously interviewed) until they arrive for the interview.

Supporting Documentation

CMU Undergraduate Application (Website)
CMU General Policy Statement (Catalog pg. 3)
Program Application

Objective 1.13

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

Explanation

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

Required Program Response

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

Possible Site Visitor Evaluation Methods

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

Narrative

Institutional admission policies are distributed through the university catalog, which is available on the website. The program has an information packet that describes the program and requirements for admission.

Admission begins with an academic breakdown using the Interview Selection Tool. Academic ranking is based on:
1) High school grade point average [GPA] or GED standard score
2) Biology, chemistry, or physics completed in high school with a "B" or college with a "C"
3) Cumulative college GPA [including all college coursework] if over 12 credits
4) Completed or in progress general education courses [except college algebra, KINE, and KINA]
5) Grades for college algebra and foundation prerequisite courses
6) Overall HOBET and HOBET math scores
7) Essay
8) Applicants who have completed CNA, Med Prep, or HSCI 101 courses and those who have applied previously receive additional consideration.

Following the academic break down, the program conducts personal interviews of top academic candidates. The panel of interviewers consists of five or more radiologic technologists, including program faculty. Interviewers ask candidates similar questions from a pool of predetermined questions. Based on the interview only, the panel makes the final selection from the numerical ranking of each candidate. The interview panel also selects three or four candidates for the alternate list.

Supporting Documentation

CMU Admission Policies (Catalog, pages 15-22)
CMU Application for Admission (Website)
Program Application and Selection Process (Information Packet)
Program Application and Selection Information (Information Packet)
Sample Interview Selection Tool (2011)
Sample Interview Questions (2011)

Objective 1.14

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

Explanation

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

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

Possible Site Visitor Evaluation Methods
•Review of employee/faculty handbook
•Review of employee/faculty application form
•Review of institutional catalog
•Interviews with faculty

Narrative

The institution has 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.

Supporting Documentation

CMU General Policy Statement (catalog pg. 3)
CMU Antidiscrimination Policy (Employee Handbook, II-1 to II-5)
CMU Affirmative Action Information (CMU website; Human Resources - forms)
CMU Faculty Search Procedure Manual

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

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

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

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review the process of student identification
•Review of student records
•Interviews with faculty
•Interviews with students

Narrative

The program does not offer distance education.

Supporting Documentation

Not applicable

Standard 2

List the major strengths of this standard in order of importance
1. The major strength of this standard is the support services for students provided by the university.

2. The program has excellent physical space, equipment, and learning aids to support student learning.

List the major concerns of this standard in order of importance
1. All of the clinical sites are recognized by the JRCERT. Some of the programs have been recognized for over 20 years and the program and clinical sites do not have records of JRCERT recognition.

2. The physical space for faculty has been a challenge for a growing department

Provide the program's plan for addressing each concern identified
1. The program will work with individual clinical sites to help them acquire a new certificate from the JRCERT.

2. The program will continue to request adequate office space for faculty.

Describe any progress already achieved in addressing each concern
1. The program addressed this issue about six months ago. Some of the clinical sites ordered new JRCERT recognition certificates, while others did not.

2. There are plans for some of the department to move to a new building fall 2014

Describe any constraints in implementing improvements
1. None

2. Plans by the administration may change.

Objective 2.1

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

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

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

Possible Site Visitor Evaluation Methods
•Review of organizational charts of institution and program
•Review of meeting minutes
•Review of published program materials
•Review of master plan of education
•Interviews with faculty and institutional officials

Narrative
While the institution has grown substantially in the past few years, the administrative structure remains relatively simple. This structure allows faculty direct access to administration. However, the program conducts most operations through the department head. This structure facilitates the program mission especially when changes need to made quickly. There are organizational levels within the program, however, faculty work together to provide students with a quality education in a timely manner.

The program's mission to facilitate each student's learning to become the best radiologic technologist possible is supported by the mission of the university to "*offer…professional, and technical degree programs.*" The 2009 Academic Program Quality, Priorities, and Productivity report recognized the program as a 'Program of Promise.' The working group evaluated all programs based on centrality to role and mission, student demand, program characteristics, financial information, and faculty. Only three programs received a higher ranking. It is also valuable to note that the university has supported the program for over 40 years.

Supporting Documentation
CMU Organizational Chart
Program Organizational Chart

Objective 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 instructors.

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

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

Possible Site Visitor Evaluation Methods
•Review institutional policies in relation to teaching loads and release time.
•Review of master plan of education
•Review of position descriptions
•Review of clinical education settings
•Interviews with faculty
•Interviews with clinical instructor(s)
•Interviews with students

Narrative
Faculty teaching loads are adequate. The program director and clinical coordinator teach the majority of the didactic courses and labs. The clinical coordinator serves as the clinical instructor for the first two semesters. The program director serves as the clinical instructor for the third semester clinical. One part-time faculty member teaches three sections of a lab, another part-time faculty member teaches one didactic course, and one part-time faculty member is the second year clinical instructor for the fourth and fifth semesters.

The teaching load for fulltime faculty is 24 semester credit hours per academic year. Typically, the load is distributed as 12 semester credit hours per semester. With the approval of the Vice President for Academic Affairs and President, the Department Head may grant release time. All program directors in the Department of Health Science receive release time to conduct program duties. The release time is distributed equitably based on the number of students enrolled in the health science program.

There are one or two affiliate clinical instructors at each clinical site in Grand Junction in addition to the first year and second year faculty clinical instructors. There are two affiliate clinical instructors at most of the other clinical sites. There is adequate clinical staff to provide a 1:1 ratio while the student is developing competency in the clinical setting.

