

Eastern Band of the Cherokee Indians
Job Description

JOB TITLE: MEDICAL TECHNOLOGIST **DEPARTMENT:** CIHA
DIVISION: CHEROKEE INDIAN HOSPITAL **SECTION:**
REPORTS TO: Laboratory Supervisor

PRIMARY FUNCTION:

Performs clinical procedures and testing in accordance with approved policies and procedures and clinically accepted standards. Provides technical expertise to the Supervisory Medical Technologist regarding assigned laboratory areas. Assesses, prepares and/or updates procedure manuals, performs and reviews quality control and maintenance manuals while being cross-trained to function in any area of the clinical laboratory. Performs scheduled duty on weekends, holidays, and on an emergency callback basis as well as when requested to do so in order to facilitate patient care.

Job requires Age Specific Competencies

FLSA: Exempt

Job Description:

May be necessary to work when Administrative leave is granted if patient care would be compromised.

Performs clinical procedures and testing in accordance with approved policies and procedures and clinically accepted standards.

Provides technical expertise to the Supervisory Medical Technologist in any of the intra-laboratory disciplines; chemistry, microbiology, hematology, immunology, serology, parasitology, and blood banking.

Performs instrument start-up procedures, observes all safety procedures, identifies instrument malfunctions, unacceptable reagent performance, provides clinical instruction to other technologists and technicians.

Develops and reviews complex laboratory section procedures and participates in proficiency testing (CAP) as requested.

Performs laboratory instrument calibration standardization and preventative maintenance.

Develops and maintains inventory control of all reagents, quality controls, and materials associated with laboratory testing.

Performs phlebotomy procedures in accordance with accepted policies and standards

on pediatric and adult patients.

Maintains a working knowledge of statistics and responsible for the calculation of monthly quality control statistics; mean, standard deviation, coefficient of variation, etc... Uses statistical data to conduct a critical assessment of daily, monthly, and yearly quality control performance.

Keeps abreast of new developments by research and continuing education in assigned discipline area and passes this information on to other technologists and technicians in the department.

Prepares special reports and performs special research as directed by the Supervisory Medical Technologist.

Prepares workload reports for assigned clinical area and submits on a monthly basis to laboratory supervisor.

Develops, assesses, prepares, and/or updates procedure manuals for assigned clinical laboratory area.

Develops and maintains clinical processes and procedures with the assistance of the laboratory supervisor in accordance with all applicable accrediting organizations (ex. CAP, JCAHO, etc...) and participates in applicable accreditation inspections.

Performs and reviews quality control and preventive maintenance procedures for various areas of the laboratory on an ongoing basis.

Maintains confidentiality of all patient results and reports.

Provides careful and respectful treatment to all patients and staff members.

Uses safe work practices that include maintaining a clean workplace, following established policies and procedures for safety and infection control, following universal blood/body fluid precautions, and reporting accidents/incidents promptly.

Organizes and prioritizes work efficiently to maintain a high level of productivity without sacrificing quality.

Collects data, organizes and prepares reports as required to fulfill compliance requirements by CAP, JCAHO or any other agency as required. Will also meet all competency requirements, including age specific competencies as mandated by accreditation organizations.

Assists the laboratory with maintaining CAP/JCAHO accreditation by compliance with standards and accurate performance of proficiency testing.

Performs complex data analysis on a daily, monthly, and yearly basis for each test in assigned clinical area (Hematology, Chemistry, Immunology, etc...). Performs validation and crossover studies when introducing new testing methodologies into the laboratory.

Incumbent must be able to work alone. Incumbent must be resourceful in calling experts when the need arises in any given area of the laboratory.

Cross-trained to be able to perform the following for each area:

□ **Chemistry/Immunology/Serology:**

Separates serum and plasma from red cells and performs Chemistry, Immunology, and Serology testing on patient specimens. Testing ranges from simple qualitative tests to highly complex quantitative analyses using both manual and automated methods. Testing includes include but are not limited to: glucose, sodium, potassium, chloride, CO₂, BUN, creatinine, liver function tests, cardiac tests (troponin, CKMB), phosphorous, calcium, protein, albumin, triglycerides, cholesterol, HDL, salicylate, acetaminophen, ETOH, and ketones.

