



## IDENTIFICATION

Department	Position Title	
Northwest Territories Health and Social Services Authority	Sonographer	
Position Number	Community	Division/Region
48-3294	Yellowknife	Diagnostic Imaging Services/Stanton

## PURPOSE OF THE POSITION

Provides sonography services to patients of the Diagnostic Imaging Department in accordance with established standards of practice in Radiology and the philosophy and objective of Northwest Territories Health and Social Services 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 Tłı̨chǫ 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 Tłı̨chǫ 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.

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, honour, 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.

Stanton Territorial Hospital is an accredited facility, located in Yellowknife, Northwest Territories (NWT). Stanton 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 to restore health with dignity.

Located within Stanton Territorial Hospital and reporting to the Technical Supervisor, Diagnostic Imaging for administrative purposes, the incumbent utilizes ultrasound equipment to independently produce and interpret high quality sonographic images required by the Radiologist to complete accurate diagnosis of patients. The incumbent works as part of the Diagnostic Imaging Department team that consists of the Senior Technologist- Computed Tomography (CT), Medical Radiation Technologists, and Sonographers.

Approximately 7000+ ultrasounds are performed annually, through referrals from medical/nursing practitioners.

The incumbent will perform sonographic examinations on a variety of internal structures including the adult and pediatric neck, abdomen, pelvis, scrotum, adult heart, 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 NTHSSA, 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.

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 to ease the patient's anxiety.

Sonographers are required to work shifts extended regular hours of work of 8 am to 4 pm.

## **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 obtain relevant clinical information is required before performing the examination (i.e. reviewing written and oral information from the patient).
- Images appropriate anatomy, determine if it is normal or abnormal, and accurately document what is seen.
- Processes examinations and evaluate the exam for technical and diagnostic quality (this may include discussions with the Radiologist to outline procedures followed).
- Provides a verbal or written technical interpretation to enable the Radiologist to make a diagnosis.
- Alerts the Radiologist or referring Physician of abnormal findings.
- 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 assists 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 the 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 Technical Supervisor, Team Lead and/or Field Service Engineers.
- Completes minor maintenance on machines as required.

**3. Provide reliable and current sonographic information to Stanton staff, Physicians, Radiologists and others as required.**

- Independently performs sonographic exams and provide professional sonographic opinion to enable the Radiologist to remotely provide a report.
- Provide opinion of anatomy imaged by Physicians who perform ultrasounds.
- Perform support staff duties as required to maintain consistent departmental records.
- Participate in accreditation processes.
- Assist locum Radiologists with the use of Stanton equipment.

## **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 airborne respiratory diseases while working in an enclosed space for an extended period of time. Working in dim light environments 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 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 produce and interpret 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 arriving late for appointments and patients with language barriers.

### **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of and an ability to perform and interpret detailed ultrasound examinations in the following areas: adult and pediatric neck, abdomen, pelvis, scrotum, adult heart, deep leg veins, breasts and the pregnant abdomen which includes the developing fetus.
- 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.
- 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.
- Skills in executing fine movements of the hand and wrist to accurately image subtle and minute detailed anatomy (highly developed hand eye coordination).
- 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.
- 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 Canadian Diagnostic Medical Sonography Program from an accredited facility.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL 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 (30 hours of continuing sonography education must be completed every three years).

NTHSSA has several certifications required upon hire depending on the area where the healthcare provider works, including but not limited to: Aboriginal Cultural Awareness, Biohazard Waste, Infection Control, Workplace Hazardous Materials Information System (WHMIS) and others directly related to the incumbent's scope of practice.

**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