JOB DESCRIPTIONS FOR ELECTRODIAGNOSTIC TECHNOLOGISTS

These job descriptions are intended for directors of electrodiagnostic medicine (EDX) laboratories and to provide guidelines for federal and state agencies and hospital administrators concerned with classification of personnel. When developing job descriptions, the facility should comply with all federal employment, Occupational Safety and Health Administration (OSHA), and Joint Commission on Accreditation of Healthcare Organizations (JCAHO) guidelines.

The EDX consultant may or may not be present during the entire EDX study; however, he or she should be available throughout. Technologists should not perform invasive procedures, specifically needle electromyography (EMG).

TITLE: ELECTRODIAGNOSTIC TECHNOLOGIST TRAINEE

Summary: Receives training in electrodiagnostic technology, specifically nerve conduction studies (NCSs).

Distinguishing Characteristics: The technologist trainee receives training under the direct supervision of the staff EDX consultant and/or laboratory technical personnel who have successfully completed board certification from the American Association of Electrodiagnostic Technologists (AAET). The technologist trainee learns the functions of electrodiagnostic technology by group and/or individual teaching, observation, assigned reading, and practical application under the direct supervision of laboratory staff.

Examples of Duties:

1. Receives training regarding ethical responsibilities and confidentiality.

2. Learns the basics of patient safety and cleanliness, including OSHA and JCAHO guidelines for Universal Precautions, cardiopulmonary resuscitation (CPR), and patient-appropriate interpersonal skills needed to work with patients, laboratory allied health, physician staff, and other hospital/clinic staff members.

3. Learns appropriate methods and explanations of the test procedure needed to obtain the patient's cooperation necessary for a complete examination.

Key Words: *job description □ electrodiagnostic medicine □ technologist*

4. Learns how to check the patient's medical chart for orders and special needs, with particular attention to patients with pacemakers and defibrillators.

5. Acquires basic knowledge of recording electrodes, stimulating electrodes, the recording instrument, and operational and electrical concepts.

6. Acquires basic knowledge of normal nerve and muscle anatomy and function, disease states encountered in EDX practice, NCS responses in normal and pathologic circumstances, other diagnostic aids, and the operating principles of pertinent electronic instrumentation.

7. Learns to accurately record responses from the nerves and muscles with surface recording and stimulating electrodes. This entails the acquisition of knowledge and skills necessary but not limited to:

   a. Applying suitable electrodes to predetermined measured positions on the patient and checking the electrode performance.

   b. Calibrating and adjusting the EDX instrument.

   c. Assisting with recording of standard protocols; recognizing physiological and nonphysiological artifacts and taking appropriate steps to eliminate them; describing normal and abnormal clinical manifestations observed during the test.

8. Keeps equipment clean and in operating condition, detects instrument malfunctions, and makes minor maintenance adjustments or reports the need for other repairs.

9. Files print or film recordings according to the laboratory policies and procedures.

10. Learns to manually compute and record graphical data in accordance with laboratory policies and procedures.

11. Performs other related duties as required by supervising staff.

12. Attends teaching seminars and conferences, completes formal reading assignments, and

demonstrates acquisition of knowledge and skills through oral, written, and practical examinations given by the supervisory staff.

Minimum Technical Qualifications:

1. Completion of 1 year of college or university with emphasis on physical or biological sciences, ***or***

2. High school graduation with emphasis on physical or biological sciences.

Personal Qualifications:

1. Maturity and the ability to establish good rapport with patients, public, and staff.

2. Capacity to deal with severely ill patients and the circumstances that surround these patients.

TITLE: ELECTRODIAGNOSTIC TECHNOLOGIST I

Summary: Performs NCSs in the laboratory under the direction of the registered laboratory technologist supervisor and/or the staff EDX consultant.

Distinguishing Characteristics: The technologist in this class is responsible for performing NCSs under the supervision of the EDX consultant.

Examples of Duties:

1. Adheres to training regarding ethical responsibilities and confidentiality.

2. Conforms to all laboratory policies and procedures regarding OSHA and JCAHO guidelines for Universal Precautions and hospital regulations.

3. Demonstrates positive patient-appropriate interpersonal skills with patients, laboratory allied health, physician staff, and other hospital/clinic staff members.

4. Explains the test procedure to the patient to obtain the patient's cooperation necessary for a complete examination. Checks the patient's medical chart for orders and special needs, with particular attention to patients with pacemakers and defibrillators.

5. Demonstrates knowledge of the peripheral nervous system, diseases related to electrodiagnostic medicine, instrumentation, basic electronics, and electrical safety.

