



Job Description

IDENTIFICATION

<i>Position Number</i>	<i>Position Title</i>	
U-03-119, CA-1415	Combined Laboratory and X-ray Technologist	
<i>Department</i>	<i>Position Reports To</i>	<i>Site</i>
Diagnostic Imaging/Laboratory	Manager Diagnostic Services	Hay River Regional Health Center

PURPOSE OF THE POSITION

To provide quality radiographic and laboratory services to the clients of the HRHSSA, upon referral of the medical staff, in accordance with the established policies and procedures of the Diagnostic Imaging and Laboratory Departments at the Hay River Health & Social Services Authority with adherence to the Code of Ethics and the Standards of Practice of the ACCLXT (Alberta College of Combined Laboratory and X-ray Technologists) and/or SACLXT (Saskatchewan Association of Laboratory and X-ray Technologists). The incumbent produces good quality images in a safe and efficient manner; the incumbent is responsible for the procurement and accurate, timely analysis of Laboratory samples. These tasks will aid the local practitioners and other associated care providers in the diagnosis and management of disease for all client's conditions to ensure optimal care.

The Combined Technologist performs the responsibilities necessary for the daily operation of a medical laboratory (including but not limited to specimen collection and receiving, electrocardiography, hematology, chemistry, and transfusion medicine). The incumbent works within the context of the vision and principles of Hay River Health & Social Services Authority, in accordance with the ACCLXT/SACLXT professional guidelines and hospital policy and procedures. The incumbent works in accordance with recognized international laboratory practices as well as the philosophy and objectives of the HRHSSA.

In Diagnostic Imaging, the incumbent must produce quality images in a safe and efficient manner, for the referring physician to view and the Radiologist to report.

The incumbent provides professional radiography services to the clients, upon referral from the medical staff, in accordance with the established policies and procedures of the Diagnostic Imaging Department; with adherence to the ACCLXT/SACLXT Code of Ethics and the Standards of Practice; and within the context of the Vision and Mission Statement of the Hay River Health and Social Services Authority (HRHSSA).

SCOPE

This position is located at the Hay River Health & Social Services Authority (HRHSSA) Regional Health Center. The Hay River Health and Social Services Authority includes: the Hay River Regional Health Center (HRRHC), the Gensen Building, Woodland Manor, and Supportive Living Services. The HRHSSA is an accredited, integrated health authority that provides the following services: 19 acute inpatient beds

(14 Community Support Beds, 1 Family Suite (Palliative), 2 Secure Rooms, 2 Observation beds), Emergency and Ambulatory Care, including dialysis and endoscopy; Midwifery Care and Delivery; 25 Long Term Care beds; Supportive Living Campus, a Territorial campus providing 11 permanent residences; Diagnostic Services (Diagnostic Imaging, Ultrasound, Mammography); Laboratory; Medical and Specialty Clinics including Diabetes programming; Social Programs (Community Counselling, Healthy Families and Child and Family Services) Community Health and Home Care, Rehabilitation which include Physiotherapy, Occupational Therapy and Speech Language Pathology; and a full range of Support Services.

Reporting directly to the Manager of Diagnostic Services, The Combined Laboratory/X-ray Technologist reports to the Diagnostic Imaging department or the Laboratory department for duty, according to the department schedules. The HRHSSA Diagnostic Services provides health care services to adults and children on an inpatient/outpatient and referred-in basis in order to restore health with dignity. The incumbent works Monday to Friday as per schedule; the incumbent must participate in the on-call rotation. The incumbent may be in charge of the department during the Managers absence.

The incumbent provides quality diagnostic results by utilizing a variety of imaging and laboratory equipment. Due to the remoteness of the HRHSSA from major referral centers, the incumbent must have in-depth knowledge of human anatomy and radiographic techniques and practices; the incumbent must be creative with solutions required to produce quality images. In the absence of an on-site Radiologist or Pathologist, the incumbent must have a thorough understanding of the disciplines and be able to complete basic equipment maintenance and repair.

In the Laboratory, over 75 000 tests are processed annually with 40 to 50 client samples seen daily. The Technologist uses initiative, technical and critical thinking skills to perform the responsibilities necessary to the efficient daily operation of the Laboratory. This position performs routine laboratory analysis in chemistry, hematology, specimen collection and handling activities as well as transfusion medicine – within their scope of practice. While performing analysis, the incumbent must be able to recognize normal and atypical findings and initiate the appropriate actions. Accurate and timely testing allows the practitioner to accurately diagnose medical conditions and arrange for proper care and treatment which ultimately impacts on a client's morbidity. This testing also assists public health teams address regional or territorial health issues in an effective manner. The incumbent rotates among duties in Specimen Collection/Receiving, Electrocardiography, Chemistry, Hematology, Immunohematology, Urinalysis and X-ray in accordance to the Collective Agreement and the HRHSSA policies and procedures.

The incumbent consults and confers with the physicians on call, other hospital staff and supervisors regarding proper client procedures and protocols to ensure consistent and quality diagnostic services to all clients and their families.

Diagnostic services directly impacts on the health and well-being of all clients in the catchment area. The staffs provide quality work with results completed in a safe, efficient and timely manner, while keeping in mind the limitations of the client. The scope of radiology services is general radiography, portable work on the ward and in the Operating Room, and occasionally - Intravenous Pyelograms (IVP). The operation of all equipment is carried out independently. Many of the exams carried out may cause significant levels of discomfort to the client. The incumbent must maintain a high degree of professionalism in order to ease the client's anxiety. The Combined Technologist interprets client and quality control results to ensure the multidisciplinary team can make a precise assessment and diagnosis for optimal client care and treatment. The absence of an onsite Pathologist require the incumbent to act as an extensive resource for information, training and problem-solving for physicians, health centers, and the multidisciplinary team. The incumbent must have a comprehensive understanding in the Laboratory Medicine disciplines as well as instrument maintenance and repair. The remote location precludes immediate service onsite; our current response time with the existing agreements for onsite service is 72hrs. The incumbent must have advanced skills in instrument maintenance, diagnosis and repair to prevent downtime.