Supporting Documentation
CMU Faculty Workload from Professional Personnel Employment Handbook

Objective 2.3
Provides faculty with opportunities for continued professional development.

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

Required Program Response
•Describe how continued professional development opportunities are made available to faculty.

Possible Site Visitor Evaluation Methods
•Review of institutional and program policies
•Review of program budget or other fiscal appropriations
•Review of evidence of faculty participation in professional development activities
•Interviews with administrative personnel
•Interviews with faculty

Narrative
All program faculty members obtain continuing education from local, state, and national professional conferences and publications. The university provides one or two Faculty Professional Development Workshops each year. These two-day events cover topics such as assessment, teaching strategies, and improving online communications. A faculty community presents a seminar each semester and distributes weekly emails centered on teaching effectiveness.

In 2011, the program provided the complete ASRT Clinical Instructor Academy to program faculty. Utilizing Carl Perkin's funding, two-fulltime faculty attend the Association of Collegiate Educators in Radiologic Technology conference each year.

The program director is a committee chair for the state organization and is president of the district society. Both organizations support continuing education opportunities for technologists in the state and region.

Supporting Documentation - optional

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

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

Required Program Response
•Describe the availability and use of clerical support services.

Possible Site Visitor Evaluation Methods
•Review of program's staffing plan
•Interviews with administrative personnel
•Interviews with faculty
•Interviews with students

Narrative
The department has two full time administrative assistants who support nursing, medical laboratory technician, emergency medical services, and radiologic technology programs. Both assistants manage day-to-day operations and support the department head. Each assistant is designated certain programs to assist and one maintains the website for the department and each program. The administrative assistants provide excellent support for the program.

Supporting Documentation - optional

Objective 2.5
Assures JRCERT recognition of all clinical settings.

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

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

Possible Site Visitor Evaluation Methods
•Review of JRCERT database
•Review of clinical records
•Interviews with faculty
•Interviews with clinical instructors
•Interviews with clinical staff
•Interviews with students

Narrative
Students in the second year complete observational rotations in six advanced modalities. Each of these rotations takes place in a clinical setting recognized by the JRCERT. The rotations in computed tomography, vascular interventional, magnetic resonance imaging, nuclear medicine, ultrasound, and radiation oncology enhance student clinical education by providing learning opportunities in advanced modalities in radiology. These experiences also help students understand what patients encounter in these associated areas of radiology.

Supporting Documentation
JCERT documents for
Community
Family Health West
Glenwood Medical
Kokopelli
Rangely
RMO
Valley View
Western Ortho
Grand River

Objective 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. Learning environments must be consistent with those of comparable health science programs in the same institution. Provision of appropriate learning environments facilitates achievement of the program's mission. Although a dedicated classroom and/or laboratory are not required, scheduled accessibility to facilities conducive to student learning must be assured. Faculty office space should be conducive to planning and scholarly activities. Space should be made available for private student advisement.

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

Possible Site Visitor Evaluation Methods
•Tour of the classroom, laboratories, and administrative and faculty offices
•Interviews with faculty
•Interviews with students

Narrative
Physical facilities specifically provided for the radiologic technology programs are on the main campus of the university. The facilities include faculty offices, small reception and workroom areas, a dedicated classroom, and dedicated energized laboratory.

The Department of Health Sciences is challenged to provide offices for faculty. Several fulltime faculty must share small office spaces and all part-time faculty share office space. However, the two-program faculty are fortunate to have offices that provide adequate, private space to conduct business. Faculty offices are equipped with a desk, chair, locking filing cabinet, bookshelves, telephone, and desktop computer. The computer is networked to the department black and white and color printer.

A dedicated classroom provides an adequate learning environment for students. There is sufficient space in the classroom to accommodate lecture style seating and space for small group activities.

The dedicated laboratory is divided into two distinct spaces. One space permits seating for small group lecture and group activities. The second space houses two high frequency generators, tables, wall units, and x-ray tubes. Based on changing technology, the program phased out film imaging/development and began using a computed radiography system in 2008. The laboratory has adequate storage for equipment and supplies.

Supporting Documentation – optional

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

Explanation
The review and maintenance of learning resources promotes student knowledge of current and developing imaging technologies. The program must provide learning resources to support and enhance the educational program. These resources must include:
•A print or electronic library with a variety of materials published within the last five years,
•Computer access, and
•Additional learning aids (e.g., educational software, classroom/laboratory accessory devices, etc.).
The JRCERT does not endorse any specific learning resources.
Required Program Response
•Describe the available learning resources.
•Describe the procedure for review and maintenance of learning resources.

Possible Site Visitor Evaluation Methods
•Tour of learning facilities
•Review of learning resources
•Review of surveys
•Review of meeting minutes
•Interviews with faculty
•Interviews with students

Narrative
The program boasts a great deal of instructional equipment and student learning resources. Equipment and software is updated as funding is available, based on annual faculty and student input, and changes in technology.

Students have access to computer labs in several locations on the main campus, including the building where the classroom, laboratory, and offices are located. There is wireless connectivity for faculty and students.

The library has a strong base for journal research with print subscriptions to *Applied Radiology* and *Radiologic Technology*. There is online access through online journal packages and full-text access in databases. Additionally, there are links for titles available in PubMed Central. The majority of the monograph collection is now e-books. This is due in large part to the SpringerLink E-book Collection. The currency percentage is very high as 92% of the radiology and imaging books have been published since 2005 and 40% since 2010. Journal literature not available through the university, including those titles not available because of publisher embargo, can be provided by the Interlibrary Loan Department. Books and media can be borrowed from other libraries through Prospector, Colorado libraries plus University of Wyoming, or OCLC Resource Sharing, libraries worldwide.

