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ABHES BULLETIN

To: ABHES-Accredited Institutions and Programs
Recognized Accrediting Agencies
State Departments of Education
Kay Gilcher, U.S. Department of Education
Interested Parties

From: Carol Money maker, Executive Director

Date: August 15, 2012

Subject: Final Radiologic Technology Standards – Effective January 1, 2013

Following the June 18, 2012, Call for Comment and consideration of all comments by the Advisory Committee for Radiologic Technology/Radiography, the Commission of the Accrediting Bureau of Health Education Schools (ABHES) approved implementation of the attached program-specific standards for Radiologic Technology programs, effective **January 1, 2013**. These standards are applicable to any ABHES-accredited institution or applicant for accreditation offering a radiologic technology program. The program-specific standards outlined in Chapter VIII of the *Accreditation Manual*, build upon Chapter V, *Evaluation Standards Applicable to All Educational Programs*; therefore, institutions must comply with all related standards.

The attached standards culminate over two years of consideration and work by specialists in the field of radiologic technology. While ABHES is not seeking to accredit radiologic technology on a programmatic basis, recent activities in the field have expedited the need for these standards.

The American Registry of Radiologic Technologists (ARRT) is the national certifying agency for radiologic technologists/radiographers and will only certify graduates of programs accredited by organizations recognized by the ARRT. ABHES is not recognized by the ARRT and in July 2011 the ARRT issued a moratorium on recognizing new accrediting agencies while it reviewed its approval process. The moratorium remains in place today. As such, the new radiography standards do not affect radiography program graduate credentialing. ABHES will be seeking ARRT recognition as an approved accrediting agency once the ARRT accreditation moratorium is lifted.

As of January 1, 2015, the ARRT will permit only graduates who have earned an academic degree to sit for credentialing. Therefore, programs currently accredited or seeking inclusion under an ABHES institutional grant of accreditation are reminded the ARRT degree requirements will affect students enrolling on or after January 1, 2013. Immediate consideration of potential changes to areas such as curriculum, enrollment and admissions criteria, and catalogs and other promotional documents, as well as ABHES approval for any program changes, is essential.

As noted previously, the new standards are effective January 1, 2013. Institutions are expected to comply with the new standards on or before January 1, 2013.

CHAPTER VIII
PROGRAM EVALUATION STANDARDS
FOR RADIOLOGIC TECHNOLOGY/RADIOGRAPHY

The Accrediting Bureau of Health Education Schools does not accredit radiologic technology programs, but as an institutional accrediting agency, includes this program within an institution's grant of accreditation. ABHES-accredited radiologic technology programs must comply with all policies, procedures and standards described throughout the *Accreditation Manual*, including the general evaluation standards as outlined in Chapter V, degree standards as outlined in Chapter VI, as well as the Appendices. This chapter contains additional specific requirements for a radiologic technology program.

Accordingly, each Self-Evaluation Report (SER), on-site evaluation, and Site Visitation Report evaluates each program individually against all ABHES accreditation standards. A program specialist is used to evaluate each individual program offered by an institution. Individual programs that do not demonstrate compliance with the standards, policies, and procedures set forth in the *Accreditation Manual* may be excluded from the institution's grant of accreditation or may cause the institution's accreditation to be subject to adverse action.

For purposes of this chapter, a radiologic technology (aka medical imaging or radiography) program includes any programs identified by any other name or designation that is reasonably understood by professionals in the field, students, or the public to have the same meaning and educational focus. These standards apply to only full scope radiologic technology programs. This chapter is equally applicable to any educational program offered by the institution that intends to prepare graduates for employment based on the knowledge and skills set forth in this chapter.

DESCRIPTION OF THE PROFESSION

Within the diagnostic imaging field, radiologic technologists (also referred to as radiographers) produce radiographic images for diagnostic and medical intervention procedures and are not limited in scope or license to specific regions of human anatomy. Such trained individuals perform specific pre-, intra-, and post-procedure duties that allow for patient safety and comfort, while providing a physician with accurate radiographic images for quality patient care. Radiologic technologists are trained to use various techniques, safety devices, and equipment to protect their patients, themselves, and their coworkers from unnecessary exposure to radiation. Experienced technologists/radiographers may specialize in more complex imaging procedures, to include, but not limited to, computed tomography (CT), magnetic resonance imaging (MRI), or mammography.

CREDENTIALING

The American Registry of Radiologic Technologists (ARRT) offers voluntary certification for radiologic technologists. In addition, many states use ARRT-administered exams for state licensing purposes.