Performs highly complex quantitative analysis on urine and CSF specimens.

Verifies that results are reportable by analyses and interpretation of quality control and must possess a thorough clinical knowledge of physiological possibilities for humans with and without disease processes and physiologic abnormalities.

Repeats testing on both specimens and quality control materials as necessary to assure accuracy of results.

Maintains equipment in working condition. Performs preventative maintenance as scheduled and needed. Maintains records of preventative maintenance and corrective actions. Keeping equipment in working condition may include minor repairs and will require extensive knowledge of the problem and working with technical experts from equipment vendors.

Incumbent must also be able to assess when samples must be recollected due to various interferences such hemolysis or lipemia as some test results are erroneous with these interferences.

□ **Microbiology/Parisitology:**

Cultivates pathogenic and non-pathogenic microorganisms for the purpose of identifying and performing susceptibility assays on clinically significant isolates for the treatment of patients.

Monitors all specimens submitted for proper collection, preservation, and identification. Specimen types may originate from any part of the body but are most commonly fluids, wounds, blood, throat swabs, rectal, or vaginal swabs.

Places specimens in appropriate holding transport media or broth.

Prepares, treats, and inoculates specimens onto appropriate media and maintains them under special conditions (ex. CO₂ enhancement, oxygen deprivation, etc...) to enhance the growth of microorganisms.

Examines culture and subculture growth for possible pathogens, discriminating between potential pathogens versus normal flora or contaminants.

Separates colonies needed for identification and susceptibility testing.

Using biochemical analytical methods, identifies isolated colonies to the species level for bacteria.

Identifies the presence of fungal elements.

Performs susceptibility testing using precise dilutions of microorganisms with known concentrations of antimicrobials.

Performs gram stains, oxidase, and indole testing as well as other manual biochemical methods.

Maintains equipment in working condition. Performs preventative maintenance as scheduled and needed. Maintains records of preventative maintenance and corrective actions. Records include temperature checks, QC testing, rapid testing, and records of media QC testing. Keeping equipment in working condition may include minor repairs and will require extensive knowledge of the problem and working with technical experts from equipment vendors.

Reports susceptibilities using NCCLS standards to aid the physicians and other caregivers in appropriate therapy.

□ **Hematology:**

Performs Hematology testing and reports the results in a timely and efficient manner to assist physicians in diagnosis of anemias or other blood dysplasias, blood loss, and coagulation anomalies.

Performs hematology differentials and counts and must possess necessary skills to differentiate between cellular components within blood specimens. WBC differential and manual cell counts depend on the technologist's ability to recognize cell types

and differentiates cells on appearance under the microscope using specialized stains.

Performs venipuncture, capillary puncture, therapeutic phlebotomy, and bleeding times as appropriate.

Prepares, treats, dilutes, and identifies blood specimens for all requested hematological analysis (ex. CBC, ESR, Reticulocyte Counts, Coagulation, WBC differential, RBC Counts and morphology, etc...).

Performs complex cellular analysis and testing on body fluids (ex. CSF, Joint fluids, semen, etc...).

Uses clinical knowledge of normal and abnormal physical conditions to appropriately and adequately identify those patients requiring more testing and analysis by more specialized personnel (ex. Hematologists, Pathologists, etc...).

Incumbent must be able to test non-ideal specimens by pretreatments to remove interferences when encountered, e.g., lipemia.

Maintains equipment in working condition. Performs preventative maintenance as scheduled and needed. Maintains records of preventative maintenance and corrective actions. Keeping equipment in working condition may include minor repairs and will require extensive knowledge of the problem and working with technical experts from equipment vendors.

□ **Blood Bank:**

Performs all required Blood Bank procedures according to the standards of the AABB including but not limited to ABO, Rh typing, antibody screening, antibody identification, antibody titer, cross-matching, direct coombs, and the transfusion reaction investigation.

Recommends to physicians blood components for specific situations (ex. pheresed platelets for increasing platelet most effectively and safely).

Co-ordinates with the American Red Cross for the acquisition of needed products and maintains records of acquired blood products to ensure safety and tracing as needed.

Selects correct types of blood products depending on component needed, adhering to protocol and severity of the situation.

Monitors all critical temperature-controlled refrigerators and freezers according to AABB and CAP standards.

