

# Community College of Allegheny County Radiation Therapy Technology Program

## Essential Cognitive, Physical, Behavioral, and Technical Functions and Performance Standards

In order to meet the program competencies, and for successful completion of the objectives for each RTT course, a student must be able to:

- **See** with normal or device corrected vision. Visual acuity must possess near clarity at 20 inches or less and far clarity of vision at 20 feet or more.
  - Discriminate among blacks, grays, and whites, and various color combinations, in dimly lit conditions
  - Read graphs, scales, computers, treatment charts, and treatment monitor to
  - Observe changes in a patient's status, emergency signals, and environmental conditions.
  - See well enough to read treatment charts, properly position patients for treatment and monitor a patient undergoing treatment.
- **Hear** sounds of spoken verbal communication, as well as sounds that indicate changes in patient's physiological condition.
  - Monitor intercom system
- **Speak** to focal clients and members of the health team utilizing effective verbal skills.
  - Communicate orally with patients and personnel
- **Demonstrate tactile ability** sufficient to assess a patient's pulses, as well as changes in a patient's physiological status, changes in skin temperature, skin condition, edema, etc.
  - Possess manual dexterity to perform various radiation therapy procedures. Motor skills must include the ability to extend hands and arms in any direction, to hold, grasp and turn with the hands, and possess the ability to coordinate eyes, hands and feet rapidly and accurately.
- **Smell** odors that indicate changes in the physiological status of the patient, or unsafe environmental conditions.
- **Read** extract, apply and cognitively comprehend written course materials, patient care documents, technical instructions, medical information and health care institution policies and procedures.
  - Intellectually understand the conceptual, integrative, and quantitative ability to analyze information and data.
  - Comprehend three-dimensional relationships and the spatial relationships of structure.
- **Think critically** to identify cause and effect relationships, predict outcomes, interpret situation contexts and have the ability to make sufficient judgments.
- **Clearly communicate**, verbally and in writing, with the patient, families, personnel and others to disseminate information about patient care and work duties.
  - Accurately perceive nonverbal communication, and describe changes in patient mood, activity and posture, and recognize and respond to an emergency or urgent situation.
- **Write** utilizing a legible and concise documentation style which is readable and in the English language.
- **Calculate accurately** in order to administer correct dosages.

- **Move freely** to observe and assess patients and perform emergency care; this includes having full dexterity of the upper extremities, including neck and shoulders, and unrestricted movement of both lower extremities, back, and hips in order to assist in all aspects of patient care and the ability to touch the floor to remove environmental hazards.
  - Application of restraints
  - Reposition patient on the treatment table
- **Demonstrate cognitive learning** in relation to new procedures through clinical application.
- **Lift and/or support** at least 75 pounds in order to reposition, transfer, and ambulate patients safely.
  - Lift, transfer and/or move patients from wheelchairs/stretchers/beds to treatment tables
  - Manipulate overhead treatment collimator; lift/carry and position custom blocks (10-20 pounds each).
  - Utilize appropriate techniques to move patients (ambulatory, wheelchair, stretchers) to and from treatment tables who might weight up to 300 lbs.
  - Lift, move, push, and carry x-ray accessories and equipment weighing approx. 30-35 lbs.
  - Endure an eight-hour clinical day with a minimum of four to six hours of standing or walking.
- **Interpret physician orders** accurately through verbal and written communication, and carry through with appropriate psychomotor clinical application.
  - Interpret total tumor dose, daily fractionation, and monitor unit settings applicable to each patient.
  - Be alert to all changes in patient's treatment plan.
- **Tolerate physical and emotional stress** and continue to function effectively.
  - Demonstrate emotional stability and psychological health in day-to-day interaction with patients, staff, family members and others.
  - Be adaptable, flexible and able to function in the face of uncertainty.
  - Develop mature, sensitive and effective relationships with patients and colleagues and have a high level of compassion for others, motivation to serve, integrity and a consciousness of social values.
- **Possess strong interpersonal skills** to interact with people from all levels of society, all ethnic backgrounds and all belief systems.

#### NOTES:

- A complete physical examination is required prior to the start of the clinical portion of program.
- Student must be free from health or medical disorders (physical or mental) that limit the ability to completely perform the duties of a student radiation therapist.
- Student must demonstrate integrity and honesty in all matters.
- Student must be poised, neat and well-groomed, tactful, diplomatic, discreet, flexible, versatile, ethical, professional, reliable and dependable.
- Student must demonstrate the capacity for reasoned judgment in a stressful environment.
- If a student should present any physical or cognitive limitations, each case will be reviewed on an individual basis. Reasonable accommodations will be made if possible.
- The abuse of alcohol or drugs during the program are grounds for dismissal from the program.