Excellent effective and confidential written, verbal and electronic communication by the Combined Technologist with co-workers, Senior Management Team, Physicians, Pathologists/Laboratory specialists, clients and other members of the interdisciplinary health team is necessary to deliver excellent client care. The incumbent collaborates with the Lab team to evaluate daily workload and events, and makes decisions for efficient operation of the Laboratory. The Combined Technologist

assists in program education initiatives and administrative duties to enhance the quality of client care and diagnostic services provided by other members of the interdisciplinary team and Laboratory staff. In addition to providing Laboratory services to Regional Health Centre, the Laboratory also provides services to:

- Fort Resolution Nursing Station
- Fort Providence Nursing Station/Anne Bughins Wellness Centre
- Hay River Medical Clinic
- Third Party Billing companies (CannAmm/DriverChek/Kyndrex/Insurance Companies)
- Public Health/Home Care
- Other NWT Labs as needed

In emergency situations the production of timely and accurate images is crucial. Without this vital component, the practitioner would be unable to provide comprehensive diagnosis and treatment of client. Decisions to transfer clients out of the area for treatment are made on the basis of testing conducted onsite. All images are forwarded to an external radiology group for review and reporting by the Radiologist. Invasive radiographic procedures that require a Radiologist or Physician to be present are scheduled and the Technologist assists the practitioner during these examinations.

The incumbent may be exposed to emotionally upsetting situations and is expected to remain calm, controlled and professional, regardless of the situation, and demonstrate care and compassion to the client/patient and other members of the health care team.

Professional behavior and sound judgment in performance of duties is paramount to ensure effective diagnosis for prompt treatment and quality client care.

RESPONSIBILITIES

- 1. The incumbent produces quality radiographic images, in accordance with Safety Code 35 of the Radiation Protection Bureau of Health Canada, the Code of Ethics and Standards of Practice of the ACCLXT/SACLXT, to ensure accurate diagnosis and treatment for the clients and to provide radiation safety to all clients and staff.**

Main Activities:

- Maintains a safe, clean and orderly environment; provides required level of disinfection between clients.
- Assures adequate supplies are assembled
- Utilizes protection methods, devices and the most cautious techniques to obtain diagnostic images. By using in-depth knowledge base of human anatomy and physiology and an in-depth knowledge base of diagnostic imaging procedures, the incumbent makes independent creative decisions on how to best attain quality images on clients of a variety of sizes with various pathological ailments.
- Uses the A.L.A.R.A Principle (As Low As Reasonably Achieved) radiation exposure.
- Respects the client's individuality as a person and respects their cultural differences.
- Collects and documents statistics as requested.
- Ensure that the client is a candidate for the examination, explain and educate the client and/or their family on the procedure to ensure consent is obtained.
- Ensure the client fully understands any risks associated with the procedure.
- Determines the possibility of pregnancy prior to doing the examination, notify the referring physician and documents such.
- Provides all required positions for the examinations ordered, in accordance with the Radiology Procedure Manual, with flexibility to accommodate the client's limitations.
- Review all images for quality and completeness prior to sending for Radiologist reporting.
- Advocate the dignity and respect of all clients
- Respect cultural diversity
- Uses initiative to provide special or added views necessary to aid in the diagnosis, without the

direction of a Radiologist on site.

- Ensures that the personal information of the client is only shared with their permission or as legally required.
- Ensures all consent forms for invasion tests are thoroughly explained and signed by the client and physician prior to the procedure.
- Establishes good communication with the client, showing respect and dignity while providing privacy.
- Notifies the physician/nursing staff immediately if a client's pathological or traumatic condition requires immediate medical attention or if continuing the procedure jeopardizes everyone's safety. Documents notifications appropriately.
- Maintains and troubleshoots hundreds of thousands of dollars' worth of imaging equipment and reports any malfunctions to the supervisor immediately; documents findings plus follow-up maintenance in the appropriate log book.
- Reports any known or possible incidents/risks to the Supervisor immediately, and completes the forms correctly.
- Consults with the referring physician or the doctor on-call regarding unexpected atypical findings and documents this.
- Ensures safe storage, handling and processing of all films and toxic chemicals.
- Performs daily, weekly, monthly and yearly quality control testing and documents such.
- Ensures all requisitions, hard copies and the Radiologist's reports meet all medico-legal requirements. Documents exceptions appropriately.
- Works a rotational standby schedule with equal sharing of statutory holiday coverage.
- Follows universal precautions for Isolation and Operating Room mobile cases.
- Assist clients to achieve their optimum level of health
- Advocate for the dignity and respect of all clients
- Promote autonomy of clients and help them to express their health needs and values to obtain appropriate information and services
- Apply and promote the principles of equity and fairness to assist client in receiving unbiased treatment and a share of health services and resources appropriate to their needs.
- Assess the client for physical needs and abilities
- Research, develop, revise and evaluate on an ongoing basis, educational resources necessary to support client.
- Demonstrate client and family centered care and quality principles in the provision of services to clients and families.
- Participates in committees, task forces, and research projects related to DI programs
- Evaluates films for technical and diagnostic quality to ensure an accurate diagnosis.
- For Special procedures, follows sterile technique, ensures equipment is functioning properly and prepares for adverse reactions.
- For an IVP, ensures all allergies are documented and the physician notified. If a diabetic, follows the "Metformin" policy. For adverse reactions, follows the emergency procedure and documents.
- Maintains CPR certification.
- Maintains Licensure in good standing and commits to Life Long Learning.
- Understands how to operate and troubleshoot the PACS system, and knows or is willing to learn the super user requirements.
- Ensures crash cart is in the room prior to commencement of IVP procedures.
- Must be able to move at least 25 kg (50lbs) without assistance.
- Must be able to operate equipment overhead for multiple procedures during the day.
- Must be able to complete x-ray workload units for full-time technologist (19 exams/day)
- Act in a manner consistent with their professional responsibilities and standard of practice.

