



IDENTIFICATION

Department		Position Title	
Northwest Territories Health and Social Services Authority		Sonographer	
Position Number	Community	Division/Region	
48-17082	Fort Smith	Allied Health Services/Fort Smith	

PURPOSE OF THE POSITION

Provides sonography services to patients of the Multifunctional Medical Imaging Department of the Fort Smith Health Centre in accordance with established standards of sonographic practice and the philosophy and objective of the NTHSSA to proficiently scan, interpret and produce quality images 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 Tłıchǫ 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 Tłıchǫ Community Services Agency (TCSA) will operate under a separate board and Hay River Health and Social Services Agency (HRHSSA) will 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.



Under the direction of the Minister of Health and Social Services, the NTHSSA is established to move toward one integrated delivery system as part of the government's transformation strategy.

Since 2013, the NWT health and social services system has been engaged in a strategic renewal process. This began with System Transformation, a multi-year, community engagement-driven process to develop a model for an integrated health and social services system. The resulting changes to the system's governance structure have enabled a one system approach, allowing for greater efficiency and integration while better respecting the unique contexts and strengths of the NWT's distinct regions and cultures.

Building off the results and momentum of System Transformation, the strategic renewal effort has now begun a process of Primary Health Care Reform to shift the system and its care models towards a team and relationship-based approach that is driven through public participation, community feedback, and data, and built upon a foundation of trust and cultural safety. Using a community development approach, we are changing the way we work with people and communities, at every level of the health and social services system, to enable public participation in priority setting, planning, and design that integrates the social determinants of health.

Cultural safety is an outcome where Indigenous peoples feel safe and respected, free of racism and discrimination, when accessing health and social services. Relationship based care is fundamental to cultural safety because it prioritizes the need for trusting, caring and ongoing relationships between patients and clients with providers. Embedding a culturally safe approach in Health and Social Services has been identified as critical to supporting equitable access to care with the long-term goal of improving health outcomes for Indigenous peoples.

The incumbent is expected to model, honor, and promote a culturally safe environment at all times, including working from a perspective that is anti-racist and trauma-informed, employing self-reflection to encourage the professional growth and whole person development of self and others. Indigenous worldviews, practices, and customs must also be respected.

The Fort Smith Health Centre is an accredited facility, located in the Town of Fort Smith, Northwest Territories (NWT). The NTHSSA – Fort Smith Region is responsible for the effective deliver of Primary and Emergent Health Care and Social Services to approximately 2,500 residents of Fort Smith and surrounding area. The Regional facilities include one type C Health Facility and a 28 bed Long Term Care Facility. Fort Smith Health Centre provides health care services to adults and children on an inpatient/outpatient and outreach basis in order to restore health with dignity.



The incumbent is scheduled to perform 1 week long ultrasound clinic (37.5 hours of regularly scheduled appointments) approximately 6-10 times each fiscal year. The incumbent reports to the Regional Manager of Allied Health Services for administrative purposes, the incumbent utilizes ultrasound equipment to independently produce, interpret and record high quality sonographic images to enable the Radiologist to accurately diagnose patients. The incumbent works as part of the Diagnostic Imaging Department team that consists of 3 other Laboratory/Diagnostic Imaging Department staff.

Approximately 35-45 sonographic examinations are scheduled for each clinic. Receipt of Urgent/STAT requests may result in the need for the sonographer to perform overtime.

The incumbent will perform sonographic examinations on a variety of internal structures including, but not limited to, the adult and pediatric neck, abdomen, pelvis, scrotum, deep leg veins, breasts and the pregnant abdomen which includes the developing fetus. Sonography is a diagnostic imaging method to identify and document physiological and pathological status of internal anatomy to assist with diagnosing specific disease states. Sonography is often the only method of diagnosing specific disease states. When performing sonographic examinations the incumbent will interpret the anatomy scanned and determine which images to document to forward to the Radiologist based on what is seen within the scans (i.e. for identification of pathological changes of internal anatomy). Accuracy and precision of ultrasound exams are paramount to identify existing pathology to enable detection and diagnosis of disease. Exams are carried out in accordance with policies and procedures developed by Stanton, Sonography Canada and the American Registry of Diagnostic Medical Sonographers.

In addition the incumbent may be required to provide hands-on support and patient care during invasive examinations conducted by a Radiologist (e.g. including but not limited to biopsies and aspirations). During these procedures the incumbent will be responsible for all preparations required for the procedure including: explaining the procedure to the patient, documenting the necessary images and post procedure care as required. In the case of a biopsy the incumbent will independently locate the specific area to be biopsied for the Radiologist/Physician to perform the procedure, utilizing the real-time ultrasound performed by the Sonographer. Radiologists do not regularly visit Fort Smith and it is highly unlikely that any invasive procedures are conducted in Fort Smith.

Many of the exams performed by the Sonographer may cause significant levels of discomfort to the patient as the ultrasound transducer is always in direct contact with the patient's skin (e. g. including but not limited to examinations of the scrotum, breast and pelvis - via the vagina). The incumbent must maintain a high degree of professionalism in order to ease the patient's anxiety.



RESPONSIBILITIES

1. Using ultrasound equipment while working independently with mostly remote Radiologist supervision, the Sonographer performs sonographic examinations (scan, interpret and document) that will accurately demonstrate pathology (or wellness) of the patient to the diagnosing Radiologist and referring physician.