Maintains records of Quality Control testing to assure adequate and appropriate function of reagents.

Maintains equipment in working condition. Performs preventative maintenance as scheduled and needed. Maintains records of preventative maintenance and corrective actions. Keeping equipment in working condition may include minor repairs and will require extensive knowledge of the problem and working with technical experts from equipment vendors.

Capable of reacting immediately and appropriately in all emergency transfusion requirements.

□ **Urinalysis:**

Performs automated or manual “dipstick” testing of urine and performs microscopic exams of urine sediment.

Performs crystal analysis on urine specimens.

Maintains equipment in working condition. Performs preventative maintenance as scheduled and needed. Maintains records of preventative maintenance and corrective actions. Keeping equipment in working condition may include minor repairs and will require extensive knowledge of the problem and working with technical experts from equipment vendors.

□ **Special Duties:**

In addition to the above duties, incumbent must possess a working knowledge of statistics, quality control performance, calculations, and interpretation of quality control, e.g., standard deviation, coefficient of variation, precision, and accuracy.

Writing and maintaining at least one procedure manual.

Teach students or newly hired technologists in all areas of the laboratory as needed.

Attain adequate skills to be able to work alone on weekends, holiday, 2nd and 3rd shifts when needed.

Subject to on-call status as necessary and must be able to return to the laboratory within 15 minutes when called by a provider for laboratory work on patients at all hours of the day.

Perform other duties as assigned by supervisor (ex. workload reports, changing shifts occasionally to accommodate workload requirements, etc...).

Education/Experience:

Position requires a BA/BS with approved Medical Technology training and certification of MT (ASCP) or equivalent accrediting body.

Requires a minimum of 2 years to become technically proficient.

Job Knowledge:

- 1) Must possess professional and clinical knowledge of medical technology principles and procedures relative to the following disciplines: Chemistry, Microbiology, Hematology, Blood Bank, Serology, Immunology, Parasitology, and Urinalysis.
- 2) Knowledge and skill sufficient to organize and conduct a wide variety of highly complex specialized laboratory tests relative to the following disciplines: Chemistry, Microbiology, Hematology, Blood Bank, Serology, Immunology, Parasitology, and Urinalysis.
- 3) Knowledge of computer panels and how computers use and store data, electronic malfunctions and instrument capabilities as well as specific methodologies for the many tests in each of the laboratory disciplines.
- 4) Knowledge of preventive and corrective maintenance procedures for laboratory instrumentation.
- 5) Knowledge and understanding of Quality Control policies and procedures to be able to determine conformance to protocol.
- 6) Knowledge of regulatory agencies, practices, policies, and procedures and must possess the ability to develop, assess, and maintain documentation required by certifying/accrediting agencies.
- 7) Knowledge and skill sufficient to provide clinical assistance and training to extern students relative to the basic principles and practices in medical technology.
- 8) Knowledge of Privacy Act regulations governing the confidential safeguarding and dissemination of medical information/records.

Complexity of Duties

Incumbent provides technical expertise to the Supervisory Medical Technologist in any of the intralaboratory disciplines; chemistry, microbiology, hematology, immunology,

serology, and blood banking. Keeps abreast of new developments by research or attending continuing education in assigned discipline area and passes this information on to other technologists and technicians in the Department. Incumbent will develop, assess, and maintain relevant documentation in accordance with all regulatory agencies and organizations. Incumbent will prepare special reports and perform special research as directed by the Supervisory Medical Technologist. Incumbent will be assigned an area of the laboratory for which they have the responsibility to assess, prepare or update procedure manuals, perform and review quality control and preventive maintenance procedures for this area on an ongoing and monthly basis. Incumbent must be sufficiently cross-trained to be able to perform in each of the areas of the clinical laboratory as delineated above.

Required to independently assess, interpret, and evaluate all laboratory testing to determine if the desired results have been achieved. The assessment, interpretation, and evaluation will be accomplished through application of physiological science knowledge to in-vivo chemical, biological, and immunochemical methods and procedures in combination with the application of quality control use and interpretation.