Credentialing as an ARRT certified radiologic technologist is encouraged for all graduates of programs within institutions accredited by ABHES. ARRT certification and/or state licensure is also a requirement of many employers. Students are advised, prior to admission and throughout the program, of any credentialing requirements necessary to achieve employment in the field, including eligibility requirements to sit for the ARRT exam. Focus must be placed on credentialing requirements and opportunities to obtain employment and to increase employability. Adherence to an approved radiography curriculum is expected to prepare students to take the ARRT national certification examination.

SECTION A – Curriculum, Competencies, and Clinical Experience

RT.A.1. The depth and breadth of the program’s curriculum enables graduates to acquire the skills and competencies necessary to become an entry-level professional in the radiologic technology field.

Minimally, all programs are expected to provide a curriculum that incorporates the current content described in the *ARRT Content Specifications for the Examination in Radiography* and the *ARRT Radiography Didactic and Clinical Competency Requirements*. These curriculum elements should be reflective of those provided in the current version of the American Society of Radiologic Technologists (ASRT) *Radiography Curriculum*. The program must demonstrate its ability to meet stated program objectives, competencies, and program effectiveness data as outlined in Chapter V, Section I in the *Manual*.

Clinical and patient care competency is defined as the demonstrated ability to perform clinical procedures consistent with the expectations of an entry level radiographer independently and without direction from external sources. Clinical competency shall include proper positioning of the patient, the ability to adapt the exam process to the patient’s condition, accurate and efficient equipment operation, the ability to evaluate resulting image(s), and the ability to identify and make appropriate corrections to improve sub-optimal images as needed.

Competencies required for successful completion of the program are consistent with or exceed those outlined in the clinical competency requirements of the *ARRT Radiography Didactic and Clinical Competency Requirements*. The competencies are clearly delineated and the curriculum ensures achievement of these entry-level competencies through coursework, laboratory requirements, and clinical experience.

RT.A.2. Clinical experience is required for completion of the program.

The clinical experience prepares the graduate to encounter practical applications derived from a standard code of ethics within the professional clinical setting; to function as a team member in a skilled environment and to apply principles of conflict resolution. Clinical assignments are progressive and competency-based. In addition, the clinical experience prepares the graduate to practice patient confidentiality according to the policies and procedures for the Health Insurance Portability and Accountability Act (HIPAA); produce and evaluate radiographic images of consistent quality and take corrective actions as appropriate; operate and maintain radiography equipment; practice appropriate personal and patient radiation safety principles and procedures; handle emergencies effectively (including local and national emergency response); perform patient assessment and document clinical history; understand and apply concepts of total quality management; and communicate effectively with patients, family members, and other health care professionals.

The following are considered in choosing, placing and maintaining a clinical experience:

(a) **Assignment and Administration**

Clinical experience sites will be selected and assigned to provide equitable learning opportunities for all students. Clinical sites will consist of skilled and professional facilities that perform various types of radiologic and related activities which expose students to the necessary skills required of current and developing imaging technologies. In all cases, the clinical experience facility must be properly licensed and regulated by the appropriate governing authority.

The program establishes and maintains clinical experience agreements for each assigned site or facility as described in Chapter V, V.B.4 of the *Manual*. The institution must maintain documentation that supports and chronicles communication between the program and clinical site.

Students may not replace existing clinical site personnel and may not receive compensation while participating in the clinical experience. Admissions or other clinical experience preparatory documents (e.g., clinical agreement) must include these disclosure requirements. Under no circumstances may a student be considered an employee or serve as a staff substitution. Rather, students serve in a capacity to experience relevant processes and procedures in order to learn and master the required skills of the profession.

(b) **Activities**

Students are oriented to the clinical facility and the daily routine, functions, services, and operations of the facility. Initially, students must observe the required processes and procedures and, following successful completion of clinical site orientation, perform relevant tasks and procedures under direct supervision. Clinical site orientation should include a review of site-specific policies and procedures. As students progress in the clinical experience, the student transitions towards exam or procedure competency. Following competency achievement, students may qualify to perform those exams or procedures under indirect supervision. In all instances, student procedure logs or checklists must be maintained to ensure that a variety of the necessary or required tasks have been performed. Student records must contain documentation of student repeat examinations and must indicate that such examinations occurred under direct supervision.

1. General Patient Care

General patient care competencies required for successful completion of the program meet or exceed those outlined in the *ARRT Radiography Didactic and Clinical Competency Requirements*. If state or institutional regulations forbid radiologic technology students from performing these procedures on patients, then simulations are acceptable.

