



## IDENTIFICATION

Department	Position Title	
Northwest Territories Health and Social Services Authority	Senior Systems Analyst	
Position Number	Community	Division/Region
48-95112	Yellowknife	Informatics and Health Technology / Territorial Operations

## PURPOSE OF THE POSITION

The Senior Systems Analyst (SSA) works as a member of the Informatics and Health Technology (IHT) team and collaborates with colleagues of the greater GNWT to provide comprehensive informatics services for the Northwest Territories Health and Social Services Authority (NTHSSA) and the Department of Health and Social Services (DHSS) representing the residents of the Northwest Territories.

The IHT SSA is responsible for routine HSS Information Systems analysis, which includes promoting system design improvements and best practices, maintaining the environment using manual and automated methods, and solving potential system problems. As the subject matter expert, the SSA routinely provides technical support to clinical and administrative clients, documents processes and procedures, and performs data extracts using tools such as SQL and Crystal Reports.

Additionally, the SSA participates in Information Systems (IS) projects as a technical subject matter expert, sharing guidance with project managers and third-party project participants.

## SCOPE

The Northwest Territories Health and Social Services Authority (NTHSSA) is the single provider of all health and social services (HSS) in the Northwest Territories (NWT), apart from Hay River and Tłı̄ch̄o 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, which are delivered by more than 1,800 HSS staff.

There are over 100 unique HSS Information Systems within the HSS environment accessed by over 1,500 NTHSSA staff as well as over 2,000 critical health technologies.



The heavy reliance on IS to support HSS decisions means it is essential that system components work together, data flows accurately from one area to another and there is minimal downtime. Many of these HSS Information Systems are life critical and required to be operational on a 24/7 basis across all 33 NWT communities. The impact magnitude and scope is further compounded by the rapid change and merger of Health Information Systems, Information Technology, Telecommunication Technology and Health Technologies.

Located in Yellowknife and reporting to the Territorial Manager, Information Systems, the SSA leads and provides HSS Information Systems support services to a variety of users from diverse program areas within the DHSS and the NTHSSA, from front-line health care and social services workers, administration, program managers, and senior management. These users depend on the integrity and availability of the HSS Information Systems, including the business functionality provided by the applications comprising the HSS Information Systems, and data collected and used through them. The SSA has an indirect impact on the residents of the NWT as these HSS Information Systems are used to support the delivery of HSS to the public. Further, decisions made by senior management are based on data gathered and maintained using the HSS Information Systems provided. The availability, accuracy, functionality, business rules, and credibility of the HSS Information Systems are related to effective maintenance and support provided by the SSA.

The SSA works as part of a collaborative team in the IHT Division and independently provides application, systems, and database support to ensure the delivery and support of health and social services programs.

These services are provided in accordance with a framework of standards, procedures and guidelines established and/or adopted by the Division, methodologies and standards endorsed by the Director of IHT, established Federal, Provincial, Territorial legislation, federal and regional initiatives, as well as financial constraints and system capabilities.

The SSA must work closely with DHSS and NTHSSA users of the HSS Information Systems. The SSA will be required to provide direction and support to approximately 30 informatics professionals both internal (other GNWT departments) and external (contractors).

The SSA will support various HSS Information Systems, taking a lead role on supporting medium to large HSS Information Systems, and have a contributing role on other informatics projects. These projects may involve the implementation of new integrated information systems (IS) to improve functionality, reduce the number of disparate information systems and reduce the volume and duplication of manual forms processing.

The SSA has senior responsibility for the security (accessibility, integrity, and confidentiality) and problem solving of assigned HSS Information Systems and will be involved with the entire environment of the applications comprising the HSS Information System. The SSA is expected



to stay abreast of technological advancements and newer solutions as they apply to the position through formal and informal professional development.

## **RESPONSIBILITIES**

### **1. Conduct business and systems analysis to determine if and how informatics could be used to provide solutions to business requirements. Ensures that specifications for all information system components are valid and meet requirements as set out by the user request and supplemented by policies and standards.**

- Plan and lead multiple small to medium projects.
- Identify business improvements and information systems solutions.
- Researches and recommends solutions/products when clients request help in procuring technology for a specific need. (hardware/software)
- Review impact of information systems change on business.
- Prepare/monitor budgets and report constraints and considerations as required.
- Review contractor / vendor deliverables.
- Help guide management in making informed and balanced Information Systems (IS) decisions.
- Direct the assessment and evaluation of in-house administration tools, etc.
- Determine interrelationships between requirements and solutions.
- Communicate application maintenance and administration concepts to clients and management.

### **2. Assist in coordinating the development of HSS Information Systems to ensure that projects are completed on time and within budget.**

- Works as part of a collaborative team that assists in needs identification, systems planning, development, analysis, implementation, and maintenance through consultation with program managers and system users regarding operational and system requirements.
- Leads IS enhancement projects including development, implementation, and maintenance.
- Provides proposals, recommendations, and advice on system requirements.
- Liaises with project managers, program managers, DHSS staff, other NTHSSA staff, the TSC, and vendors to plan, develop, and execute project tasks.
- Coordinates planning, testing, evaluating, and implementing system enhancements.
- Train, coordinate, and direct staff on project related activities.

### **3. Manage and organize electronic data as a data administrator to ensure that it meets informatics needs, including: availability, quality, and integrity. Regularly deal with Database Administration services provided by external parties to facilitate adherence to corporate data administration policies, standards, and technology.**

- Manage organization-wide data policies, security, and standards.
- Provide leadership in selection, use of data administration standards, tools, etc.