2. Quality Control and Quality Assurance: Conforms to federal radiation safety regulations as set out in Safety Code 35 from the Radiation Protection Bureau Health Canada in order to maintain image quality and ensure a safe working environment for clients and health care professionals.

Main Activities:

- Assist in the daily monitoring and documenting of equipment functions. Troubleshooting within the scope of practice and Identified by Quality Control tests.
- Identify problems which cannot be corrected on site, consult with the Diagnostic Imaging Supervisor to arrange repair or obtain advice to correct the problem.
- Perform support staff duties as required to maintain consistent departmental records
- Act as a source of reliable and current radiology information to the staff and practitioners of HRHSSA
- Participate in the Accreditation process.
- Assists in the planning, revising of program structure with a focus on continuing quality improvement.

3. The incumbent works effectively as part of the Multi-disciplinary health care team.**Main Activities:**

- Maintains communication guidelines between the departments, other agencies and medical staff; plus good rapport with Supervisor, co-workers and all members of the Multi-disciplinary team.
- Participates on committees.
- Attends other departments' in-services.

- Organizes bookings, supplies and consultations with the local physicians during the Radiologist's visit.
- Provides clear and precise instructions while maintaining the respect and dignity of all clients.
- Helps to organize and promote Medical Radiation Week for staff, clients and visitors.
- Provides technical expertise, department's policies and procedures, client protocols and examination requirements to all medical and non-medical personnel of the HRHSSA and the outlying communities.
- Responds to call-backs in a professional and timely manner.
- Competently fulfills the responsibility/acting position during the supervisor's absence.
- Coach, train and support relief staff
- Provides coaching and leadership to peers, students and other members of the health care team to develop skill levels necessary to achieve the standard of care

4. The incumbent performs all clerical duties in Diagnostic Imaging and demonstrates and maintains excellent, effective and confidential written, verbal and electronic communication with clients, Laboratory staff, Senior Management Team, Physicians, Pathologists/Laboratory specialists, Radiologists and other members of the interdisciplinary health team.**Main Activities:**

- Maintains at all times professional attitude and mannerisms. Shows courtesy, respect and kindness at all times when interacting with clients, hospital staff and public to develop an excellent rapport. This includes the use of appropriate language and tone with an awareness of body language.
- Demonstrates effective and confidential verbal, written and electronic communication with Radiologists, Laboratory specialists (Hematologists, Clinical Chemists, etc), physicians, co-workers, other members of the interdisciplinary team and clients to ensure excellent client service and public relations.
- Communicates with sales and/or service representatives and instrument hotlines.

- Communicates with consulting Radiologists, Pathologists or other specialists when unusual situations arise, client related issues and /or when an abnormality needs attention.
 - Effective, courteous electronic communication via email and text message.
 - Effective and appropriate use of Departmental telephones is critical.
 - Cooperates with co-workers and members of the interdisciplinary team to resolve internal and external issues and to complete tasks in a manner that creates optimal client satisfaction.
 - Liaisons with physicians, other departments in the hospital, community physician offices and referral stations to maintain and improve the quality of Diagnostic Services.
 - Participates in interdisciplinary committees for problem solving, policy and procedure development and continuous quality improvement including but not limited to: Client Care Services; Infection Control; Occupational Health and Safety; Clinical Practice Advisory committee; Interdisciplinary rounds; as well as the Laboratory Advisory Committee and Diagnostic Imaging Consultation Committee to the Department of Health and Social Services.
 - Designs and implements requisitions and other report forms for distribution and statistics.
 - Maintains knowledge of the current Laboratory Information System (LIS), Radiology Information System (Medipatient), PACS and other HRHSSA integrated systems to enter necessary client data, monitor operation and investigate problems as required.
 - Serves as technical support for LIS and PACS based problems.
- Faxing of reports to external sources when results become available to ensure continuation of care is not interrupted and procedures booked in Edmonton are able to be completed
 - Operates computer hardware and software to ensure effective departmental operation.
 - Address all incoming calls to designated work area including inquiries from clients and outside departments/facilities
 - Keeps client information and filing system accurate and up-to-date.
 - Keeps teaching files up-to-date.
 - Schedules all appointments correctly and accordingly.
 - Re-directs reports to appropriate health centers, other agencies that cannot access the reports electronically and/or require a copy for scanning and linking in the EMR.
 - Prepares films or CD's of images for send out when the client requires treatment outside the NWT.
 - Knows and teaches the nursing staff, the routine for emergency reporting.
 - Maintains computerized radiology program and paper ledger for client records, results and reports for distribution and tracking.
 - Import previous images into PACS and correctly links them to the client chart for comparison review by radiologist.

5. Using Infection Control and Prevention precautions, the incumbent safely collects, processes and analyzes a variety of biological samples for Hematology, Chemistry, Transfusion Medicine and Microbiology using critical thinking skills in the interpretation of results to assure optimal client care and treatment.

Main Activities:

- Collects and processes biological specimens using universal precautions involving procedures including but not limited to venipuncture, micropuncture, urinalysis, and electrocardiography.
- Ensure the client identity corresponds with the requisition information and that the client and/or clients family fully understands the procedure.
- Processes client specimens with attention to appropriate universal precautions and packaging for transportation of diagnostic specimens and infectious substances as per TDG regulations.

- Travels to and from the local airport with specimens when required according to the Dangerous Goods Regulations transportation policies and procedures.
- Organize, prioritize and verify the accuracy of the client/sample information prior to processing
- Prepare samples for analysis
- Determine when samples require special handling and ensure that HRHSSA adheres to established National and International standards for the transportation of dangerous goods (TDG).
- Run blood gas and capillary/venous gas tests
- Perform peripheral blood collection for adult, pediatric and neonatal clients using a closed collection system (Vacutainer), needle with syringe, and/or microtainer collection techniques using routine practices and additional precautions as required.
- Ensures safety of client through identification procedures, infection control protocols and physical positioning and/or use of appendage
- Maintains a safe, clean and orderly environment; provides required level of disinfection between clients.