The smart-classroom has a computer with Internet access, projector, document projector, and audio-video equipment installed.

The laboratory is well equipped with a disarticulated full body phantom; articulated full body phantom; and head, breast, thorax, lower torso, hand, knee, and foot phantoms. There are two articulated skeletons and nine or more disarticulated bones or bone sections for each body part. There is a wall mounted 42 inch monitor, three 20 inch mega pixel color monitors, digital workstation, and software. The program also has quality assurance equipment and miscellaneous positioning sponges, sandbags, and lead aprons.

Supporting Documentation - optional
Instructional Technology and Equipment

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

Explanation
The provision of appropriate student services promotes student achievement. At a minimum, the program must provide access to information for:
•Personal counseling,
•Requesting accommodations for disabilities as defined by applicable federal (Americans with Disabilities Act) and state laws, and
•Financial aid.

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

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

Required Program Response
•Describe the students' access to student services.
•Provide published program materials that outline accessibility to student services.

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Interviews with faculty
•Interviews with students

Narrative
There are many services available for students on campus that support learning. All of the services are made know to students and the general public from the CMU website. A statement in course syllabi directs students to student services.

CMU's Student Services provides diversity, advocacy, and health services. Health services include mental health through Behavioral Clinical Services and student wellness through the Student Health Clinic.

Academic Advising and Academic Services provide students with academic advising, career services, educational access services, and tutoring. Educational Access Services provide services for student with disabilities. The Tutorial Leaning Center provides peer tutoring. The Advising Center provides students with academic advising and assists with declaring a major and educational planning. Students have access to college success courses.

Financial aid is available through the Financial Aid Office. The Radiology Club supports a scholarship available to a second year student. Several other scholarships are available to students through the institution and state. Most students in the program are eligible for AmeriCorps funding. Well over half of the students take advantage of this opportunity each year.

Supporting Documentation
Syllabi Statement of Student Services
Student Services Website Homepage
Counseling Services Webpage
Academic Advising and Academic Services
Educational Access Services
Financial Aid

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

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

Required Program Response
•Describe the adequacy of financial resources.
•Provide copies of the program's budget and/or expenditure records.

Possible Site Visitor Evaluation Methods
•Review of program budget and/or other fiscal appropriations
•Interviews with administrative personnel
•Interviews with faculty

Narrative
The Colorado Commission on Higher Education (CCHE) is the policy and coordinating board for the state's higher education system. The CCHE's mission is to provide access to high quality, affordable education for all Colorado residents that is student-centered, quality driven, and performance-based.

CCHE grants full authority and responsibility for the control and governance of the university to institution's Board of Trustees (BOT). The trustees served as the policy-making board for the university. This includes such areas a finance, resources, academic programs, personnel policies, curriculum, admissions, and role and mission. To assist in the meeting of their responsibilities, trustees delegate to the university president the authority to interpret and administer policies in all areas of operations and, as such, the president is responsible to the BOT. The president, as chief executive officer, has general authority and responsibility for the institution and for keeping the board informed regarding the university in a timely and appropriate manner.

The BOT expects the president to be responsible for communicating with the legislature, the CCHE, and other state agencies on a regular basis. Other modes of input to the board come from the student and faculty trustees, each elected by their constituents. Faculty input is a vital component of informed decision-making at CMU. The BOT recognizes the faculty senate as a formal, direct, two-way communication link between the board and faculty.

Income for the CMU budget comes from the institution's general fund and student fees. Funding from the general fund is based on full time equivalent students (FTES). The president allocates funds to the office of academic affairs, who then distributes the funds among department heads. The department head allocates monies to each program based on fiscal projections of the program's needs. This budge may be further augmented by special initiative funds and grant dollars.

Total budget revenues have been adequate to meet current program expenditures. There have been no significant increases or decreases in the unit cost of the program in the past eight years. Salaries compare to other institutions of similar size and generally support recruitment and retention of qualified faculty and staff. All CMU faculty have received annual cost of living raises ranging from 2.5 to 3.7 percent for academic years 2007-2013. There has been no department funding for faculty development since about 2010. *not true*

The budget for the AAS and BAS Radiologic Technology programs is approximately 14 percent of the department budget. The budget allotment between programs is based on FTES. From 2008 to 2012,

students in the program were assessed lab fees. These fees paid for monthly personal dosimeters (radiation monitoring devices) and minor equipment purchases for the lab. When the assessment of student fees ended in 2012, the program began to draw from shared department funds. These funds are adequate to meet the needs of the program. These funds cover continuing costs such as dosimeters and equipment repair and annual fees such as equipment inspection and ACERT and JRCERT fees.

The program funds major equipment purchases primarily with grants. The program successfully secured a grant for $50,000 from Caring for Colorado to purchase a second energized x-ray unit for the dedicated radiologic technology lab. The equipment was received and installed in spring, 2010.

The program receives funding for other equipment and instructional materials and funding for faculty development through Carl Perkins grants each year. In addition to Perkins funding, the Colorado Health Foundation and Colorado Trust are opportunities for obtaining external funds during the next six years.

The program cannot generalize the budget from the department budget. Copies of the department budget will be available during the site visit.

Supporting Documentation

Sample Dosimeter Payment

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

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

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

Required Program Response
•Provide evidence that Title IV financial aid is managed and distributed according to the USDE regulations to include:
  • recent student loan default data and
  • results of financial or compliance audits.

•Describe how the program informs students of their responsibility for timely repayment of financial aid.

Possible Site Visitor Evaluation Methods
•Review of records
•Interviews with administrative personnel
•Interviews with faculty
•Interviews with students

Narrative
JRCERT does not serve as gatekeeper for Title IV financial aid for the program.

