



IDENTIFICATION

| Department | Position Title | |
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| Northwest Territories Health and Social Services Authority | Medical Radiation Technologist | |
| Position Number | Community | Division/Region |
| 48-0927 | Yellowknife | Operations and Allied Health / Stanton Territorial Hospital |

PURPOSE OF THE POSITION

The Medical Radiation Technologist provides diagnostic X-ray and Computed Tomography services, as part of a rotation, to patients of the Diagnostic Imaging unit in accordance with established standards of radiological practice and the philosophy and objectives of the Northwest Territories Health and Social Services Authority to ensure quality images are produced which enable the Radiologist in the accurate and timely diagnosis of patients.

SCOPE

The Northwest Territories Health and Social Services Authority (NTHSSA) is the single provider of all health and social services in the Northwest Territories (NWT), with the exception of Hay River and Tłı̄chǫ regions, covering 1.2 million square kilometers and serving approximately 43,000 people, including First Nations, Inuit, Metis, and non-aboriginals. Health and social services includes the full range of primary, secondary and tertiary health services and social services including family services, protection services, care placements, mental health, addictions, and developmental activities, delivered by more than 1,400 health and social services staff.

While the Tłı̄chǫ Community Services Agency (TCSA) will operate under a separate board and Hay River Health and Social Services Agency (HRHSSA), in the interim, the NTHSSA will set clinical standards, procedures, guidelines and monitoring for the entire Northwest Territories. Service Agreements will be established with these boards to identify performance requirements and adherence to clinical standards, procedures, guidelines and policies as established by the NTHSSA.

Stanton Territorial Hospital (Stanton) is an accredited facility, located in Yellowknife, and is the referral center for approximately 43,000 NWT residents and 5,900 residents from the

Kitikmeot Region of Nunavut. Stanton provides health care services to adults and children on an inpatient/outpatient and outreach basis in order to restore health with dignity.

The Diagnostic Imaging unit handles approximately 33,000 diagnostic imaging examinations on an annual basis (approximately 100 exams per day). Practitioners refer patients to the Diagnostic Imaging unit. The production of diagnostic images (i.e. x-rays and ultrasound) is a critical function within the Stanton. Without the production of timely and accurate images the hospital would be unable to provide comprehensive diagnosis and treatment of patients.

Located in Yellowknife at Stanton, the Medical Radiation Technologist (MRT) reports directly to the Technical Supervisor, Diagnostic Imaging (DI), and is part of a small team of Radiological Technologists who provides radiological testing (x-ray) of patients. The incumbent works as part of the DI team that consists of the Technical Supervisor, Radiological Technologists, Mammography/Medical Radiation Technologist, Mammography Technologist, Sonographers and a Senior Technologist, Computed Tomography (CT).

Most of the exams CT, general radiography and fluoroscopy, will be conducted on an individual basis where the incumbent works directly with the patient and is responsible for all images produced. In addition, on a scheduled basis the incumbent will be required to provide hands-on support and patient care during invasive examinations conducted by a Radiologist (i.e. starting intravenous lines (IV), IV push, preparation for barium enemas, biopsies under CT guidance, etc.). During these invasive procedures the MRT will be responsible for all preparation of the procedure including explaining the procedure to the patient, acquiring the images and post procedure care as required. The MRT will assess the risks for allergies and co-morbidities such as diabetes before injecting contrast and be prepared for any potential allergic reactions to the contrast. The incumbent is required to palpate (identify external landmarks) on patients in order to focus in on targets for radiographic examination. This can be quite difficult as a result of the variety of sizes and shapes of patients. The incumbent has to be very aware of the feeling of security for the patient when doing invasive procedures. The Technologist may need to have another female or male present (i.e. male technologist inserting rectal tubes on female patients, etc.). Imaging timelines may be affected by patient being unprepared, tight schedule(s) and language issues.