6. Examine and analyze a variety of biological samples using recognized international laboratory practices to ensure that medical and non-medical professionals have laboratory results required to diagnose, treat and manage disease.

Main Activities:

- Analyze samples using complex laboratory instrumentation and manual techniques,
- Review, verify and release client results through the Laboratory Information Systems (LIS).
- Ensure all lab results are accurately entered into the LIS to track client information.
- Aliquot and mixes chemicals with attention to WHMIS guidelines.
- Maintains knowledge and skills in technical departments including Hematology, Chemistry, Microbiology and Transfusion Medicine and follows established procedures for analyzing samples in all technical areas of the Laboratory.
- Resolves technical problems and assesses unusual test collection/results with critical thinking skills and takes appropriate action to resolve the problem.
- Recognizes unusual or abnormal findings or events and reports them to the appropriate resource(s) for action/solutions: Attending physician, consulting pathologist, quality risk manager, Manager of Diagnostic Services, CEO. Reviews incidents of unusual occurrence and files appropriate documentation for risk management.
- Evaluates and modifies new methodologies and equipment as appropriate to improve Laboratory services.
- Verifies all technical work to ensure proper testing, reporting and computer entry has been carried out. Verifies that copies of reports are printed or faxed to the appropriate Ward, Clinic, and Health Centre, Notifiable Disease Center or infection control as required. Verifies that offline reports (E.g. ECGs) are sent to specialist for review and final reports are appropriately distributed.
- Ensures designated providers are notified of critical or panic results in a timely manner and documents process.

7. Uses the skills, abilities and knowledge required to carry out the validation of new testing platforms prior to use on client samples. Carry out Lot to Lot QC validations prior to using QC in live laboratory testing environment to ensure analyzer accuracy.

Main Activities:

Validation and Lot to Lot comparison studies include, but are not limited to:

- Accuracy studies – 3 to 5 data points from an external Proficiency Testing Survey per analyte

- Precision study – this can be a Simple Study where 20 replicates of each level of control are performed in one run or a Complex Study where 5 replicates a day of each level of control are performed for 5 days to produce 25 results per analyte. The study required may be one or both of the above.
- Linearity study – Minimum 5 data points utilizing appropriate materials near the upper and lower limits of the manufacturer’s stated AMR performed in duplicate
- Correlation study – 40 data points per analyte (mix of abnormal and normal client population)
- Reference Interval study – 20 to 40 normal individuals – preferably 50% males and 50% females over a wide age range with no clinical history of chronic disease and no history of current prescription medicine use.
- Limit of Blank study – Generate 20 values on the same run using a sample devoid of analyte or use diluent
- Lower Limit of Detection study – Utilizing a sample that should fall within the manufacturer’s stated LOD, generate 20 values
- Specimen Stability study – Select 3 sample pools, consisting of 2 tubes each which represent – Low, Normal and High. Assay samples at 0hrs, retain one tube at room temperature the other is placed in the fridge. Assay room temp and fridge specimens again at specified intervals
- Predictive Value Differential – 100 well prepared smears, made in duplicate, ensure samples are run on new and reference analyzers. 50 normal and 50 abnormal smears required.

The incumbent needs to be able to compile the data and correctly enter it into the supplied Excel documents for submission and analysis.

8. Perform, record, interpret and monitor Quality Control (QC) on all instruments and equipment to ensure the precision and accuracy of results reported.

Main Activities:

- Follow approved standard operating procedures perform QC tests on all instruments prior to analyzing samples.
- Calibrate or assist in the calibration of laboratory equipment on a scheduled and as required basis.
- Continually review test results in accordance with approved standard operating procedures to evaluate for any potential analytical error.
- Decide whether to release, delay or repeat testing prior to the reporting of client results (reported results must be accurate) in accordance with approved standard operating procedures (SOPs)
- Investigate abnormal results/trends and initiate corrective actions
- Demonstrates proficiency in troubleshooting instrumentation and procedures for improved bench efficiency.
- Report QC issues to the Manager, Diagnostic Services with initial investigation results.
- Ensures the maintenance of laboratory equipment according to preventative maintenance schedule and established procedures to extend life expectancy.
- Arranges preventative maintenance inspections.
- Seeks help in a timely manner from co-workers and/or instrument hotlines to minimize downtime of equipment when troubleshooting. Informs the Manager, Diagnostic Services of estimated downtime of instrument.
- Telephone panic results to appropriate care center, nurse in charge or physician to ensure appropriate and timely care can be initiated, and ensures this action is documented.

9. Delegation in the absence of a Pathologist.

Main Activities:

- Technologists will assist in the interpretation of results to medical and non-medical personnel, impacting on client care and addressing Public Health Issues.
- Technologists will out-source other appropriate testing when required by practitioners

10. Collaborates with Laboratory team and follows safety, fire, and emergency policies, programs and procedures while performing duties with care and consideration for the safety of others.**Main Activities:**

- Accepts responsibility for the safety of clients and others while they are in the laboratory.
- Performs duties with care in order to reduce the risk of injury to self, co-workers and clients.
- Follows safety procedures at all times and is familiar with fire and emergency procedures and required equipment (E.g. Fire extinguishers).
- Ensures safety procedures are followed and that the Lab team is familiar with fire and emergency procedures as outlined in safety and procedure manuals.
- Performs general housekeeping duties to ensure cleanliness and compliance with infection control protocols.
- Works with Fire, Health and Safety committee to ensure that safety concerns are addressed.
- Incumbent ensures that she/he is current in and follows WHMIS, TDG and Handwashing regulations and training.
- Understands and follows Infection Prevention and Control protocols for the complete protection of themselves and others.
- Knows and follows procedure for filing incident, unusual occurrence, accident, WSCC and Blood and Body Fluid exposure reports.