2. Imaging Procedures

Imaging procedure competencies required for successful completion of the program meet or exceeds those outlined in the *ARRT Radiography Didactic and Clinical Competency Requirements*.

For each exam or procedure, the graduate demonstrates the ability to evaluate physician orders; conduct patient assessment; coordinate room preparation; operate equipment; select required techniques; conduct patient positioning; practice radiation safety procedures, image processing, and evaluation while following applicable state and federal regulations, as well as policies and procedures of the clinical site and program.

Programs must provide students with learning opportunities in advanced medical imaging technologies. It is the program's prerogative as to how these learning opportunities occur. Advanced medical imaging technologies may include, but are not limited to, computed tomography, magnetic resonance imaging, sonography, nuclear medicine, and vascular imaging/interventions. If mammography or other gender sensitive procedures are included, equal opportunities must be available to all students regardless of gender.

(c)

Supervision

There is supervision by qualified clinical staff or technologists of all students in the field while participating in a clinical experience with a minimum of a 1:1 student-registered technologist ratio. Direct supervision is indicated during all exams and procedures prior to the student's achievement of competency on that specific exam or procedure and during all repeat images. Direct supervision is the direct observation of student performance by a qualified technologist throughout the entire performance of the exam including patient assessment, image evaluation and approval. Indirect supervision is the immediate availability of a qualified technologist to assist a student, generally considered within verbal distance. Indirect supervision is only applicable during exams and/or procedures in which the student has previously achieved and documented competency. Program design must include the responsibilities of the clinical instructor or preceptor and specific functions related to student supervision, including student evaluation process and conflict resolution procedures. The institution ensures that the responsible individual or preceptor understands the program expectations as defined.

(d)

Program Completion

Clinical experiences should be designed and congruent with the curriculum in relation to sequencing of content and be appropriate and educationally valid. Subsequent to attempts to achieve competency on any examination or procedure in the clinical setting, students must receive relative didactic instruction and demonstrate entry-level skills in the laboratory setting. All competencies required within the program's curriculum must be achieved prior to the student's eligibility for graduation.

SECTION B – Program Supervision, Faculty, and Consultation

Subsection 1 – Program Supervision

RT.B.1. The program supervisor possesses supervisory experience and is credentialed in the field.

The Program Supervisor (Educational Supervisor) is a graduate of an accredited radiography program and holds a minimum of a master's degree, current ARRT certification in radiography with a minimum of three years of full-time clinical experience in medical imaging, and two years of experience as an instructor in a program accredited by an agency recognized by the United States Department of Education or the Council for Higher Education Accreditation (CHEA) with evidence of learned knowledge and/or experience in instruction, student evaluation, academic advising, educational methods, and supervision of personnel.

The Program Supervisor is responsible for the organization; administration; periodic review; planning; development; evaluation; consistency with educational mission and scope; and overall effectiveness of the program. The Program Supervisor also has input into budget preparation. The Program Supervisor may have limited teaching assignments; however, such assignments must allow for adequate time for administrative responsibilities. The Program Supervisor is a full-time position.

Subsection 2 – Faculty and Consultation

RT.B.2.a. Faculty formal education/training and experience support the goals of the program.

All Program faculty members work under the direction of the Program Supervisor. Job descriptions and responsibilities of program personnel are clearly explained to include, but are not limited to:

1. **Clinical Coordinator (or Clinical Supervisor)** is a graduate of an accredited radiography program and holds a minimum of a baccalaureate degree, current ARRT certification in radiography with a minimum of two years of full-time clinical experience in the diagnostic radiography, and one year of experience as an instructor in a program accredited by an agency recognized by the United States Department of Education or the Council for Higher Education Accreditation (CHEA), with experience in instruction, student evaluation, and academic advising.

The Clinical Coordinator is responsible for the supervision and training of Clinical Instructors and preceptors and is the primary point of communication between the clinical site(s) and the program. The Clinical Coordinator is responsible for scheduling of students in all clinical assignments to ensure alignment with curriculum sequencing, as well as equitable and educationally valid experiences. The Clinical Coordinator may have limited teaching assignments; however, such assignments must allow for adequate time for administrative responsibilities. A full-time Clinical Coordinator position is held by one individual or a collective role between no more than two qualified individuals; however, programs may have more than one full-time Clinical Coordinator position.