Supporting Documentation

Standard 3

List the major strengths of this standard in order of importance

1. The major strength for Standard 3 is the excellent and dedicated program faculty at CMU.

2. The program curriculum aligns with the mission statement to serve students.

List the major concerns of this standard in order of importance

There are no concerns for Standard 3.

Provide the program's plan for addressing each concern identified

Describe any progress already achieved in addressing each concern

Describe any constraints in implementing improvements

Objective 3.1

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

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

Required Program Response
•Provide a copy of the program's mission statement.
•Provide meeting minutes that document periodic reevaluation of the mission statement.

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review of meeting minutes
•Review of master plan of education
•Interviews with faculty

Narrative
The program publishes the mission statement on the program website http://www.coloradomesa.edu/healthsciences/radtech.html, in the AAS Information Packet, and AAS Student Handbook. The program mission statement is in alignment with the university's vision, values, and mission published on the CMU website http://www.coloradomesa.edu/about/values.html. The program periodically reviews the mission statement.

Supporting Documentation
Program Mission Website
Program Mission Information Packet
Program Mission Student Handbook
CMU Vision Values and Mission
Program Meeting 03 16 2009

Objective 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 radiography 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.).

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

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

Narrative
The program follows the Professional Curriculum for Radiography from the American Society of Radiologic Technologists. The objectives and outlines in each module (syllabus) are based on this curriculum. The program designed the curriculum include review of prior learning from the beginning of the program until the end. For example, many of the prompted journal reflection activities completed during all of the clinical rotations require support from topics introduced in the Patient Care course.

The program sequences and delivers courses to prepare students before they enter the clinical setting. For example, the first seven weeks of the Clinical I (RTEC 114) course is delivered in an on-campus laboratory. In this competency-based system, students prepare for clinical experiences by learning and demonstrating skills in patient assessment and transport. The remainder of the clinical courses takes place in a clinical facility. The Digital Imaging (RTEC 123) course and Principles of Radiographic Exposure (RTEC 122/122L) courses are designed to acquaint students with a foundational understanding of digital equipment, processes, and technique prior to entering the clinical setting. All didactic courses are delivered in on-campus classrooms, except for a section of the Introduction to Radiography and Patient Care (RTEC120) course. The medical terminology portion of this course is delivered online through the university web-based system. All laboratory courses are delivered in on-campus laboratories. The program limits the procedures students can perform in the clinical setting until they have been introduced to them in the lecture and laboratory (RTEC 121/121L and RTEC 131/131L). Competency must be demonstrated in the laboratory for a unit of study before a student can attempt a procedure under indirect supervision in the clinical setting. The review course (RTEC 261) provides students with the opportunity to review concepts from the other program courses.

Students are introduced to critical thinking and problem solving, as well as professional values and life-long learning in the first semester of the program. Various group exercises and role playing are planned to acquaint students with cultural diversity issues, age and gender issues, and ethical problems. Problem solving and critical thinking skills are integrated in all courses throughout the curriculum. In the clinical setting, students must interact with patients, peer, and technologists, displaying an understanding of professional values. Students use prompted reflective journaling throughout the program to discuss a variety of issues. The reflective journaling process culminates in a paper reflecting on the experiences.

Student are encouraged to participate in local, state, and national radiologic technology organizations and the Lambda Nu Honor Society. Students have attended conferences and participated in knowledge bowls and essay competitions.

Supporting Documentation
Curriculum Analysis Grid
Competency Based Clinical Education System for Radiography
Sample Course Module 1 (RTEC 120)
Sample Course Module 2 (RTEC 123)
Sample Attitudes and Communication in Patient Care (RTEC 120)
Sample Questions Assignment (RTEC 123)
Sample Prompted Reflective Journal (RTEC 214/224/234)

Objective 3.3

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

Explanation
The program must provide learning opportunities in current and developing imaging and/or therapeutic 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 imaging and/or therapeutic technologies; however, these clinical rotations are strongly encouraged to enhance student learning.

Required Program Response
•Describe how the program provides opportunities in developing technologies in the didactic and/or clinical curriculum.

Possible Site Visitor Evaluation Methods
•Review of master plan of education
•Interviews with faculty
•Interviews with students

Narrative
The program provides learning opportunities in computed tomography, magnetic resonance imaging, vascular interventional, mammography, ultrasound, nuclear medicine, and radiation oncology. Learning opportunities include reading assignments and guest speakers in each of these areas. Students take a field trip to the radiation oncology unit. During the second year of the program, students experience six-day observational rotations in computed tomography and vascular interventional areas and three-day observational rotations in magnetic resonance, ultrasound, nuclear medicine, and radiation oncology.

Supporting Documentation – optional

Objective 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.

Required Program Response
•Describe the relationship between the program length and the terminal award offered.

Possible Site Visitor Evaluation Methods
•Review of course catalog
•Review of published program materials
•Review of class schedules
•Interviews with faculty
•Interviews with students

Narrative
Most students accepted into the program have completed the general education courses. However, students can complete general education (except the foundation courses) while enrolled in the program. Most students complete the general education (16 credits), CMU requirements (2 credits), and foundation courses (4 credits) in two semesters. The radiologic technology program is five semesters in length.

Supporting Documentation – optional

Objective 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.

Required Program Response
•Describe the method used to award credit hours for lecture, laboratory and clinical courses.
•Provide a copy of the program's policies and procedures for determining credit hours and an example of how such policy has been applied to the program's coursework.
•Provide a list of all didactic and clinical courses with corresponding clock or credit hours.