- Demonstrates patient and family centered care and quality principles in the provision of services to patients, and families.
- Ensures patient is a candidate for the examination and understands the procedure (i.e. explain/educate).
- Reviews patient history and obtains relevant clinical information that is required before performing the examination (i.e. reviewing written and oral information from the patient).
- Images appropriate anatomy, determines if it is normal or abnormal, and accurately documents what is seen.
- Extends the examination to include areas of the body potentially involved in the imaged disease process.
- Processes examinations and evaluates the exam for technical and diagnostic quality (this may include discussions with the Radiologist to outline procedures followed).
- Provides a written description of the normalcy or pathology the incumbent imaged to enable the Radiologist to make an accurate diagnosis.
- Alerts the Radiologist or referring Physician of life threatening or life altering abnormalities found during the scan.
- Enters all exam results into the Radiology Information System (RIS) and Picture Archiving Communication System (PACS).
- Advocates for patient's dignity and self-respect.
- Promotes the autonomy of patients and help them to express their health needs and values to obtain appropriate information and services.
- Acts in a manner consistent with their professional responsibilities and standard of practice.
- Shares their expertise with interpretation of the ultrasound exam with practitioners. Their scope of practice does not include sharing interpretation of images with the patient, aside from revealing the gender of the fetus when available and consensual with patient.

2. Independently performs quality control (QC) tests on ultrasound equipment in order to maintain image quality and to ensure a safe environment for patients and health professionals.

- Provides daily monitoring and maintenance of ultrasound equipment including documentation of such.



- Troubleshoots issues with equipment within their scope of technical expertise.
 - Identifies problems or concerns and consults with Regional Manager of Allied Health, other Lab/DI staff, and/or Field Service Engineers/Technicians.
 - Completes minor maintenance on machines as required.
- 3. Provide reliable and current sonographic information to Fort Smith Health care Providers, Physicians, Radiologists and others as required.**
- Independently performs sonographic exams and provides a professional sonographic opinion to enable the Radiologist to remotely provide a report.
 - Provides their opinion of anatomy imaged by Physicians who perform ultrasounds.
 - Performs support staff duties as required to maintain consistent departmental records.
 - Participates in accreditation processes.
 - Assists locum physicians with the use of ultrasound equipment on site.

WORKING CONDITIONS

Physical Demands

Intermittent lifting and assisting patient's movement into specific positions during patient assessment and testing, as well as intermittent movement/repositioning of heavy equipment. Frequent demands of performing fine motor movements involving shoulder, hand and wrist while applying a significant amount of pressure to the ultrasound transducer to enhance and define images. The incumbent is required to scan patients for 7 hours daily using moderate to high personal strength intensity.

Environmental Conditions

Exposure to communicable diseases transmitted in human blood and body fluids. Exposure to air borne respiratory diseases while working in an enclosed space for an extended period of time in direct contact with patients. Working in a dimly lit environment to view sonographic images can pose moderate eye strain exertion.

Sensory Demands

Daily, frequent and high intensity demands for using fine motor skills to enhance and define imagery with sonographic techniques as well as palpating lumps/organs on various parts of the body.

Mental Demands

Patients coming into the Diagnostic Imaging Department are often very ill or have experienced a severe trauma and the incumbent is expected to remain calm, controlled and professional regardless of the situation and demonstrate compassionate care to the client.



The Sonographer is required to perform very personal invasive examinations (i.e. vagina, scrotum, breasts) which may result in high levels of anxiety in the patients. Dealing with this anxiety can cause high levels of mental stress on the incumbent.

There is pressure to thoroughly scan the patient to interpret and produce optimal images within a set length of time. This is hampered by: physical size and age of the patient (from infant to elderly), very anxious and concerned patients, patients with language barriers, lack of adequate patient preparation and patients arriving late for appointments.

KNOWLEDGE, SKILLS AND ABILITIES

- In depth knowledge of and an advanced ability to perform and interpret detailed ultrasound examinations in the following areas: adult and pediatric neck, abdomen, pelvis, scrotum, deep leg veins, breasts and the pregnant abdomen which includes the developing fetus.
- Advanced knowledge of internal anatomy and physiology of all areas to be examined using sonography methods and be able to seek out and recognize pathological changes of internal anatomy. This includes knowledge of and an understanding of pathologies which may affect internal structures.
- Ability to use ultrasound equipment to produce complex quality images for diagnosis of the patient by the Radiologist based on clinical information provided by the referring physician.
- Execute fine movements of the hand and wrist in order to accurately image subtle and minute detailed anatomy (highly developed hand eye coordination).
- A specialized knowledge of ultrasound physics is required to create and interpret images produced.
- An understanding of and an ability to conduct QC measures on all ultrasound equipment.
- Skills and ability to efficiently operate a RIS and PACS system.
- Ability to safeguard the trust of patients, ensuring appropriate patient privacy and confidentiality.
- Ability to communicate effectively with both medical and non-medical individuals.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

This level of knowledge is typically acquired through the successful completion of a Certified Diagnostic Medical Sonography Program.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

Fort Smith Regional Requirements

Registration with Sonography Canada is required. The incumbent will be required to authorize the employer to independently verify the registration with Sonography Canada.

Continuing education is required to maintain the Sonography Canada registration and stay current with the ever-changing technology (40 hours of continuing sonography education must be completed every three years).

Within the Fort Smith Health Centre, all employees must be able to acquire within a reasonable time frame and remain current with the following training and certifications:

- N95 Safety Mask Fit Testing
- CPR
- WHMIS
- Biohazard Waste Disposal

Position Security (check one)

- ☐ 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 (check one if applicable)

- ☐ 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: Select language

- ☐ Required
- ☐ Preferred