6. Prepares the patient, applying a variety of surface electrodes as required; accurately obtains standard NCSs; distinguishes between normal and abnormal results; describes all abnormal clinical manifestations observed during the test; recognizes physiological and nonphysiological artifacts and takes appropriate steps to eliminate them.

7. Performs the appropriate calibration procedure on the electrodiagnostic instrument for standard recordings. Manipulates instrument controls for optimal recording of electrical responses.

8. Assists the EDX consultant with the EDX studies as needed by preparing or manipulating the instrument and applying surface recording electrodes.

9. Keeps equipment clean and in operating condition, detects instrument malfunctions, and makes minor maintenance adjustments or reports the need for major repairs. Cleans and maintains electrodes.

10. Acquires specialized skills to perform the more difficult procedures, including surgical monitoring, under the direct supervision of the staff EDX consultant or registered technologist.

11. Files print or film recordings according to the laboratory policies and procedures.

12. Performs other related duties as required.

13. Continues education by participating in technical conferences and meetings.

Minimum Technical Qualifications:

1. Successful completion of a traineeship with a minimum of 6 months duration following:
    a. Completion of 1 year of college or university with emphasis on physical or biological sciences, ***or***

    b. High school graduation with emphasis on physical or biological sciences.

2. Maintains CPR certification according to the laboratory policy and procedures.

3. Eligible for/or successfully completed AAET registry written and oral examinations. Requirements for registry are as follows:
    a. Performs NCSs for a minimum of 1 year under direct supervision of an EDX consultant.

b. Written statement from EDX consultant that the technologist works under their direct supervision.

c. Completes all 3 sections of the AAET registry examination with a minimum score of 70% on each section and an overall minimum score of 75%.

Personal Qualifications:

1. Maturity and the ability to establish good rapport with patients, public, and staff.

2. Capacity to deal with severely ill patients and the circumstances that surround these patients.

TITLE: ELECTRODIAGNOSTIC TECHNOLOGIST II

Summary: Performs NCSs in the laboratory, at bedside, or in the operating room, and/or serves as a senior technologist with responsibilities for work assignments. Provides ongoing in-service training for junior personnel.

Distinguishing Characteristics: The technologist in this class is responsible for obtaining standard, as well as advanced, NCS recordings in the laboratory, at bedside, or in the operating room under the direction of an EDX consultant. The technologist is responsible for checking and maintaining the instruments in excellent working condition. This class of technologist continues education, researches new techniques, and instructs junior personnel.

Examples of Duties:

1. Adheres to training regarding ethical responsibilities and confidentiality.

2. Conforms to all laboratory policies and procedures regarding OSHA and JCAHO guidelines for Universal Precautions and hospital regulations.

3. Maintains patient-appropriate interpersonal skills with patients, laboratory allied health, physician staff, and other hospital/clinic staff members.

4. Explains the test procedure to the patient to obtain the patient's cooperation necessary for a complete examination. Checks the patient's medical chart for orders and special needs, with particular attention to patients with pacemakers and defibrillators.

5. Assists the EDX consultant with the EDX studies as needed by preparing or manipulating the instrument and applying surface recording electrodes.

6. Maintains all instrumentation in excellent working order, checking calibrations, and making minor maintenance adjustments and repairs deemed by the instrument manufacturer as appropriate and safe.

7. Performs standard and advanced NCSs in a highly skilled, patient-appropriate manner, recognizes normal and abnormal results and recognizes and takes reasonable steps to eliminate physiological and nonphysiological artifact.

8. Performs NCSs in the intensive care unit (ICU) or other hospital units, understanding the special technical requirements of these areas.

9. Monitors certain NCSs during surgeries at risk for peripheral nerve damage or for repairing the same.

10. Files print or film recordings according to the laboratory policies and procedures.

11. Performs other related duties as required.

12. Supervises and participates in teaching junior personnel.

13. Continues education through journals, publications, workshops, seminars, and site visits.

14. Participates in technical conferences and meetings.

Minimum Technical Qualifications:

1. Successful completion of the qualifications enumerated for the Trainee and Technologist I positions, ***or***

Successful completion of AAET registry or eligibility with intent to complete registry. The technologist in this category must successfully complete registry prior to intraoperative monitoring responsibilities.