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review of class schedules
•Interviews with faculty
•Interviews with students

Narrative
CMU defines one semester credit hour of lecture courses as a minimum 50 minutes of contact and one semester credit hour of laboratory/clinical courses as a minimum 100 minutes of contact. All program didactic courses are 50 minutes of contact for one credit hour. All program laboratory courses are based on 100 minutes of contact for one credit hour. All program clinical courses are based on 150 minutes of contact for one credit hour.

As noted in the Credit Hours/Contact Hours for Clinical Experiences the only discrepancy is 34 hours during the summer clinical (RTEC 214) course. The program bases all of the second year clinical rotations on four-week rotations. To maintain consistency in the program this modification was necessary.

Supporting Documentation
CMU Contact and Credit Hours (Curriculum Policies and Procedures Manual)
Program Credit Hours per Contact Hours

Objective 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.

Required Program Response
• Identify the location of the component parts of the master plan of education.
• Provide a Table of Contents for the program's master plan.

Possible Site Visitor Evaluation Methods
• Review of master plan of education
• Interview with program director
• Interviews with faculty

Narrative
The Master Plan of Education is located on a university share-drive that is accessible to all department faculty. A folder contains all of the components listed in the table of contents.

Supporting Documentation
Master of Education Table of Contents

Objective 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.

Required Program Response
•Describe procedures for advisement.
•Provide sample records of student advisement.

Possible Site Visitor Evaluation Methods
•Review of students' records
•Interviews with faculty
•Interviews with clinical instructor(s)
•Interviews with students

Narrative
Academic advising for the program is commonly informal. If a student has difficulty understanding course content or has questions, faculty members will hold informal review sessions. If the student continues to struggle, the faculty member holds a formal session to determine the reason. Frequently, the faculty member recommends tutoring or for test anxiety, referral to Behavioral Clinical Services. If a student is failing, he/she is aware long before the end of the semester.

Program faculty members handle most behavioral advisement on an informal basis. If the situation worsens, the faculty member gives the student a verbal warning, followed by a written warning, and then a formal contract between the student and program. If behavioral issues stem from psychological reason, the faculty member advises the student to make an appointment with Behavior Clinical Services.

The clinical instructor handles clinical issues by first discussing the issue with the students and reducing the grade on the Professional Evaluation of Behavior, Attitudes, and Ethics. If behavior problems continue, the student meets with the clinical coordinator and/or program director. The student is counseling about the consequences for continued negative behavior. If the problem continues, the clinical coordinator and/or program director draws up a contract between the student and program. Further violations can result in suspension or dismissal from the program.

Supporting Documentation
Sample Behavioral Issue
Sample Student Contract

Objective 3.8

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

Full-time Program Director

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

Full-time Clinical Coordinator

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

Full-Time Didactic Program Faculty

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

Part-Time Didactic Program Faculty

•Prepares and maintains course outlines and objectives, instructs and evaluates students, and reports progress,
•Participates in the assessment process, when appropriate,
•Cooperates with the program director in periodic review and revision of course materials, and
•Maintains appropriate expertise and competence through continuing professional development.

Clinical Instructor(s)

•Is knowledgeable of program goals,
•Understands the clinical objectives and clinical evaluation system,
•Understands the sequencing of didactic instruction and clinical education,
•Provides students with clinical instruction and supervision,
•Evaluates students' clinical competence,
•Maintains competency in the professional discipline and instructional and evaluative techniques through continuing professional development, and

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

Clinical Staff

•Understand the clinical competency system,
•Understand requirements for student supervision,
•Support the educational process, and
•Maintain current knowledge of program policies, procedures, and student progress.

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

Full- and part-time status is determined by, and consistent with, the sponsoring institution's definition. At all times when students are enrolled in didactic and/or clinical components, the program director and/or clinical coordinator must assure that their program responsibilities are fulfilled.

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

Possible Site Visitor Evaluation Methods
•Review of position descriptions
•Review of handbooks
•Interviews with faculty and clinical staff to assure responsibilities are being performed
•Interviews with students

Narrative – optional

Supporting Documentation
RT Faculty Position Descriptions

Objective 3.9

Evaluates program faculty and clinical instructor performance and shares evaluation results regularly to assure instructional responsibilities are performed.

Explanation
The performance of program faculty and clinical instructor(s) must be evaluated minimally once per year. Evaluation assures that instructional responsibilities are performed and provides administration and faculty with information to evaluate performance. Evaluation promotes proper educational methodology and increases program effectiveness. Evaluation results must be shared minimally once per year with the respective program faculty and clinical instructor(s) being evaluated to assure continued professional development. Any evaluation results that identify concerns must be discussed with the respective individual(s) as soon as possible.

Required Program Response
•Describe the evaluation process.
•Describe how evaluation results are shared with program faculty and clinical instructor(s).
•Provide samples of evaluations of program faculty.
•Provide samples of evaluations of clinical instructor(s).

Possible Site Visitor Evaluation Methods
•Review of program evaluation materials
•Review of clinical instructor evaluation
•Interviews with administrative personnel
•Interviews with program faculty
•Interviews with clinical instructor(s)
•Interviews with students

Narrative
All university faculty members are evaluated by student in the fall and spring semesters. Clinical facilities and faculty are evaluated by graduating student in the spring semester.

Supporting Documentation
Clinical Site Evaluations
Faculty Evaluation RTEC 131
Faculty Evaluation Comments RTEC 131
Faculty Evaluation RTEC 133
Faculty Evaluation Comments RTEC 133
Faculty Evaluation RTEC 224
Faculty Evaluation Comments RTEC 224

Objective 4.8

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

Explanation

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

Required Program Response

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

Possible Site Visitor Evaluation Methods

•Review of orientation process
•Review of student records
•Interviews with faculty
•Interviews with clinical instructor(s)
•Interviews with students

Narrative

The program orients students to clinical education settings in the first seven weeks of RTEC 114 and RTEC 120 before students begin clinical experiences. During the first seven weeks of the semester students take a field trip to the three main hospitals where first year students complete the first two semesters of clinical. Clinical affiliates orient students to clinical site policies and procedures on the first day of the rotation, although most clinical sites require the completion of modules or quizzes prior to tl first day.