Supervision Received:

The incumbent is under the supervision of the Supervisory Medical Technologist for clinically associated duties, and all other associated duties and responsibilities. The Supervisory Medical Technologist approves the incumbent's schedule. The incumbent will be assigned to one of three shifts (dayshift, second shift, and night shift) dependent on the needs of the laboratory. The incumbent will be required to work weekend shifts as needed, with time off through the week in equal proportions. The incumbent performs all assigned duties in accordance with defined regulations, policies, and procedures in order to accomplish each identified unit objective, priority, and deadline. Performs independently in carrying out each task and assignments that requires individual initiative and judgment when interpreting a procedure relative to each established policy and objective. Consults with the supervisor only on matters that may be in conflict with established regulations, policies, and procedures. The incumbent may work alone on a regular basis and must be able to work with no supervision.

Responsibility for Accuracy:

The incumbent is responsible for all test results bearing his/her signature (may be electronic). The effective diagnosis and treatment of patients is dependent upon the accuracy and reliability of the incumbent's laboratory testing procedures and resulting determinations. An inaccurate result reported by the technologist has the potential to create a patient fatality (ex. mistyped ABO blood transfusion, incorrect electrolyte values, etc...).

Contact with Others:

Various laboratory testing procedures may require direct personal contact with patients requiring tests. Additionally, the incumbent has direct communicative contact with Federal, State, Tribal, and county medical personnel, as well as nurses, midlevels, physicians, support personnel, and administrative personnel within the Cherokee Indian Hospital.

Contact with repair personnel and technicians from laboratory equipment vendors is required.

Contact with the patient is required to accomplish the laboratory testing procedure requested by the patient's physician and may include performing phlebotomy or capillary puncture or include instructions on how to collect other specimens.

Contact with the aforementioned personnel is needed to disseminate information relative to the policies and objectives of the unit. The incumbent must be able to communicate patient results effectively and to aide other caregivers in the appropriateness of certain testing, answer questions relating to medical technology literature, etc.

Confidential Data:

Must maintain complete confidentiality of all administrative, medical, and personnel records, and all other pertinent information that comes to his/her attention or knowledge. Must adhere to all tribal confidentiality policies and procedures. Violations of such confidentiality shall be cause for disciplinary action.

Mental/Visual/Physical Effort:

Mental effort is required due to the multi-tasking the incumbent will be required to do. The incumbent will be required to have more than one task running in the laboratory at a time, which requires good prioritization and organizational skills. The incumbent will be working with and around sick or hurt patients, which requires mental distancing in emergency laboratory procedures which have to take precedence over his/her feelings. The incumbent is required to perform phlebotomy and capillary procedures which cause pain and are not always successful. The incumbent must be able to succeed at acquiring the needed specimens while maintaining professional and comforting composure with the patient in spite of failed attempts.

Incumbent is required to use a microscope to discriminate between cell types, bacteria types, and to perform crystal identification. Microscope use requires good/corrected eyesight. Close range visual acuity is also necessary in microbiology plate reading, immunological agglutination procedures, and in Blood Bank typing. A colorblind test is required of the incumbent. Incumbents who are colorblind are not allowed to perform certain color differentiating tests (ex. ictotest for bilirubin).

Incumbent will be required to stand and walk for several hours at a time in all areas of the laboratory and the hospital. Certain procedures in the laboratory require manual dexterity, visual acuity, and physical effort to complete. Incumbent must occasionally assist patients in the collection of specimens that may or may not require physical effort. Incumbent will have to carry laboratory supplies, papers, manuals, and small instruments.

Environment:

The laboratory environment carries risks and discomforts that require special safety precautions. In addition, the laboratory environment is a high-risk area for HIV and Hepatitis exposure. Work performance also involves risks of exposure to contagious diseases, carcinogenic materials, and caustic reagents. Full and appropriate safety precautions must be worn and used (ex. lab coats, gloves, eyewear, etc...) when performing laboratory work. Microbiology procedures must be performed under the Class II safety hood. The incumbent must practice correct and proper hand-washing protocols to maintain health. The incumbent must participate in the Employee Health Program to aide in preventing work related injuries.

The laboratory environment has a higher than normal amount of noise pollution due to the number of analyzers, centrifuges, refrigerators, and freezers that are running continuously.

Customer Service:

Consistently demonstrates superior customer service to patients/customers by displaying Spotlight on Success I CARE behaviors and skills. Ensure excellent customer service is provided to all patients/customers by seeking out opportunities to be of service.