11. Maintains a comprehensive Maintenance program for all automated analyzers, point of care machines and manual procedures in compliance with territorial, national and international standards to ensure the precision and accuracy of reported results thereby ensuring the appropriate diagnosis and treatment of clients.**Main Activities:**

- Performs maintenance on approximately \$300K worth of complex laboratory equipment in order to minimize downtime and maintain productivity. This will extend the life expectancy of the instruments thus avoiding costly repair and/or early replacement.
- Performs checks and monitors quality control data on automated instruments and for manual procedures as required to ensure accurate reporting of results.
- Perform and document routine preventative maintenance on a scheduled basis
- Due to the remoteness of the community, the incumbent troubleshoots and is required to perform complex repairs on instrumentation, either unassisted or in telephone consultation with instrument repair specialists as required.
- Notify Manager of repairs that are outside the scope of the incumbents training or require further intervention.
- Effectively documents quality control and corrective actions taken by the incumbent for out of control values within the LIS.
- Investigates abnormal Quality Control results and determines in collaboration with the Lab team whether to release or delay the reporting of client results pending corrective action.
- Appropriately informs and consults with DSM on high-risk decisions involving quality control problems including any trends or shifts in quality control.
- Punctually and accurately downloads and completes and submits month end external quality control results after collaborative review of results by another technologist prior to deadline for faxing or electronic submission.
- Ensures there is an adequate supply of quality control material and that all controls, reagents,

- equipment and supplies are suitable for use.
- Reviews and files calibration documentation for all tests as required.
- Files quality control reports appropriately and in a timely manner.
- Reviews and maintains quality control and maintenance programs for all internal and external point of care testing including but not limited to glucometers, manual urinalysis, urine pregnancy tests and occult blood according to federal and territorial legislation and regulations.
- Maintains and troubleshoots point of care testing throughout the organization as required.
- Evaluates all new point of care testing brought into the organization prior to usage to ensure precise and accurate testing for immediate clinical care.

12. As part of the laboratory team – provide exceptional customer service to all laboratory clients.

Main Activities:

- Assists clients to achieve their optimum level of health
- Advocate for the dignity and respect of all clients
- Promote autonomy of clients and help them to express their health needs and values to obtain appropriate information and services.
- Demonstrate client and family centered care and quality principles in the provision of services to clients and families
- Respect cultural diversity
- Ensures the personal information of the client is only shared with their permission or as legally required.
- Establishes good communication with the client showing respect and dignity while providing privacy.
- Maintain a professional appearance and demeanor at all times when engaging with laboratory clients, ordering practitioners, nursing staff and hospital administration.
- Comply with the organizational dress code policy
- Provide client instructions and advice within the scope of the role of a Combined Laboratory and X-ray Technologist as outlined in the Practice Guidelines of the ACCLXT or SACLXT.
- Ensure that all interactions with colleagues and clients are in accordance with the HRHSSA Harassment Free and Respectful Workplace policy. Participates in mandatory Cultural Awareness, Anti-Racism, Customer Service, etc. courses
- Responds to callbacks in a professional and timely manner.
- Providing a culture that will ensure clients have a voice and participate in their own personal care.
- Empowering clients through improving client satisfaction, enhancing the quality of care and ultimately the quality of life for our clients.
- Focusing on the experience of the client from their perspective and listening to their needs.
- Fostering collaboration between the client and organization by working together to achieve our goals.

13. Plans and organizes his/her own work and resources in collaboration with the Lab team and the Diagnostic Services Manager and in accordance to the Collective agreement and the HRHSSA policies and procedures.

Main Activities:

- Participates in Laboratory staff meetings.
- Builds team environment by communicating, supporting, cooperating and contributing in a positive manner to co-workers within the Lab team and the multidisciplinary environment of HRHSSA.

- Follows a rotating staff schedule according to the allowed budget, collective agreement, and hospital policy to provide 24-hour coverage with shift work and on call. Takes part in the routine on call rotation and regular shift rotation.
- Provides support and task relief as required by co-workers.
- Reviews job description biannually or as needed and provides input on changes needed.
- Follows appropriate policy and procedures including technical, safety, confidentiality and personnel policies.
- Economizes usage of Laboratory and organizational resources.
- Supervises and assists new staff and laboratory students when assigned.
- In collaboration with the Lab team, the incumbent evaluates daily workload and events and makes decisions to ensure the efficient operation of the laboratory.

14. Performs administrative duties including: Reviewing current procedures, accreditation preparation, preparing statistical reports, participating in interdisciplinary committees and ordering supplies from onsite stores.

Main Activities:

- Reviews all laboratory policies, procedures and manuals, and participates in the revision process.
- Assures adequate supplies are assembled.
- Prepares Laboratory to meet Accreditation Canada Laboratory Standards and Guidelines to achieve Laboratory Accreditation.
- Checks off and otherwise tracks specimens sent to referral laboratories for testing.
- Participates on interdisciplinary committees for problem solving, policy and procedure development and continuous quality improvement including but not limited to: Client Care Services; Infection Control; Fire, Health and Safety; Interdisciplinary rounds and Labour Management.
- Assists in tabulating month end statistics on laboratory testing as required by the Diagnostic Services Manager.
- Orders, reconciles and maintains supply inventory from stores department as needed and alerts Diagnostic Services Manager to low levels of external vendor supplies in a timely and written manner.
- Inventories blood supply and orders appropriate blood and blood products from Canadian Blood Services.
- Maintains and regularly updates computer databases (LIS and Blood Transfusion database).
- Uses responsible practices which contribute to cost effective use of health care resources.
- Verifies referral testing invoices in a timely manner as required by the Diagnostic Services Manager.
- Ensures collection of payment/ or lieu of from clients as required.
- Completes payroll callback/overtime sheets for submission to Diagnostic Services Manager for approval.
 - Faxing of reports to external sources when results become available through verified fax numbers within the LIS
 - Address all incoming calls to designated work area including inquiries from clients and outside departments/facilities

15. Act as a resource for Laboratory Medicine to ensure established procedures and policies are followed, and to enhance the awareness of the profession

Main Activities:

- Provide orientations to new laboratory staff on laboratory equipment, policies and procedures and HRHSSA workplace.
- Provide orientations to non-Laboratory and non-medical personnel in the proper collection and transport of biological samples. This includes, but is not limited to: venipuncture techniques, slide preparation, etc.
- Provide Point of Care testing and instrument maintenance
- Represent the Laboratory on a variety of hospital committees related to Laboratory services when required

16. Assists in planning education initiatives and training other members of the interdisciplinary team and Laboratory staff in programs to enhance the quality of client care and diagnostic services.**Main Activities:**

- Participates in continuing education and training to maintain current applicable knowledge and competency in hematology, chemistry, transfusion medicine, microbiology and quality assurance.
- Assists in planning and providing in-services, training and resources to other health care personnel, as requested by DSM or SLT. These include but are not limited to: glucometers, electrocardiography and venipuncture/micro puncture.
- Participates in training of new staff and students.
- As required, teaches new instrumentation, procedures and maintenance to staff.