Supporting Documentation

Introduction to Clinical Experiences RTEC 114
SMH Student Procedure
Sample Signature Page for Student Handbook
Sample Signature Page for Confidentiality

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

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

Required Program Response
•Provide program policies that safeguard the health and safety of students.

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review of student records
•Interviews with faculty
•Interviews with students

Narrative – optional

Supporting Documentation
CMU Emergency Notification System
CMU Residence Life Student Health and Safety
CMU Drug Free Schools and Community Act
CMU Harassment, Sexual Assault, Stalking Policy
CMU Medical Amnesty/Good Samaritan Policy
Program Requirements for Clinical Experience
Department Substance Abuse Policy

Objective 4.6

Assures that students are directly supervised by a qualified radiographer when repeating unsatisfactory images.

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

Required Program Response
•Describe how the direct supervision requirement for repeat images is enforced and monitored in the clinical education setting.
•Provide documentation that the program's direct supervision requirement for repeat images is made known to students, clinical instructors, and clinical
 staff.

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review of student records
•Review of meeting minutes
•Interviews with faculty
•Interviews with clinical instructor(s)
•Interviews with clinical staff
•Interviews with students

Narrative
The student handbook defines the repeat policy. The clinical coordinator reinforces the policy at the beginning of the semester in student clinical meetings and clinical instructors reinforce the policy during the semester at clinical sites.

Supporting Documentation
Clinical Supervision of Students (Student Handbook)

Objective 4.5

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

Explanation

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

Required Program Response

•Describe how the indirect supervision requirement is enforced and monitored in the clinical education setting.
•Provide documentation that the program's indirect supervision requirement is made known to students, clinical instructors, and clinical staff.

Possible Site Visitor Evaluation Methods

•Review of published program materials
•Review of student records
•Review of meeting minutes
•Interviews with faculty
•Interviews with clinical instructor(s),
•Interviews with clinical staff
•Interviews with students

Narrative

The clinical instructors and affiliate clinical instructors enforce and monitor the indirect supervision requirement. The student handbook defines the indirect supervision policy after students have achieved competency. The clinical coordinator reinforces the policy at the beginning of the semester in student clinical meetings and clinical instructors reinforce the policy during the semester at clinical sites. The policy is also discussed at program advisory meetings.

Supporting Documentation

Clinical Supervision of Students (Student Handbook)
Advisory Committee Minutes Spring 2008

Objective 4.4

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

Explanation

Direct supervision assures patient safety and proper educational practices. The JRCERT defines direct supervision as student supervision by a qualified radiographer who:
- Reviews the procedure in relation to the student's achievement,
- Evaluates the condition of the patient in relation to the student's knowledge,
- Is physically present during the conduct of the procedure, and
- Reviews and approves the procedure and/or image.
- Students must be directly supervised until competency is achieved.

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

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

Narrative

Before a student can perform a procedure on a patient under indirect supervision in the clinical setting, she/he must demonstrate competency. The program distributes and discusses the Competency Based Clinical Education System for Radiography with students during the first week of the program. The student handbook defines the direct/indirect supervision policy. A student cannot perform any procedure under direct or indirect supervision in the clinical setting until they have gained instruction from the lecture and lab for the unit under study. For each unit of study in the first and second semester anatomy and positioning lab (RTEC 121L and 131L) courses, the student must successfully execute a simulated procedure randomly drawn from a given unit of study. In the clinical setting, the student must be under the direct supervision of a qualified radiographer during the performance of each procedure in the unit until a qualified radiographer documents successful performance of the procedure. After receiving documentation of competency, the student may opt to perform that procedure under indirect supervision. The student cannot perform radiographic procedures without the direct supervision of a qualified radiographer without documentation of competency.

The responsibilities for ensuring students are under direct supervision prior to documentation of competency lies with the student, clinical coordinator, clinical instructors, and affiliate clinical instructors. The clinical instructors and affiliate clinical instructors enforce and monitor completion of competency documentation. Most students have all competencies completed by the end of the third semester. The first year clinical instructors and affiliate clinical instructors are given the anatomy and positioning schedule so they are aware of the units of study that students have completed. If a student does not pass a competency, the anatomy and positioning instructor notifies the clinical instructor.

Supporting Documentation
Competency Based Clinical Education System for Radiography
Clinical Supervision of Students (Student Handbook)
Introduction to Clinical Experience (RTEC 114 syllabus)
Clinical Procedure (RTEC 124 syllabus)

Students report the lack of radiation safety practice by technologists in the clinical setting. Students express concern, not only for themselves, but also for the safety of patients. The program has addressed this issue by reviewing radiation safety practices with students and reminding them that it is their responsibility to protect themselves and patients. The program has discussed this issue with department directors and asked that they raise the issue with staff.

The energized laboratory door remains locked when a faculty member is not in the room. Exposure controls in the energized laboratory remain locked anytime a faculty member is not present in the room.

Supporting Documentation
Radiation Safety Policy (Student Handbook)
Radiation Safety RTEC 114
Sample Evaluation of Radiation Safety (RTEC 121/131)

Objective 4.3
Assures that students employ proper radiation safety practices.

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

Students must understand basic radiation safety practices prior to assignment to clinical settings. Students must not hold image receptors during any radiographic procedure. Students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care. As students progress in the program, they must become increasingly proficient in the application of radiation safety practices.