The MRT is responsible for ensuring the continued operation of all radiographic equipment such as the direct radiography (DR) equipment, fluoroscopy unit, C-Arm and computed tomography (CT) unit. The incumbent provides x-ray services (fluoroscopy) in the Operating Room for surgeons using C-Arm. In some instances, the portable X-Ray machine must be utilized.

The nature of the work may expose the incumbent to death/dying or other emotionally upsetting experiences as well as numerous emotional behaviours. The incumbent is expected to remain calm, controlled and professional in all situations and demonstrate compassionate care to the patient.

Within the Diagnostic Imaging unit, the Medical Radiation Technologists and the Senior Technologist, CT will be required to provide on-call coverage during the evenings and on

rotating weekends for general x-ray and CT that follow established protocols, as well as do shift rotation through the Yellowknife Primary Care Clinic.

RESPONSIBILITIES

1. Independently performs all types of radiology and CT procedures in accordance with established NTHSSA policies and procedures and governing bodies, producing high quality diagnostic images for diagnosis of the patient by the Radiologist.

- Provides patient and family centered care and quality principles in the provision of services to patients, and families.
- Ensures the patient is a candidate for the procedure, understands the procedure and explains the risks associated.
- Reviews patient history and interviews the patient to obtain relevant information required before performing the examination (i.e. history and symptoms).
- Examines and evaluate images for technical and diagnostic quality.
- Advocates the dignity and self-respect of patient.
- Applies all methods and standards of radiation protection for patients and employees.
- Obtains written consent for invasive procedures from the patient.
- Based on in-depth knowledge of human anatomy and radiographic procedures the incumbent must make creative decisions on how to best attain quality images with patients of a variety of sizes and ailments
- Promotes the autonomy of patients and helps them express their health needs and values to obtain appropriate information and services.
- Safeguards the trust of patients, ensuring appropriate patient privacy and confidentiality, and that information learned in the context of a professional relationship is shared outside the health care team only with the patient's permission or as legally required.
- Provides direct patient care and support during all types of examinations.
- Acts in a manner consistent with their professional responsibilities and standards or practice.
- Conducts administrative tasks or any other tasks, as required by the employer, related to the department and that would promote the vision, mission and values of STH and the NTHSSA.
- Participates and engages in quality improvement initiatives.

2. Coordinates and manages the day-to-day CT workload.

- Plans and organizes the workload within the area.
- Ensures the proper process is followed in the performance of the requested service and the testing performed is accurate and valid.
- Refers unusual requests to the appropriate personnel in a timely manner.
- Reviews all booked CT examinations, actively performs technical functions in the CT area, reviews requisitions and patient history to identify radiologist's requirements.
- Initiates intravenous (IV's) for injection of contrast media under the indirect supervision of the Radiologist and ensures all the necessary information to allow contrast injection is recorded (i.e. creatinine, eGFR).

- Palpates (identifies external landmarks) on patients in order to focus in on targets for CT examination.
 - Uses the combined senses of touch, sight and hearing during all parts of the procedure (i.e. initiating IV's, preparation for rectal contrast) and continuous observation during examination.
- 3. Performs basic quality control (QC) tests in accordance with Safety Code 35 from Health Canada and by the NTHSSA Policies and Procedures in order to maintain image quality and to ensure a safe environment for patients and health professionals.**
- Performs daily monitoring of equipment.
 - Trouble-shoots equipment issues, within the incumbent's field of expertise.
 - Identifies problems or concerns, notifying the Technical Supervisor and consulting with field service engineers on potential resolution.
 - Completes minor maintenance on machines as required.
 - Runs and records QC tests using STH/NTHSSA approved record keeping processes.

WORKING CONDITIONS

Physical Demands

Most of the incumbent's time involves supporting, moving patients, moving and adjusting equipment including overhead x-ray equipment, C-Arm and portable x-ray machine.

Work activities include standing and operating the C-Arm during surgery in Operating Room (during the duration of the surgery which can be more than one hour).