POSITION ROLE IN CLIENT & STAFF SAFETY:

The HRHSSA is committed to creating a culture of safety throughout the organization. A culture of safety is necessary to provide optimal care to our clients, and a healthy workplace for staff. An organization with a culture of safety is characterized by several elements:

- Client-centered care;
- Healthy workplace;
- Open communication; and a
- Blame-free and accountable environment.

All staff throughout the organization shares the responsibility for client and staff safety by:

- Demonstrating a commitment to safety;
- Complying with safety policies, procedures and best practices;
- Identifying and reporting safety issues; and
- Participating in safety initiatives.

Commitment to Client Centered Care

Recognizing that our clients are the experts for their own lives, the Hay River Health & Social Services Authority (HRHSSA) is committed to support our clients as leaders to accomplish the goals that they have set out for us in their personal care. The (HRHSSA) will endeavor to provide client centered care through the following:

- Involving clients in their care by reducing barriers that may inhibit our ability to help them.
- Providing a culture that will ensure clients have a voice and participate in their own personal care.

- Empowering clients through improving client satisfaction, enhancing the quality of care and ultimately the quality of life for our clients.
- Focusing on the experience of the client from their perspective and listening to their needs.
- Fostering collaboration between the client and organization by working together to achieve our goals.
- Providing continuous dialogue with the clients to ensure that each and every client is seen as a unique individual.
- Ensuring staff are provided with the training and tools required to complete the best job possible.

Criminal Record Check

Employment with the Hay River Health & Social Services Authority is contingent on providing a satisfactory criminal record check including the vulnerable sector check to the Human Resources Office prior to the official start date of a position.

KNOWLEDGE, SKILLS AND ABILITIES

This level of knowledge and competency in laboratory and radiation technology is acquired by graduating an accredited Combined Laboratory and X-ray Technology Program.

Applicants must have achieved a certification from a recognized Canadian Combined Laboratory and X-ray Program. A minimum of 2 years postgraduate experience is preferred; new graduates waiting to write their certification examination will be considered however; registration must be achieved prior to beginning unsupervised employment. Registration/Licensure in good standing must be maintained with a recognized Canadian body throughout the period of employment with HRHSSA Diagnostic Services. Equivalencies will not be considered. Current licensing bodies are the ACCLXT and SACLXT.

- A knowledge of accepted radiology procedures as outlined in the manual and the Standards of Practice including positioning, radiation safety and medical terminology. The ability to safely and efficiently operate General Radiology and Portable units is required. The incumbent must be able to produce quality radiographs for the purpose of interpretation by an off-site Radiologist for diagnosis to aid in the client's treatment.
- The incumbent requires a sound knowledge of: anatomy, positioning, physiology, pathology, radiobiology and protection, radiation physics, film critique, the ACCLXT/SACLXT Standards of Practice and the ability to use various imaging modalities. The ability to perform Diagnostic Imaging quality control tests for troubleshooting of all equipment is an asset.
- A minimum of one year experience in Hematology, Chemistry is preferred. Knowledge and experience in Electrocardiography also preferred.
- Knowledge of Medical Laboratory Technology with a focus on principles and standards of practice including specimen collection and handling, medical terminology, Chemistry, Hematology, Urinalysis, Point of Care Testing and manual laboratory testing methods, including microscopic cellular differential counts and identification.
- Ability to operate, understand and maintain complex laboratory instrumentation is required in order to provide direct hands on laboratory testing, provide directions and leadership to fellow hospital staff, and in order to analyze and interpret results to aid medical and non-medical professionals in the diagnosis, treatment and management of disease.
- Demonstrate excellent computer knowledge and skills in word processing, database, spreadsheet and Laboratory Information System programs with the knowledge and ability to input and retrieve information from the Laboratory Information System (LIS) and Radiology Information System (RIS).
- Knowledge of the importance of client and health care information confidentiality and must comply with all legislation and procedures directing the handling of confidential client and organizational information.

- Demonstrates current technical skills and knowledge of current methodologies and/or instrumentation within the field by participating in ongoing continuing education.
- Demonstrates good communication and interpersonal skills and presents a pleasant professional manner at all times.
- Recognizes and responds effectively and appropriately to an emergency.
- Strong team player who demonstrates support for co-workers while able to perform duties independently and professionally.
- Flexibility to meet operational requirements including hours of work and location. This may include but is not limited to: coverage for absent staff, adapt to equipment breakdown, middle of the night callbacks with the ability to report for work the next morning for a full day or back-filling the supervisor's position if they are absent.
- Demonstrates good organizational and time management skills including the ability to multitask.
- Demonstrates professional judgment with objectivity and fairness.
- Prioritizes and responds effectively to changing workload demands.
- Shows initiative in identifying key issues and takes a logical, responsible approach to problem solving. Demonstrates critical thinking skills.
- Ability to speak and listen effectively to staff, clients, Senior Management, physicians and specialists. Able to write clearly and concisely in notes, email and reports to the previously stated audience to resolve issues.
- Willingness and ability to be in an on-call rotation.
- Able to pass a color-blindness test with no impediment.
- Have fine motor skills to manipulate small samples and repair delicate instruments.
- Knowledge of trans-cultural environment sensitivity to others situations/feelings.
- Knowledge of education principles related to adult learners in order to develop and deliver subject specific training and development
- The incumbent must have a sound knowledge and understanding of pathologies that may affect internal structures
- The incumbent must be able to use clinical information provided by the referring practitioner to determine specific areas to be imaged based on client symptoms
- The incumbent must be able to perform QC measures on all DI equipment
- The CLXT must be able to deal with the pressure to produce the images required for a study thoroughly and optimally within a set length of time. This can be hampered by client physical size and age, lack of adequate client preparation, clients arriving late for appointments and some clients with limited English skills.
- The incumbent must have knowledge of radiation hazards and constantly practice radiation safety precautions, as outlined in Safety Code 35.
- The CLXT must be able to work independently and must use good judgment in making appropriate and quick decisions in a professional manner.
- The incumbent must be aware of the importance of confidentiality and follow the established policy of the HRHSSA.
- Knowledge of PACS and how it integrates with internal RIS to troubleshoot issues.
- Continuing education credits are required to maintain standards and stay current in new technologies and techniques in this dynamically changing professional environment.
- The incumbent must practice safety precautions for lifting and moving heavy clients and equipment.
- The incumbent must have the ability to control personal emotions or bias to whatever the situation might be; show confidence, common sense and analytical thinking as well as motivation.

