



IDENTIFICATION

Department	Position Title	
Northwest Territories Health and Social Services Authority	Sonographer	
Position Number(s)	Community	Division/Region(s)
17-3294	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 radiological practice and the philosophy and objective of Stanton 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 Tłıchq 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 Tłıchq 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.

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 in order to restore health with dignity.

Located within Stanton and reporting to the Technical Supervisor, Diagnostic Imaging Services 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 Supervisor, 4 Radiological Technologists, 1 Mammography/Radiological Technologist, 4.5 Sonographers, and 1 CT Technologist.

Approximately 6000+ 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 Stanton, Sonography Canada and the American Registry of Diagnostic Medical Sonographers.

In addition the incumbent will 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 in order to ease the patient's anxiety.

The 4.5 Sonographers may be required to work shifts extended regular hours of work of 8 am to 4 pm. As well, sonographers will be required to rotate through the Yellowknife Primary Health Care Clinic.

RESPONSIBILITIES

- 1. Using ultrasound equipment 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.**

Main Activities:

- 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 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.**

Main Activities:

- Provides daily monitoring and maintenance of ultrasound equipment (includes maintaining documentation).
- Trouble-shoots issues with equipment within their scope of technical expertise.
- Identifies problems or concerns and consults with field service engineers/technicians.
- Completes minor maintenance on machines as required.

3. **Provide reliable and current sonographic information to Stanton staff, Physicians, Radiologists and others (i.e. Regional Hospitals within the NWT where Sonograms are performed).**

Main Activities:

- 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 (e.g. OB/GYN Specialists) who perform ultrasounds
- 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. Working in dim lighted 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 a severe trauma. As such, the incumbent may be exposed to death/dying or other emotionally disturbing experiences where 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 prep ration, patients arriving late for appointments and many patients with language barriers.

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, adult heart, deep leg veins, breasts and the pregnant abdomen which includes the developing fetus.
- A specialized knowledge of ultrasound physics is required to create and interpret images produced.
- Execute fine movements of the hand and wrist in order to accurately image subtle and minute detailed anatomy (highly developed hand eye coordination).
- 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.
- An understanding of and an ability to conduct QC measures on all ultrasound equipment.
- A working knowledge of and an ability to efficiently operate a RIS and PACS system.
- Initiative (shows persistence) - an ability to persist which may mean taking two or more steps to overcome obstacles or rejection (does not give up easily when things do not go smoothly).
- The incumbent must be able to communicate effectively. This includes being able to get one's point across to both medical and non-medical individuals.

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.

ADDITIONAL REQUIREMENTS

Stanton Territorial Hospital Requirements

Registration with Sonography Canada is required.

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).

Within Stanton, all health care providers must be able to acquire within a reasonable time frame and remain current with the following training and certifications:

- Workplace Hazardous Materials Information System (WHMIS)
- Fire training
- Workplace Bullying In-service
- Fit testing
- Infection Control
- Privacy and Confidentiality Quiz
- Emergency Response
- Basic Cardiopulmonary Resuscitation (CPR)

Assets would include: Non-Violent Crisis Intervention (NCI) and SafeStart

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: To choose a language, click here.

- ☐ Required
- ☐ Preferred