2. Maintains CPR certification according to the laboratory policy and procedures.

Personal Qualifications:

1. Maturity and the ability to establish good rapport with patients, public, and staff.

2. Capacity to deal with severely ill patients and the circumstances that surround these patients.

3. Self motivated.

TITLE: ADMINISTRATIVE SUPERVISOR

Summary: Supervises and directs the day-to-day operation of the electrodiagnostic laboratory, including development of policies, purchasing of laboratory supplies, planning laboratory schedules. Assists with recruitment, selection, and evaluation of technical staff. Individuals holding this position are only responsible for administrative duties and are therefore not required to posses the qualifications to perform, supervise, record, or review the results of any medical procedure.

Distinguishing Characteristics: An administrative supervisor directs related clerical activity; and supervises, plans, and helps develop training activities. Individuals must possess excellent interpersonal skills, good judgment, and a working knowledge of the electrodiagnostic laboratory.

Note: Although there is some overlap between the duties of an Administrative Supervisor and the duties of an Electrodiagnostic Supervisor, the minimum technical qualifications required for each position are very different. *Only individuals who meet the minimum technical qualifications described in the Electrodiagnostic Supervisor section of this document posses the knowledge and expertise necessary to perform or supervise recording procedures such as NCSs*.

Examples of Duties:

1. Adheres to training regarding ethical responsibilities and confidentiality.

2. Develops and updates the laboratory policy and procedures manual utilizing and following OSHA and JCAHO guidelines. Maintains patient appropriate interpersonal skills with patients, laboratory allied health, physician staff, and other hospital/clinic staff members.

3. Arranges maintenance and repair of equipment.

4. Keeps inventory and initiates purchasing of laboratory supplies.

5. Plans laboratory schedules; assigns priorities according to the workload and clinical urgency in conjunction with the staff EDX consultant.

6. Assists the EDX consultant and/or supervises junior staff with laboratory research projects.

7. Takes part in the recruitment, selection, and evaluation of technical staff and trainees.

8. Performs other related duties as required.

9. Continues education through journals, publications, workshops, seminars, and site visits.

10. Participates in publications, conferences, and technical meetings.

11. Organizes and participates in technical conferences and meetings.

Minimum Technical Qualifications:

1. Bachelors degree or equivalent and 3 years of experience in administration and/or management, ***or***

Five years experience in administration and/or management.

Personal Qualifications:

1. Maturity and the ability to establish good rapport with staff.

2. High degree of leadership, and organizational talents.

TITLE: ELECTRODIAGNOSTIC SUPERVISOR

Summary: Qualifies to serve as Electrodiagnostic Supervisor and/or Chief Technologist and supervises the technical operation and training activities of the laboratory.

Distinguishing Characteristics: The technologist in this class is distinguished by a high degree of sophistication in the field of EDX technology; is responsible for the technical operation of laboratories performing clinical and/or research work; directs related clerical activity; and supervises, plans, and helps develop training activities.

Examples of Duties:

1. Adheres to training regarding ethical responsibilities and confidentiality.

2. Develops and updates the laboratory policy and procedures manual utilizing and following OSHA and

JCAHO guidelines. Maintains patient appropriate interpersonal skills with patients, laboratory allied health, physician staff, and other hospital/clinic staff members.

3. Arranges maintenance and repair of equipment.

4. Keeps inventory and initiates purchasing of laboratory supplies.

5. Supervises or performs particularly difficult or unusual recording procedures.

6. Performs NCSs in the ICU or other hospital units, understanding the special technical requirements of these areas.

7. Plans laboratory schedules; assigns priorities according to the workload and clinical urgency in conjunction with the staff EDX consultant.

8. Supervises, plans, and reviews the work of the technical staff and performs their duties when required. When necessary, takes corrective action or suggests technical innovations.

9. Assists the EDX consultant and/or supervises junior staff with laboratory research projects.

10. Takes part in the recruitment, selection, and evaluation of technical staff and trainees.

11. Performs other related duties as required.

12. Continues education through journals, publications, workshops, seminars, and site visits.

13. Participates in publications, conferences, and technical meetings.

14. Organizes and participates in technical conferences and meetings.

Minimum Technical Qualifications:

1. Bachelor's degree or its equivalent and 3 years of experience in EDX technology, ***or***

Successful completion of AAET registry, ***or***

Five years of experience in EDX technology and continuing education with intent and eligibility for successful completion of registry examinations.

Personal Qualifications:

1. Maturity and the ability to establish good rapport with patients, public, and staff.

2. Capacity to deal with severely ill patients and the circumstances that surround these patients.

3. High degree of leadership, organizational, and teaching talents.

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Approved by the American Association of Neuromuscular & Electrodiagnostic Medicine (formerly AAEM): February 2000.

Endorsed by the American Society of Electroneurodiagnostic Technologists: April 2000.