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

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

Possible Site Visitor Evaluation Methods
•Review of program curriculum
•Review of radiation safety policies/procedures
•Review of student handbook
•Review of student records
•Review of student dosimetry reports
•Interviews with faculty
•Interviews with clinical instructor(s)
•Interviews with clinical staff
•Interviews with students

Narrative

During the first seven weeks of the program (before entering the clinical setting) students are instructed in the utilization of imaging equipment, accessories, optimal exposure factors, and basic patient positioning to minimize radiation exposure to patients, selves, and others. Prior to entering the clinical facility instructors introduce basic concepts of radiation protection and safety in the RTEC 114. Instructors discuss the concepts of ALARA, time, distance, and shielding, and the purpose of radiation monitors. In RTEC 122 of the first semester, instructors discuss imaging equipment, accessories, and optimal exposure factors. In the RTEC 121 lab, the instructor reiterates radiation safety by requiring students to monitor the possibility of pregnancy and to use area (gonadal, thyroid, breast) shielding according to the standard of care when performing simulated procedures. In the second semester in RTEC 135 (Radiation Biology and Safety), the principles are reinforced. Instructors emphasize radiation safety the clinical setting in all rotations. Instructors discuss radiation safety during the final two semesters in RTEC 251, 255, and 265, and RTEC 261 (program review course).

The Radiation Safety Policy in the Student Handbook precludes students from holding an image receptor during any radiographic procedure or holding patients during any radiographic procedure when an immobilization method is the appropriate standard of care. Students must wear protective lead aprons during all fluoroscopic, C-Arm, or mobile procedures conducted in the clinical setting.

Objective 4.2

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

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

Explanation

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

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

Possible Site Visitor Evaluation Methods
- Review of published program materials
- Review of student records
- Interviews with faculty
- Interviews with clinical instructor(s)
- Interviews with students

Narrative

The program provides the pregnancy policy in the Student Handbook. In the first semester, the instructor in RTEC 120 reviews the policy. After a student declares pregnancy, the radiation safety officer issues a fetal monitor to the student for the duration of the pregnancy.

Supporting Documentation

Declared Pregnant Student Policy (Student Handbook)
Sample Declaration of Pregnancy
Sample Fetal Dosimetry Report

Objective 4.1

Assures the radiation safety of students through the implementation of published policies and procedures that are in compliance with Nuclear Regulatory Commission regulations and state laws as applicable.

Explanation

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

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

Possible Site Visitor Evaluation Methods
•Review of published program materials
•Review of student records
•Review of student dosimetry reports
•Interviews with faculty
•Interviews with students

Narrative

The program provides radiation safety policies in the Student Handbook for enrolled students. Prior to beginning clinical, the program instructs students in basic radiation safety protocols. Each month (within thirty days following receipt of data), the radiation safety officer posts the dosimetry reports. The report does not contain any personally identifiable information. Students self-select a code that the radiation safety officer puts on the report so a student can identify his/her information.

Supporting Documentation

Radiation Safety Policy (Student Handbook)

Standard 4

List the major strengths of this standard in order of importance

The major strength of Standard 4 is the strong emphasis on radiation safety and the policies set forth by the JRCERT. Program faculty members constantly review policies with students and staff at clinical sites. Affiliate clinical instructors are supportive of the policies embraced by the program. When students raise concerns about radiation safety and protection, the university faculty address it immediately.

List the major concerns of this standard in order of importance

There are no major concerns for this standard.

Provide the program's plan for addressing each concern identified

Describe any progress already achieved in addressing each concern

Describe any constraints in implementing improvements

Standard 5

List the major strengths of this standard in order of importance

1.   A strength of the program is the quality delivery of education to students in the program, as evidenced by pass rates on the certification examination and high satisfaction rates from employers and graduates.

2.   The program is fortunate to have input from various communities of interest. Feedback from students, clinical staff, clinical instructors, graduates, and employers serve to enhance the equality of the program.

List the major concerns of this standard in order of importance

There are no major concerns of Standard Five.

Provide the program's plan for addressing each concern identified
NA

Describe any progress already achieved in addressing each concern
NA

Describe any constraints in implementing improvements
NA

Objective 5.1

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

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

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

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

Possible Site Visitor Evaluation Methods
•Review of assessment plan
•Review of assessment tools
•Interviews with faculty

Narrative – optional

Supporting Documentation
2013-2014 Assessment Plan

Objective 5.2

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

Explanation
Credentialing examination, job placement, and program completion data must be reported annually to the JRCERT. 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 student graduates who pass, on first attempt, the American Registry of Radiologic Technologists (ARRT) certification examination or an unrestricted state licensing examination compared with the number of graduates who take the examination within six months of graduation.

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

Program completion rate is defined as the number of students who complete the program within 150% of the stated program length. The program must establish a benchmark for its program completion rate. The program specifies the entry point (e.g., required orientation date, final drop/add date, final date to drop with 100% tuition refund, official class roster date, etc.) used in calculating program's completion rate.
Graduate and employer satisfaction may be measured through a variety of methods. The methods and timeframes for collection of the graduate and employer satisfaction data are the prerogative of the program.

Required Program Response
•Provide actual outcome data in relation to program effectiveness.

Possible Site Visitor Evaluation Methods
•Review of program effectiveness data
•Interviews with faculty

Narrative – optional
Graduate and employer satisfaction measures are included in the annual program assessment. Graduates on an annual basis complete an Exit Summary.