Environmental Conditions

Although universal precautions are in place, the incumbent is continually exposed to low doses of ionizing radiation during x-ray examinations. Quarterly monitoring is done to ensure the incumbent's radiation exposure level is within limits.

The incumbent is required to work with ill, emotionally upset patients, patients with contagious diseases (TB, HIV, and Hepatitis); and open wounds (patients in Emergency and Operating Room).

The incumbent may be exposed to blood, body fluids and excrements (use of rectal contrast). Frequency = 60%.

Sensory Demands

The incumbent is required to use the combined senses of touch, sight and hearing during on-going assessment (i.e. initiating IV's, preparation for barium enemas) and continuous observation during testing.

Mental Demands

Patients attending the DI unit are often very ill or have experienced a severe trauma.

The incumbent is on-call 6-10 times per rotation (16 hours per shift); works weekends as part of the established rotation, including weekend standby call, and typically experiences multiple call backs per standby shift.

There is pressure to produce optimal images within a set length of time. This is hampered by: physical size and age of the patient, lack of adequate patient preparation, patients being in pain and/or shock, patients intoxicated, uncooperative patients arriving late for appointments and patients with language barriers.

KNOWLEDGE, SKILLS AND ABILITIES

- Specialized knowledge of Radiology and an ability to effectively use varied types of diagnostic equipment required to produce quality images for diagnosis of the patient by the Radiologist.
- Knowledge of Computed Tomography (CT) and an ability to produce quality images for reporting and diagnosis by the Radiologist.
- Ability to produce high quality x-rays and an ability to provide technical direction to others as required.
- Ability to provide patient and family centered care and quality principles in the provision of services to patients, and families.
- Ability to perform basic quality control (QC) tests in accordance with Safety Code 35 from Health Canada and by the NTHSSA Policies and Procedures.
- Skills and the ability to efficiently operate a Radiology Information System (RIS) and Picture Archiving Communication System (PACS).
- Ability to communicate effectively. This includes being able to articulate pertinent information to both medical and non-medical individuals in a clear and concise manner.
- Ability to be sensitive to the geographical and cultural needs of the people and understand how community and culture impacts the delivery of health care.

Typically, the above qualifications would be attained by:

A Diploma / Degree in Medical Radiation Technology (MRT) and a minimum of one (1) year of experience in Canadian healthcare environment attained from a MRT program practicum, or in combination with customer service or health related experience.

This position also requires the job candidate / incumbent to have successfully completed post-graduate CT courses and/or workplace CT training, or clearly states/demonstrates their intention to obtain.

ADDITIONAL REQUIREMENTS

Certification and registration under CAMRT prior to the commencement of employment.

Proof of immunization in keeping with current public health practices is required.

Job holder will also be required to ensure completion of:

- Continuing education to remain current with ever-changing technology.
- Acquiring 15 credits in medical imaging (or health care related topics) every three (3) years.
- Certificate in CT Imaging (CTIC) through CAMRT or willing to obtain within three (3) years of hire.

Stanton Territorial Hospital has a number of certifications that are required upon hire, depending on the area where the employee works, including but not limited to: IV certification, Aboriginal Cultural Awareness, Biohazardous Waste, Biosafety & Biosecurity, Infection Control, Workplace Hazardous Materials Information System (WHMIS) and others directly related to the incumbent's scope of practice.

Within NTHSSA all health care providers must have or be able to acquire within a reasonable time frame and remain current with all mandatory certifications.

Position Security

- No criminal records check required
- Position of Trust – criminal records check required
- Highly sensitive position – requires verification of identity and a criminal records check

French language

- French required (must identify required level below) Level required for this Designated Position is:
 - ORAL EXPRESSION AND COMPREHENSION
 - Basic (B) Intermediate (I) Advanced (A)
 - READING COMPREHENSION:
 - Basic (B) Intermediate (I) Advanced (A)
 - WRITING SKILLS:
 - Basic (B) Intermediate (I) Advanced (A)
- French preferred

Indigenous language: To choose a language, click here.

- Required
- Preferred