Advanced LTM Analyst Job Description

This Job Description is designed to be used as a guideline in conjunction with the facility policies and procedures.

The duties listed in this Job Description guideline are performed under the direction of administrative and clinical leadership as defined by facility policies and procedures.

The supervision levels in this Job Description guideline refer to technical supervision only.

General Summary:

The Advanced LTM Analyst is an integral part of the general care team, working closely with direct care providers and multidisciplinary team members. The Advanced LTM Analyst holds a credential in Electroencephalography (R. EEG T.*), certification in Long Term Monitoring (CLTM*), and has a minimum of seven years' experience in LTM, ICU and/or cEEG monitoring after attaining the CLTM credential.

The Advanced LTM Analyst has proven competence in Long Term Monitoring in the Epilepsy Monitoring Unit as well as continuous EEG monitoring in critical care areas such as ICUs, and has developed the highest skills and expertise to provide the most complex monitoring needed for brain and epilepsy surgery cases and/or patients in ICU.

Strong, well-developed communication skills are essential for this position. The Advanced LTM Analyst works under **general supervision**[1] during all long-term monitoring procedures, including intra- and extra- operative testing. It is expected that the institution employing the Advanced LTM Analyst also makes available the appropriate personnel to provide required **general supervision**[1].

[1]General supervision requires that procedures are performed under the general direction and oversight of a qualified Medical Director; however, the physician is not required to be present during the performance of the procedures.

Minimum requirements:

1. Hold registry in Electroencephalography (R.EEG T.*)

2. Hold current certification in Long Term Monitoring (CLTM*)

3. Minimum of 7 years' experience in LTM and/or ICU after attaining the CLTM credential.

4. Have strong, well-developed communication and critical thinking skills.

5. Extensive knowledge of medication and its effects on EEG waveforms.

6. Current BLS certification is required.

7. An Associate's or Bachelor's degree from an accredited college or university is preferred.

Education:

Completion of a Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited Neurodiagnostic Technology Program, or a Bachelor's Degree from an accredited college or university is preferred.

It is recommended that education in sterile technique and operating room orientation per institution protocol be required.

Reports to:

Administrative and clinical leadership as is defined by facility policy and procedures.

Principal Duties and Responsibilities:

Expected level of competency in performance of the duties and responsibilities listed below is:

The Advanced LTM Analyst is independent and proficient in the performance and training of all duties and responsibilities for LTM/ICU/cEEG monitoring and may act as the physician extender in collaboration with the supervising physician and other healthcare staff.

Extensive knowledge of medication and its effects on EEG waveforms and patterns is required.

Must have extensive knowledge of EEG technology concepts and advanced techniques for LTM/ICU/cEEG, including:

1. Equipment set-up for ICU/cEEG recordings and application of scalp electrodes utilizing International 10-20 (or 10-10) System of Electrode Placement using collodion or paste adhesives.

2. Activating procedures (hyperventilation, photic stimulation) as appropriate.

3. All duties and responsibilities for typical and special consideration for routine and advanced EEG/ECoG (electrocorticography).

4. Extensive knowledge in neuroanesthesia and its application to neuromonitoring.

5. All aspects of the subdural grid implant preoperatively, intraoperatively, and post- operatively including but not limited to: electrode set-up, montage creation/verification, troubleshooting, hook-up and discontinuation, and stimulation for cortical mapping.

Recognizes physiologic and nonphysiologic artifacts and eliminates and/or properly monitors. Reviews, evaluates, maps, and classifies impressions of ictal, interictal and paroxysmal events from EEG/Video data.

Describes examination made during admission to the monitoring units.

Responsible for daily scanning, documentation and annotation of ictal, interictal and paroxysmal events. Writes final report and detailed description of EEG patterns, seizure semiology, radiologic findings, mapping of ictal and interictal abnormalities and selection of representative EEG samples.

Maps interictal and ictal patterns and creates permanent file clips which represent these findings.

Details patient history from patient interviews and writes daily monitoring descriptions in the patient hospital charts.

Edits and archives EEG and video data of patients' Video/EEG monitoring

Educates the patient and family regarding their LTM/ICU/cEEG monitoring procedure as well as interacting on a level appropriate to the patient's age and mental capacity. Documents description of the patient's events and pertinent history to include current and previous medications, family history, surgeries, skull defects, etc. into the patient's record.

Must have above average computer skills.

Utilizes universal precautions and adheres to the infection control standards of the institution.

Establishes lab protocols according to American Clinical Neurophysiology Society (ACNS) guidelines and complies with the safety policies and procedures of the medical institution and as recommended by the American Epilepsy Society (AES). Knowledge and practice of department management including, budgeting, scheduling and equipment purchases.

Tutors, demonstrates and mentors other team members.

Maintains continuing education requirements of ABRET for CLTM* by reviewing current literature and attending continuing education meetings and seminars. All other relate duties that are consistent with patient and technical care for this level.

Physical Skills:

1. Frequent walking 25-75%

2. Sitting/standing 67-100%
3. Reaching including above/below shoulder height 33%
4. Some kneeling/crawling 5%
5. Pulling/pushing >50 pounds 20%
6. Carrying <50 pounds 20%
7. Frequent bending /stooping/crouching/twisting and continuous repetitive movements

Physical Exposure:

Lighting bright and dim, mechanical hazards, hazardous substances, infectious diseases, ionizing/non-ionizing radiation, and toleration of temperature ranges 60° to 75° F.

Physical Ability:

Must be good or greater: vision, hearing, manual dexterity, talking and speech, typing. Requires the ability to concentrate for long periods of time under stressful conditions and still perform properly and effectively.

The Advanced LTM Analyst job description does not supersede governmental regulation and/or state licensure laws or affect the interpretation of such laws if they so exist.

APPENDIX:

*The R. EEG. T. and CLTM credentials are granted by ABRET Neurodiagnostic Credentialing and Accreditation (ABRET). www.abret.org

-- Approved by ASET Board of Trustees July 2015

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