Supporting Documentation
Program Effectiveness Data
Sample Exit Summary Form
Sample Graduate Satisfaction data
Sample Employer Satisfaction data

Objective 5.3

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

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

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

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

Possible Site Visitor Evaluation Methods
•Review of program publications
•Review of institutional and/or program Web site
•Interviews with faculty
•Interviews with students

Narrative – optional
The Program Effectiveness Data (and JRCERT URL) is available from a direct link on the program website and in the Information Packet. The JRCERT URL is included in the Student Handbook.

Supporting Documentation
Program Effectiveness Data in Info Packet
JRCERT URL in publications

Objective 5.4

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

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

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

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

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

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

Narrative
Typically, program faculty review assessment data once or twice a year to identify areas for program improvement. However, in 2011 and 2012 data acquisition and assessment was not completed in entirety due to issues involved in a change of leadership. The program shares student learning outcome data and program effectiveness data with the Advisory Committee annually or more frequently if needed.

Data in 2010-2011 indicated students did not meet the benchmark for evaluation of radiographic images for quality factors. Clinical instructors were encouraged to promote image evaluation at clinical facilities. Subsequently the program met the benchmark. Another example of program improvement because of assessment was improvement in first year students' ability to recognize appropriate exposure index numbers. Comments from graduating students from the Exit Survey led to a change that will take place beginning Summer 2014. The change is separating clinical rotations where students are not in the diagnostic area. Students' expressed concern about "forgetting" when they were not in diagnostic rotations for extended periods of time.

Supporting Documentation Objective 5.4
Assessment Plan with Evaluation for 2009-2010
Advisory Committee Minutes Fall 2011
Advisory Committee Minutes Fall 2013

Objective 5.5

Periodically evaluates its assessment plan to assure continuous program improvement.

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

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

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

Possible Site Visitor Evaluation Methods
•Review of meeting minutes related to the assessment process
•Review of assessment committee meeting minutes, if applicable
•Interviews with faculty

Narrative
Program faculty typically review the Assessment plan annually. The program shares the assessment plan with the Advisory Committee annually. The program solicits feedback about the program twice a year.

Supporting Documentation
Program Minutes 03_02_12
Program Minutes 05_16_13

Standard 6

List the major strengths of this standard in order of importance

The major strength of Standard 6 is the clinical facilities that support the program. The clinical sites are fiercely loyal to the program. Many, if not most of the technologist's in the local and regional area are graduates of the program.

List the major concerns of this standard in order of importance
There are no concerns for Standard 6.

Provide the program's plan for addressing each concern identified

Describe any progress already achieved in addressing each concern

Describe any constraints in implementing improvements

Objective 6.1
Documents the continuing institutional accreditation of the sponsoring institution.

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

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

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

Narrative – optional

Colorado Mesa University recently submitted for re-accreditation. The site visit was in November 2013.

Supporting Documentation
HLC Affiliation Statement

Objective 6.2

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

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

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

Narrative - optional

Supporting Documentation
Continental Inspection
Quantum Inspection

Objective 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 an instructor in a JRCERT-accredited program, and
  - Holds American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted state license for the state in
    which the program is located).

- **Full-time 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 an instructor in a JRCERT-accredited program, and
  - Holds American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted state license for the state in
    which the program is located).

- **Full-time Didactic Program Faculty:**
  - Holds, at a minimum, a 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 radiography 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 Instructor(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 radiography 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 radiography 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 instructors 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 students performing patient care skills, phlebotomist supervising students performing venipuncture, etc.). is located).

Required Program Response
•For all program officials not previously identified on the program's database , submit a request for recognition of program officials including a current curriculum vitae and documentation of current registration by the American Registry of Radiologic Technologists* or equivalent.
•For all currently recognized program officials [program director, clinical coordinator (if applicable), full-time didactic faculty, and all clinical instructors], submit a current registration by the American Registry of Radiologic Technologists* or equivalent.

*These may be copies of current registration cards or "ARRT Identification" page available at www.arrt.org.

Narrative - optional

Supporting Documentation
Ward ARRT
Grisak ARRT
Allen ARRT

All affiliate clinical instructors

Objective 6.4
Establishes and maintains affiliation agreements with clinical education settings.

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

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

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

Narrative - optional

Supporting Documentation
Affiliation Community
Affiliation Delta
Affiliation Family Health West
Affiliation Glenwood Medical Associates
Affiliation Grand River Medical
Affiliation Kokopelli
Affiliation Montrose
Affiliation Rangely
Affiliation Rocky Mountain
Affiliation St. Marys
Affiliation VA
Affiliation Valley View
Affiliation Western Orthopedics

Objective 6.5
Documents that clinical 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 setting. Clinical settings may be recognized by The Joint Commission (TJC), DNV Healthcare, Inc., Healthcare Facilities Accreditation Program (HFAP), or an equivalent agency, or may hold a state-issued license.

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

Narrative – optional
None of the clinics are recognized by an agency and there are no state-issued licenses in the State of Colorado.

Rangely Hospital is a district hospital and is not recognized by an agency.

Supporting Documentation
Compliance Community
Compliance Delta
Compliance Family Health West
Glenwood Medical Associates
Compliance Grand River Medical
Kokopelli
Compliance Montrose
Rangely – not accredited…district owned hospital
Rocky Mountain
Compliance St. Marys
Compliance VA and
http://www.qualitycheck.org/consumer/searchResults.aspx?zip=81501&Select1=3&dist=3&provGrpId=2&provGrpIdtracker=2
Compliance Valley View
Western Orthopedics

Objective 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 apprise the JRCERT in an accurate and timely fashion, of all program changes. Updates should be reflected within thirty (30) days of effective change date. Additionally, the JRCERT requires notification of substantive changes prior to implementation.

Required Program Response
•Report any program changes to maintain compliance with JRCERT Standards.
•Report any substantive change not previously submitted.

Narrative – optional

Supporting Documentation - optional