This discipline, in a northern workplace, requires the incumbent to have an awareness and sensitivity to the cross-cultural needs of the clients. Also, a Diagnostic Imaging department with no Radiologist on-site and a Laboratory with no Pathologist on-site, places great demands on the ability of the individual to work independently and provide expertise beyond the normal scope of the discipline. The CLXT should be able to recognize severe atypical findings and initiate the appropriate action (contact the referring physician immediately). Failure to do so, directly impacts upon the care, treatment and ultimate morbidity of the client.

Within HRHSSA, all frontline staff must be able to acquire within a reasonable time frame and remain current with the following mandatory certifications:

- Non-Violent Crisis Intervention,
- WHMIS,
- Aboriginal Cultural Awareness
- Infection Control - IPAC
- Internet and e-mail applications,
- Fire training,
- Certification in Health Provider CPR
- Privacy & Confidentiality
- Workplace Bullying
- Expected Behaviors
- Anti-Racism

WORKING CONDITIONS

Physical Demands

Working conditions identify the **unusual and unavoidable** externally imposed conditions under which the work must be performed and which create hardship for the incumbent.

Working with equipment above shoulder height generating enough force to move 25 kg (50lbs) on overhead tracking multiple times daily)	daily	3 – 6 hours	High
Lifting heavy equipment and clients	daily	3 - 6 hours	High
Must be able to move 25 kg (50lbs)			
Transferring and assisting clients to move into specific positions during assessment and test	daily	5 – 7 hours	Moderate
Standing for extended periods, bending and working in awkward positions while on hard floors	daily	3 – 6 hours	High
Standby & callbacks This involves the recall to work usually in the evenings and at night for an indeterminate time as deemed necessary by the practitioner on-call. This results in frequent sleep disruption and deprivation. The continuous call and weekend coverage requires that the incumbent have an exorbitant amount of stamina.	alternate weeks	24/day	Severe
Fine motor skills are used repetitively throughout the day in the when pipetting and operating smaller equipment and computers.	daily	5 – 7 hours	Moderate
Essential safety attire which may make the wearer warmer than is comfortable at times. Gloves are	daily	5 – 7 hours	Moderate

worn throughout most of the day which can cause skin irritation and risk of allergy. Extensive hand-washing and use of alcohol based hand cleaners can cause skin irritation.			
Much of the daily work requires the use of computer screens. This can lead to eyestrain, headache, and neck and shoulder strain depending on the work station used. There is a significant risk of carpal tunnel syndrome from daily use of computer keyboards, mouse, and hematology counters.	daily	5 – 7 hours	Moderate

Environmental Conditions

The Combined Technologist works in a hospital environment. The incumbent is at continuous high risk of exposure to infectious disease as a result of direct client contact, working with biological samples, human waste and sharps disposal.	daily	7 hours	High to Severe
There is the risk of injury from toxic/corrosive agents, disinfectants, medical equipment, and from intoxicated, mentally unstable or emotionally distraught clients while trying to obtain biological samples and/or images. These situations occur 5 to 10 times a week and the intensity of these exposures is high. This can lead to headaches and nausea.	daily	7 hours	Low to Mod
Exposure to ionizing radiation	daily	7 hours	High
Constant low level noise from equipment	daily	7 hours	Low
The incumbent is continually exposed to a noisy work environment including loud angry clients and white noise from equipment and telephones.			
Working in a crowded work space	daily	7 hours	Moderate
Temperature extremes as well as poorly controlled humidity can make the working environment challenging and uncomfortable.	daily	7 hours	Moderate

Sensory Demands

The CLXT is required to use the combined senses of touch, sight and hearing to ensure constant observation of the client's well-being during the examination	daily	7 hours	High
Fine motor skills are used repetitively throughout the day in the laboratory during pipetting, operating smaller equipment and computer use.	daily	5 hours	High

Throughout the entire 7.5 hour work day and all callbacks, the incumbent works in a dimly lit room X-ray room. This can lead to eye strain and headaches.	daily	7.5 hours	High
A continuous period of visual concentration is required. In the Laboratory, to check the integrity of the samples (i.e., Color, density, presence of contamination, volume) to determine if they are suitable for analysis. Visual concentration in X-ray is required to examine images for unusual findings. Six to seven hours of work is done daily using the computer screens leading to eyestrain.	daily	7 hours	High
The incumbent is exposed daily on an ongoing basis to unpleasant odors from biological cultures, urine, feces and chemical reagents and occasionally - clients. This can lead to headaches and/or nausea.	daily	7 hours	Moderate
Background noises from equipment running are constant. Decibel levels increase significantly when analyzers are operating or the centrifuges are operating.	daily	7 hours	Moderate
Intense audio concentration. The incumbent is required to listen for changes in a clients' condition that may indicate decline or newly developing/worsening condition. Imaging is carried out in a remote area of the facility that is not staffed after hours.	unpredictable	Indeterminate time per episode.	High to Severe