2. **Full-Time and Part-Time Program Faculty** are graduates of an accredited radiography program and hold a certificate in radiography, a baccalaureate degree, and a current ARRT certification in radiography with a minimum of two years of full-time clinical experience in diagnostic radiography,. Courses which do not require expertise in the technical performance of radiography may be taught by individuals who possess qualifications commensurate with the individual courses being taught.
3. **Clinical Instructors** hold a minimum of a certificate or diploma in radiography from an accredited program and current ARRT certification in radiography with a minimum of two years of clinical experience in medical imaging.
4. **Clinical Staff (Preceptors)** hold a minimum of a certificate or diploma in radiography from an accredited program and current ARRT certification in radiography or equivalent (e.g., unrestricted state license for the state in which the clinical education setting is located).

Clinical Preceptors are working radiographers with a minimum of one year of full-time (or its equivalent) clinical experience in diagnostic radiography who evaluate students for competency achievement. Preceptors are sponsored by the clinical site and work under the direction of their clinical site supervisor. The Program must have input in the nomination and appointment of preceptors. The Program documents preceptor orientation and ongoing training to include responsibilities specific to clinical instruction and student competency evaluation, annual program updates, and documentation to support the communication between the Program and the Preceptor.

The Program must document regular evaluations of all personnel and which are shared with the respective personnel in a timely manner to assure role effectiveness, positive communications, and opportunities for professional development. Programs must provide evidence of the students' role in evaluations to include overall evaluations of the Program and validity of clinical education settings.

Faculty must comply with Chapter V (non-degree programs) and, as applicable, Chapter VI (degree-granting programs).

RT.B.2.b. Faculty numbers and ratio support the goals of the program.

The program limits class size to ensure instruction without risking student or faculty safety. Supervision during laboratory instruction is defined as student-to-faculty ratio of 10:1.

RT.B.2.c. A program is served by an advisory board of program related specialists to assist administration and faculty in fulfilling stated educational objectives.

The advisory board is comprised of individuals from the community of interest (i.e. currently licensed or registered radiographer and other practitioners in the field; physicians (as appropriate); scientific consultants; academic professionals; and administrators) who have knowledge of radiological science education.

SECTION C – Educational Laboratory Facilities and Resources

RT.C.1.a. The program has sufficient resources to meet program outcomes and assure the quality and educational effectiveness of the instructional plan. If on-site laboratories are provided, these must be operational and readily available to accommodate all enrolled students.

1. Laboratory areas are of a size to accommodate students, faculty and equipment during instruction.
2. Equipment and instruments are available in quantity and quality to accommodate student during instruction.
3. Energized laboratories are in compliance with applicable federal and/or state radiation safety regulations.
4. Student use of an energized laboratory must be under the direct supervision of a qualified instructor.

RT.C.1.b. Equipment and instruments are available within the institution's clinical educational settings or laboratory facility to achieve the program's goals and objectives. Radiographic equipment must also follow state guidelines and follow radiation protection specifications. Equipment and instruments include, but are not limited to, the following:

- Radiographic table energized or non-energized x-ray tube, collimator and control panel
- Image receptors (digital and/or analog based)
- Image receptor holders (Bucky tray or other)
- Image processing equipment (digital scanners and/or darkroom with chemical processor)
- Image display device (computer monitor and/or viewbox)
- Various foam positioning sponges
- Various radiographic lead markers
- Lead aprons and shields
- Positioning phantom (full-body anthropomorphic and/or phantom limbs)

SECTION D - Radiation Safety

RT.D.1.a. The program has established radiation safety policies and procedures compliant with federal and state radiation protection laws.

1. Radiation safety policies and practices promote the application of ALARA (as low as reasonably achievable) principles.
2. The program evaluates the student application of radiation safety practices in the clinical setting.

RT.D.1.b. Students must be issued radiation exposure monitors that are in keeping with current field requirements regarding type and length of exposure.

1. The program requires students to wear assigned radiation monitor in all potential exposure situations to include laboratory, clinical, or other observational experiences.
2. The program has an established process for timely review of student dosimetry reports by a qualified radiation safety officer (RSO) or other qualified individual.
3. The program documents timely (e.g., 30 calendar days of receipt of report) communication of dosimetry report results to students.
4. The program has established thresholds for student exposure and an established process for investigation and counseling for excessive readings.

RT.D.1.c. The program has an established student pregnancy policy compliant with federal and state radiation protection laws

1. The program's pregnancy policy allows for voluntary disclosure of pregnancy, including a voluntary withdrawal of this disclosure.
2. The program's pregnancy policy provides enrollment choices for disclosed pregnant students including remaining actively enrolled in the program.
3. The program's pregnancy policy allows disclosed pregnant students to seek counseling from a radiation safety officer (RSO) or other qualified individual.
4. Students must have access to the program's pregnancy policy upon enrollment.