

ULTRASOUND TECHNICIAN I

This is technical work in diagnostic ultrasound where procedures are performed to detect anatomical abnormalities and structures such as masses, abscesses, and stones. The ultrasound is a high frequency sound wave passed through the body. The sound wave is bounced back and an outline of the echo is converted to visualize the organ or area. This view and/or abnormality are photographed for the physician by the technician. These positions are located at the UNC-Chapel Hill, East Carolina University and UNC-Hospitals.

I. DIFFICULTY OF WORK:

Complexity - The Technician receives the physician's request for a procedure and reviews the patient's chart. The patient is positioned and draped. The probe is passed over the area of study until a clear picture appears. The Technician takes a closer look at the abnormality if possible and takes a picture. The Technician performs 18-20 diagnostic studies, requiring considerable knowledge of anatomy and basic physiology, and the ability to differentiate artifacts from the normal or pathological processes. Work includes teaching and precepting ultrasound students, calibration of equipment, and the inventory of supplies. The physician does the final reading and interpretations of the records.

Guidelines - The procedural guidelines are relatively routine and understood. Employee is usually trained on-the-job in a formal program; some textbooks and journals are available for procedural questions. The supervisory physician is also available for technical questions.

II. RESPONSIBILITY:

Accountability - Employee has some opportunity to commit the agency since independently performing the diagnostic studies and selecting the best picture of the abnormality, if existing.

Consequence of Action - there is no imminent danger to the patient; however, an unnoticed abnormality could have a significant impact on the diagnosis of the patient.

Review - Employee works independent of physician and supervisory review. The radiologist does the final interpretation of the study.

III. INTERPERSONAL COMMUNICATIONS:

Subject Matter - The information regarding techniques, procedures, and results is usually understood by the medical staff. The information is more difficult for the patient and untrained personnel to understand regarding the technical procedures, test results, and diagnosis.

Purpose - Communications are usually with staff members, students, and physicians for the exchange of information and teaching purposes. Contacts are with patients to explain the procedure and to comfort them.

IV. WORK ENVIRONMENT:

Nature of Working Conditions - Employee works in the ultrasound laboratory the majority of the time.

Nature and Potential of Hazards - There is little or no danger to the employee, except possibly from working with electrical equipment or difficult patients.

V. RECRUITMENT STANDARDS:

Knowledges, Skills, and Abilities - Considerable knowledge of the procedures, techniques, and equipment involved in ultrasound studies; considerable knowledge of the repair, maintenance, and operation of ultrasound equipment; considerable knowledge of human anatomy and physiology; skill in the operation of ultrasound equipment; ability to perform ultrasound studies and to differentiate artifacts from normal or pathological processes, and to do a basic interpretation of the diagnostic scan; ability to teach others; ability to gain the confidence and cooperation of patients; the ability to establish and maintain effective working relationships with others.

Training and Experience Requirements - Graduation from a two year program from a community/technical college with an Associate of Applied Science (AAS) degree in medical Sonography, Diagnostic Ultrasound, or closely related field; or an equivalent combination of training and experience.

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