Mental Demands

Clients coming into the department are often very ill or have severe trauma. The incumbent may be exposed to death/dying or other emotionally disturbing experiences but must remain calm, controlled and professional to work effectively with other health care team members. The incumbent must also demonstrate compassion for the client and their family while providing quality care.	This may not happen daily but the possibility always exists daily	24 hours/day	Severe
The incumbent is required to share in an on-call rotation for X-ray and may also be required to cover Laboratory call alone or in addition to X-ray as staffing requires. When lack of second technologist; the incumbent is required to be on-call until relief is available – this can be 30 continuous days or more. On-call rotation requires that incumbent endure several sleep interruptions and work alone during nights, and on weekends. The incumbent is solely responsible for decisions within his/her scope that	alternate weeks (Nightly may be required if decreased staffing levels exist)	24 hours/day	

could affect the care, treatment and morbidity of a client. This has a significant impact on family and social life. Standby also contributes to a lack of sleep during the regular work week and over time may lead to burnout.			
On-call rotation requires that incumbent be away from family in high intensity situations.	alternate weeks (Nightly may be required if decreased staffing levels exist)	1 - 6 hours each time	Severe
There is often intense pressure to meet deadlines despite interruptions, staff shortages and extra demands on the technicians' time. This can lead to very high stress levels.	daily	7.5 hours	High
The incumbent deals with medical and non-medical personnel as well as demanding clients who have expectations beyond the control of the incumbent	5 - 20 times/day	5 - 30 mins.	Moderate to High each time
The incumbent deals with clients from a variety of cultural and ethnic backgrounds leading to difficulties in communication and/or cooperation.	1 - 3 times/day	10 - 30 mins.	Low to Moderate each time
The incumbent deals with clients who have not been adequately prepared/informed prior to arrival at the department, or clients who arrive without the correct paperwork. This can lead to delays in processing the client creating a backlog. This may result in the incumbent receiving verbal abuse from the clients.	1 - 3 times/day	30 minutes	Moderate to High each time
STAT orders require immediate testing/imaging and affect treatment decisions. This is usually a life-threatening situation.	1 - 2 times/week	30 - 60 mins.	Moderate to High each time
The incumbent processes large volumes of samples or clients that require quick, yet accurate examination turn-around-time. The incumbent must remain calm and composed and avoid making the clients feel rushed.	2 weeks/month	1 - 2 hrs. each	Moderate to High each time
The incumbent must have the patience to explain limitations when pressed for faster expected turnaround time than instrumentation will allow. Demands for testing that are outside the scope of the laboratory. Demands for results from unreliable samples.	5-10 times/day	10-30 minutes each time	Normal-High
Incumbent exposed to emotionally difficult situations (i.e., death, trauma, anxious, irate/violent, clients). The incumbent is expected to remain calm, controlled and professional regardless of the situation and to demonstrate a caring, compassionate attitude to the clients and other members of the health care team.	4-5 times/week	30-60 minutes each time	Moderate-Severe
Frontline staff can experience a volatile work environment; after hours the work is completed remotely from other staffs. Abusive clients, people under the influence of alcohol and/or drugs and RCMP escorts are	Daily	7.5	Severe

part of the day to day operation. There is concern for safety and well-being which may cause extreme levels of stress on the incumbent both during and after work hours.			
Contends with constant interruptions from phone calls and client walk-ins making it difficult to meet deadlines in a continuous, precise, efficient manner.	20-30 times/day	5-15 minute each time	Moderate-Severe
Deals with work overload because of the high rate of reduced staff and lack of casual replacement (locum staff or short staffed).	3 - 6 times/year	Up to 1 month	Moderate-Severe
Shipping delays for samples or supplies that are beyond the control of personnel. Personnel must deal with consequences of shipping failures. This leads to a significant increased stress levels. (Testing not available, recollection of clients)	2-3 times/ month	Minimum of 1 day per episode	Severe
Equipment breakdown results in sudden delays in imaging or results. In the Lab, the tests must be redirected individually within the LIS. In X-ray, alternate equipment must be used to try and obtain the images. This is in addition to trying to repair the equipment via telephone support.	2 times/ month	1-2 days per episode	Severe

The incumbent has a significant lack of control over the pace of work; emergency orders fall outside the appointment set up and have set acceptable turn-around-times. The incumbent also has a significant lack of control over workload due to staff shortages, practitioner ordering and frequent interruptions that may lead to mental fatigue or stress. There is pressure to procure samples quickly or to produce optimal images on the first attempt – this can be hampered by the client’s size, age, mental or physical condition and inability to be understood or understand; there is also pressure to produce results quickly for each practitioners request without regard to prior urgent requests.

The CLXT delivers these services (24 hours a day when on call too) without a Radiologist present to give the attending physician an immediate result. There is a great deal of pressure to help find an urgent diagnosis or to give an inquisitive client an answer. This goes beyond our realm of authority and expertise and causes significant levels of mental stress and fatigue.

CERTIFICATION

Position Number:

<hr/> <p>Employee Signature</p> <hr/> <p>Printed Name</p> <hr/> <p>Date</p> <p>I certify that I have read and understand the responsibilities assigned to this position.</p>	<hr/> <p>Supervisor Title</p> <hr/> <p>Supervisor Signature</p> <hr/> <p>Date</p> <p>I certify that this job description is an accurate description of the responsibilities assigned to the position.</p>
<hr/> <p><i>Dale Snow</i></p> <hr/> <p>Director/Chief Executive Officer Signature</p> <p>19 September 2022 Date</p> <p>I approve the delegation of the responsibilities outlined herein within the context of the attached organizational structure.</p>	

The above statements are intended to describe the general nature and level of work being performed by the incumbents of this job. They are not intended to be an exhaustive list of all responsibilities and activities required of this position@.

Reviewed August 2014
Revised/Reformatted May 2019
Revised October 2020
Revised August 2022