

TECHNICAL STANDARDS

In order to participate in this Program and to be an effective radiographer, students must be able to meet specific technical standards.

Responsibility: Student, Program Director, EAC, Hospital Administration

Standard: Human Resources

JRCERT 2021 Radiography Standard(s): None

Nebraska Department of Education: Title 92 Chapter 41 Section 004.9I

These technical standards include certain communication, physical, sensory, mental and behavioral requirements to ensure the safe performance of radiologic procedures.

Sensory Requirements - Perception of the patient and surrounding environment is necessary to perform competent health assessments and interventions, and equipment operation necessitating the functional use of vision, hearing, tactile and olfactory senses. Examples of these requirements include but are not limited to:

- Sufficient vision and hearing to monitor condition of the patient during the radiographic procedure; ability to distinguish typical from non- typical sounds created by the radiographic equipment in operation
- Vision sufficient to allow accommodation between brightly lit and dimly lit environments
- Sufficient vision to discriminate between gray-scale tones and image brightness associated with the radiographic image and video display monitors
- Sufficient sight to read printed and computer text, observe the patient's condition from a distance, and manipulate equipment and accessories
- Ability to detect changes in environmental odors and temperatures

Communication Requirements - The student must have the ability to use multiple communication techniques (verbal, written, nonverbal, group processes, and information technology) that enable effective communication with others. Examples of these requirements include but are not limited to:

- Speech sufficient to be understood by others; ability to understand the communication of others; understand and assess non-verbal communications
- Communicate proficiently in the English language (read, write, and speak) in order to relate with patients, patient's families and staff
- Must be able to report to members of the health care team by accurately collecting and documenting appropriate information

- Able to communicate with sensitivity as well as teach, explain, direct and counsel patients

Psychomotor Requirements – The student must possess gross and fine motor functions necessary to perform patient assessment and diagnostic interventions. Such interventions require coordination of both gross and fine muscular movements, as well as stamina and equilibrium. Examples of these requirements include but are not limited to:

- Ability to maintain physical demands that require a full range of body motion including walking, raising arms above head and hand-eye coordination; sufficient gross and fine motor skills necessary to perform patient care and equipment adjustment
- The ability to stand and walk for prolonged periods of time, up to 8 hours per day
- Possess sufficient muscle strength, low back and knee stability to lift and carry grids, image receptors, positioning devices; wear lead aprons and other shielding devices needed in performing a radiographic procedure
- Ability to transport, move, lift or transfer patients from wheelchair or gurney to an x-ray table or to a patient bed
- Ability to hold and use a writing instrument and operate a computer keyboard for recording patient history or pertinent information
- Ability to move, adjust, and manipulate a variety of x-ray equipment (including the physical transportation of mobile x-ray machines) in order to arrange and align the equipment with respect to the patient and the image receptor according to established procedures and standards.
- Ability to physically place patients in proper positions for the examination according to established procedures and standards.

Intellectual-Conceptual, Integrative and Qualitative Abilities – The student must have sufficient psychological stability and knowledge of techniques/resources to be able to respond appropriately and efficiently in emergent situations in order to minimize dangerous consequences either patient related, staff related, or environment related. Examples of these requirements include but are not limited to:

- Ability to calculate and select proper technical exposure factors according to the individual needs of the patient and the

requirements of established procedures and standards to ensure care and safety to the patient

- Ability to measure, calculate, reason, analyze, evaluate, synthesize, use problem solving and critical thinking skills to find practical solutions for didactically and clinically acquired information and observations
- Ability to comprehend three-dimensional structures and understand the spatial relationships of these structures
- Ability to understand complex problems and to collaborate and explore alternative solutions

Behavioral and Social Attributes

The applicant shall possess the capacity required for full use of one's intellectual abilities and demonstrate good judgment with prompt completion of all responsibilities. The applicant must have the ability to develop effective relationships with patients. Examples of these requirements include but are not limited to:

- The social skills necessary to interact effectively with those of the same or a different culture with respect, politeness, and discretion.
- Possession of the ability to support a patient during a radiographic procedure.
- The ability to tolerate workloads, function effectively under stress, adapt to changing environments and conditions, and function in the face of uncertainties inherent in the clinical setting and with patients.
- Possession of reasoning and ethical behavior appropriate for a healthcare professional.

The applicant/student will need to be able to perform each of these tasks in a reasonably independent manner. The applicant must acknowledge that he or she is capable of meeting the technical standards listed or that the applicant needs an accommodation in accordance with RWHS policy. If an accommodation is necessary because of disability, the applicant shall provide documentation of the medical need and the request for a specific accommodation in writing from a Licensed Independent Practitioner (LIP).

The program will follow RWHS policy in evaluating requests for a reasonable accommodation. Determination of reasonable accommodation will be considered on an individual basis and is an interactive collaboration with RWHS, the applicant, the Educational Advisory Committee, and the program director when indicated.

Signature
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Program Director

Signature
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Reviewed: 5/3/12, 4/25/13, 2/28/2014, 2/20/15, 1/27/17, 2/2/2018, 1/31/19, 4/28/20, 9/13/21,
2/29/24
Revised: 3/4/16, 2/24/22, 5/24/22, 3/31/23