**Medical Diagnostic Technician**

NC 14250 (31000080) OSP 04/01/08

**DESCRIPTION OF WORK:** Positions in this banded class perform skilled technical work in the administration of radiologic procedures used for the diagnosis and treatment of patients\*. These positions perform diagnostic imaging in a variety of clinical settings. Duties performed include: taking, developing, and, sometimes interpreting, radiographs and tests; using and maintaining technical equipment effectively and/or assisting physicians during procedures. Work involves working directly with patients - preparing patients for procedures, positioning patients and providing instruction. Work may include training and/or supervising others.

**EXAMPLES OF COMPETENCIES: CONTRIBUTING**

**Knowledge - Technical:** Basic knowledge of anatomy, principals of imaging, positions of patients and medical ethics. Basic knowledge of the principles of operating and maintaining imaging equipment. Basic knowledge of safety procedures used for preventing or reducing radiation hazards. Basic knowledge of aseptic techniques.

**Coordination – Work:** Ability to position patient and operate imaging equipment to secure desired results. Ability to facilitate the effective operation of a clinic through monitoring patient flow. Ability to adjust equipment to secure quality test results; ability to maintain equipment and make minor repairs and adjustments. Ability to prepare work area and maintains sterile conditions. Ability to process results; ability to review results and decide if procedure needs to be repeated. Ability to prepare contrast media. Ability to maintain appropriate inventory of supplies and instruments; may require ability to order and receive supplies. Ability to understand and comply with the quality control procedures. Ability to understand and comply with safety measures and guidelines.

**Patient Care:** Ability to greet patients and gain their confidence and cooperation in the procedure. Ability to prepare patients for procedures following patient care protocols. Ability to instruct patients on steps of the procedures and follow-up care.

**Data Collection/Analysis:** Ability to record results of radiological studies; ability to prepare for physician review. Ability to maintain data (regarding patient and studies) in data management system; ability to file films following established protocols. Ability to prepare and analyze some data; ability to prepare non-routine data for analysis; ability to prepare routine reports. **Instruction:** Ability to participate in the orientation of staff and instruction of students. Ability to instruct medical students, interns and residents on radiographic techniques; ability to monitor results.

**JOURNEY**

**Knowledge - Technical:** Full knowledge of anatomy, principals of imaging, positions of patients and medical ethics. Applies considerable knowledge of medical problems that may be encountered; applies knowledge of first aid in emergency situations. Full knowledge of the principles of operating and maintaining imaging equipment. Applies considerable knowledge of department and organizational policies and procedures. Full knowledge of safety procedures used for preventing or reducing radiation hazards.

**Coordination – Work:** Ability to advise others in preparation and positioning of patients; ability to

position and prepare patients for special procedures.

Ability to assist supervisor with scheduling and improving patient flow. Ability to train others in operations of equipment and in safety procedures; ability to identify need for variation in testing procedures; ability to monitor quality assurance related to equipment. Ability to use contrast media, catheters, or special equipment; ability to assist physicians in performance of procedures. Ability to evaluate new procedures and modifies existing techniques. Ability to

**Patient Care:** Ability to document and maintain patient care procedures. Ability to train and/or monitor others in preparing and positioning patients for procedures. Ability to act as liaison with providers to problem solve and resolve scheduling issues. Ability to propose quality improvement in patient care. Ability to train and monitor others in providing patient instruction. **Data Collection/Analysis:** Ability to record a variety

of data from radiological studies; ability to ensure quality control of data collection. Ability to oversee film management procedures and patient file maintenance. Ability to prepare and analyze a wide variety of data; ability to prepare more complex reports. **Instruction:** Ability to coordinate orientation and on- site training for staff; ability to train and/or supervise

the work of students in performing diagnostic procedures. Ability to perform weekly clinical rotations; ability to explain, critique, and grade work of

students. Ability to design and present lectures,

learning exercises and classroom demonstrations.

monitor use of resources; requisitions supplies. Ability to evaluate and modify quality control procedures. Ability to evaluate and modify safety measures and guidelines.

**ADVANCED**

**Knowledge - Technical:** Extensive knowledge of procedures techniques, and equipment required in specialized diagnostic procedures. Applies full knowledge of medical problems that may be encountered. Full knowledge of principles of operating specialized imaging equipment and preventive maintenance. In-depth knowledge of local, state and Federal safety laws and regulation.

**Coordination – Work:** Ability to perform and/or assist in specialized tests in one or more specialized area(s). Ability to coordinate the scheduling of patients; ability

to prepare work schedules and assignments for staff.

Ability to maintain and calibrate specialized laboratory equipment as needed. Ability to develop specifications for equipment purchasing; ability to maintain records involving purchases and equipment repair. Ability to assist physicians in the performance of specialized procedures. Ability to develop and implement new procedures and techniques. Ability to manage resources in work unit; ability to establish priorities in the use of resources including supplies and equipment; may require ability to monitor expenditures. Ability to assist in developing and monitoring quality control program. Ability to assist in developing and monitoring safety measures and guidelines.

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**Patient Care:** Ability to document and maintain patient care procedures for specialized procedures; ability to train and supervises others. Ability to prepare patients for specialized procedures. Ability to

develop and implement quality improvements in patient care. Ability to provide instruction to patients about specialized procedures.

**Data Collection/Analysis:** Ability to research issues related to abnormal test results; ability to assist in resolving issues related to variations or discrepancies in the data. Ability to develop and implement new procedures for film management and file maintenance. Ability to provide analysis of complex data and/or data from highly specialized tests; ability to interpret study results and discuss preliminary findings with higher level professional in the field of study.

**Instruction:** Ability to train, evaluate and counsel other technicians. Ability to assist in developing and delivering educational programs for staff and students.

**MINIMUM TRAINING AND EXPERIENCE:** High school diploma or equivalency and two years of experience in medical diagnostics; or equivalent combination of training and experience. Some positions may require

additional training, certifications, or licenses.

Special Note: This is a generalized representation of positions in this class and is not intended to reflect essential functions per ADA. Examples of competencies are typical of the majority of positions, but may not be applicable to all positions.