

CLINICAL NEUROPHYSIOLOGY TECHNICIAN II

This is skilled work in the performance, basic assessment, and interpretation of specialized as well as standard electroencephalographic procedures. Electroencephalography is the making and study of graphic records of the electrical activity of the brain. The EEG is used to aid in the diagnosis of seizure conditions, classify epilepsies and sleep disorders, localize areas of disease involvement, and quantitate efficiency of treatment, to identify metabolic brain diseases, to identify the presence of brain activity, to ensure the absence of metabolic or vascular changes during operations, and to aid in interpretations of other studies. These positions are located at the North Carolina Memorial Hospital and Department of Human Resources. Work requires the employees to perform a variety of neurophysiology procedures requiring a thorough knowledge of electroencephalography. This level is differentiated from the Clinical Neurophysiology Technician I by the variety of procedures, level of interpretation and know ledges required to perform procedures and provide a form of interpretation. Work may include other duties as assigned by management. Work is supervised by a Clinical Neurophysiology Laboratory Supervisor and/or Electroencephalographer.

I. DIFFICULTY OF WORK:

Complexity - Employees perform a variety of neurophysiology procedures to include standard EEG's, electrocerebral silence studies, neonatal EEG's, various portable studies, prolonged monitoring studies, sleep deprived studies narcolepsy/sleep apnea studies, intraoperative EEG's, and EEG telemetry studies. Employees measure and mark the patients head for proper electrode placement in accordance with the international 10/20 system, and instruct and assist the patient. Work also requires the employees to observe the electrical activities for conformance to standards and note artifacts and observe and document movement and behaviors of the patient. Employees also administer auditory, visual and somatosensory stimulation in electrocerebral silence records, and monitor eye movement, respiration, EKG, and submental muscle tone for neonatal EEG studies. Employees also use special montage configurations for electrode place. The employees also provide a preliminary interpretation of the various EEG studies, which is normally reviewed by the Electroencephalographer.

Guidelines - Departmental procedures, policies and standards are established, but some initiative and independent decision-making is necessary to enhance to quality of test procedures. Work operations are often routine and procedures are well documented. Instructions may be requested in unusual cases, or when problems like inadequate records or equipment malfunctions develop. Assessment of the record and equipment operation is performed with considerable independence.

II. RESPONSIBILITY:

Accountability - Employees have the opportunity to reflect upon he agency since they perform basic interpretations of the record. The recur ding, are always reviewed by the Electroencephalographer, but the technician's awareness of the patient's condition, age, clinical history, and behavior during the procedure directly affects diagnostic interpretation.

Consequence of Action - Improperly recorded activity and/or inattentive observation of the patient could lead to an erroneous diagnosis and/or delay recovery.

Review - Studies are performed independently. Records are reviewed by the Electroencephalographer and Clinical Neurophysiology Laboratory Supervisor.

III. INTERPERSONAL COMMUNICATIONS:

Subject Matter - The employees fully explain the procedure to the patient or unfamiliar medical staff. Employees also obtain a detailed history from the patient at the beginning of the study, and may modify test protocols based upon that information.

Purpose - Communications are with patients to explain the procedure, and to either elicit patient response or confirm seizure activity. The employee may have to persuade a patient to participate in the procedure.

IV. WORK ENVIRONMENT:

Nature of Working Conditions - Employees work in the EEG Laboratory, clinics, medical units, emergency room, or operating room.

Nature and Potential of Personal Hazards - There is little danger to the employees, except possibly from working with electrical equipment or difficult patients, or patients with contagious viruses. Employees also work with the patients in isolation.

V. RECRUITMENT STANDARDS:

Knowledges, Skills and Abilities - Considerable knowledge of the procedures, techniques, and equipment involved in recording clinical neurophysiology studies; considerable knowledge of the maintenance and operation of neurophysiology equipment; general knowledge of neurology, neuroanatomy, neurophysiology, neurophthalmology anatomy, and electroencephalography. Ability to interpret EEGs; ability to teach other medical staff; ability to gain the confidence and cooperation of patients.

Minimum Education and Experience - High school or General Educational Development diploma and completion of an AMA accredited program in electrophysiology plus one year of experience in performing a variety of neurophysiology procedures; or an equivalent combination of education and experience.

Minimum Education and Experience for Trainee Appointment – High school or General Educational Development diploma and completion of an AMA accredited program in electrophysiology.