- Provide expertise to multiple database management projects.
  - Provide guidance on new and emerging data administration concepts.
  - Reconcile competing data interests.
  - Implement corporate data standards and monitor their use.
  - Develop, negotiate and/or manage contracts.
  - Define and implement incorporated data standards.
  - Formulate and recommend to management new and/or modified data policies, procedures, and guidelines.
- 4. Liaise with the TSC and vendors to ensure service level requirements are followed respecting metrics such as throughput, response time, turnaround time and availability are met for all HSS Information Systems.**
- Ensure that adequate capacity management and an orderly process for implementing software upgrades, repairs and recoveries are maintained.
  - Work with the TSC to ensure development of appropriate documentation, training, and disaster recovery solutions for the application systems.
  - Rapidly envisage potential solutions for users.
  - Promote database solutions to users and vendors.
  - Define migration standards/ensure migration plans meets requirements.
  - Investigate and understand implications of new hardware/software.
  - Manage information systems sizing for a major project.
  - Ensure due attention to quality, privacy, integrity, etc.
  - Negotiate on utilization, capacity, and performance issues.
  - Quantify utilization, capacity and performance of current and proposed systems, and the impact of proposed changes.
  - Assess possible designs and implementations to ensure reasonable solution.
  - Participate in defining strategy and set policy for information systems facilities.
  - Guide establishment/maintenance of required disaster recovery methods/procedures.
- 5. Provide database administration and tier 2 support for HSS Information Systems to ensure secure operations (confidentiality, availability, integrity)**
- Maintain operations of mission critical systems.
  - Monitors, analyzes, and responds to system events and audit logs.
  - Provides database administration (backups, restores, maintenance plans)
  - Receives client technical support request through phone, email or within service desk software. Recording the details within a ticket in the service desk software, assigning appropriate categories and an appropriate priority to the ticket.
  - Analyzes support requests and issues while working with the client to get more details if required to determine root cause and/or an agreeable solution, resolving the client request if possible.
  - Responsible for finding appropriate resolutions to issues that come through the helpdesk, escalating and monitoring progress on issues that are outside the scope of



their expertise or control (e.g. Email, network issue, outside applications), keeping ownership of the issue and continue communication with the client to ensure they are aware of the status of reported issues until the issue is resolved.

- Carries out routine desktop support including installation, configuration and troubleshooting issues with hardware and software on local workstations.
- Applies relevant technical standards, procedures, and tools to resolve technical problems.

## **WORKING CONDITIONS**

### **Physical Demands**

No unusual demands

### **Environmental Conditions**

There are no significant adverse environmental conditions that exist in this position except for exposure to the healthcare environment. Some travel in small aircraft or by automobile to remote sites and to other locations across the country might be required.

### **Sensory Demands**

Sensory demands are consistent with a normal GNWT Office environment.

### **Mental Demands**

The incumbent supports mission critical clinical applications which may require after hours/weekend support. The incumbent is faced with changing priorities; short time frames and is often required to work overtime to meet deadlines. This incumbent is exposed to pressure due to the tight work schedules and changing operational priorities. A high level of competency must be maintained, requiring ongoing study. Potential to become frustrated in resolving problems which are beyond the position's control such as a satellite failure, a change in specialist schedule and hardware failure.

## **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of systems analysis and design, including broad knowledge of all phases of the system development life cycle.
- Knowledge of Microsoft network operating systems and database management systems (Structured Query Language, database design, data modeling).
- Knowledge of systems development tools.
- Knowledge of project management.
- Knowledge / application relating to access and security management.
- Knowledge / application relating to quality assurance and risk management.
- Knowledge / application in preparing and monitoring project expenditures against an established resource budget.



- Knowledge / application on preparing cost-benefit analysis.
- Knowledge of software packages, database systems, software development tools, prototyping and modeling tools, multi-tier computing environments, hardware environments, operating systems, and communication environments.
- Skills relating to testing procedures associated with application systems.
- Skills relating to flowcharting (Data Flow Diagrams, Entity Relationship Diagrams).
- Ability to define requirements for new and existing software and database development.
- Ability to gather information through environmental scans and consolidating data into relevant information.
- Ability to think analytically and relationally while solving complex problems.
- Ability to support clients in the daily use of application systems and databases.
- Ability to troubleshoot/resolve client's application system problems in an efficient manner and either resolve the problem or identify the nature of the problem and forward it to the appropriate place for resolution.
- Ability to write systems documentation and to guide the development of or write user documentation.
- Ability to provide guidance for change management scenarios.
- Ability to define and lead all elements of business recovery processes, in case of disaster recovery activity.
- Ability to guide the repair of application software or the upgrade of application software.
- Ability to estimate, plan and report project timelines, milestones, and progress.
- Ability to guide multiple tasks, schedules, and projects in a coordinated manner.
- Ability to assist in the development of policies and communicate and market informatics business plans.
- Ability to escalate issues that are beyond the incumbent's scope.
- Ability to evaluate proposals and assist in the selection of contractors.
- Office productivity tools (e.g. word processor, spreadsheet, email) - skills and abilities.
- Flexibility: ability to alter normal procedures or ways of working to fit a specific situation to get the job done and/or meet government goals.
- Information Seeking: ability to ask a series of probing questions to get at the root of a situation or problem, below the surface issues presented.
- Ability to analyze multiple causal links, several potential causes of events, several consequences of actions, or multiple-part chains of events.
- Ability to follow through on client inquiries and requests.
- Ability to produce written documents which are clear, easy to understand, and which are written in a style and form using tact and likely to appeal to and influence the audience.
- 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:**

A relevant post-secondary degree, and four (4) years of progressively more responsible related experience. ITIL, PMP or Prince2.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL REQUIREMENTS**

Professional certifications in project management, systems analysis or software development are desirable, as is membership in the Canadian Information Processing Society.

**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