

Government of the Northwest Territories

REQUEST FOR INFORMATION

Procurement Shared Services

Project Title: Electronic Health Record RFI

Program Department: Health and Social Services

Event ID: **EV6839**

RFI Call Date: Wednesday, July 19, 2023

Submission Deadline: 15:00 (Local Time) Wednesday, August 16, 2023

REQUEST FOR INFORMATION

The Government of the Northwest Territories (GNWT) is requesting Submissions from interested Respondents for the provisions as outlined in this Request for Information (RFI).

Table of Contents

SECT	70N 1	3
1.	ANNOUNCEMENT	3
2.	POINT OF CONTACT	3
3.	RFI SUBMISSION DEADLINE	3
4.	RFI SUBMISSION INSTRUCTIONS AND GENERAL INFORMATION	3
5.	ANTICIPATED CONTRACT TERM & RENEWAL OPTIONS	5
SECT	TON 2	6
TERM	AS OF REFERENCE	6
1.	BACKGROUND	6
2.	NWT ENVIRONMENT	7
3.	RFI OBJECTIVES	9
SECT	TON 3	10
GEN	ERAL INSTRUCTIONS	10
APP	ENDIX "A" RESPONDENTS INFORMATION	

SECTION 1

GENERAL INFORMATION AND INSTRUCTIONS

1. ANNOUNCEMENT

1.1 The Government of the Northwest Territories (GNWT) is pleased to invite your company to participate in the RFI process as described within this document. To that end, the GNWT is requesting information from interested parties regarding potential EHR solutions. Response will include providing answers to append the RFI Response document. This RFI is intended to gather information that could assist the GNWT in the development of a future procurement process. In the event that sufficient information is received, the GNWT may, but is not obligated to, initiate a competitive bidding opportunity.

2. POINT OF CONTACT

2.1 All questions or enquiries ("Enquiries") concerning this RFI must be in writing and be submitted no later than five (5) Business Days prior to the Submission Deadline and be directed to the following (the "Contact Person"):

Attention: Contracts Administrator

Address: Government of the Northwest Territories

Department of Finance

Procurement Shared Services

Phone: (867) 767-9044 Ext. 32118

Facsimile: (867) 920-4112
Email: psstenders@gov.nt.ca

2.2 Verbal responses to any question or enquiry cannot be relied upon and are not binding on either party.

3. RFI SUBMISSION DEADLINE

3.1 Submissions must be received prior to 15:00 local time on **Wednesday**, **August 16**, **2023** (The "Submission Deadline").

4. RFI SUBMISSION INSTRUCTIONS AND GENERAL INFORMATION

4.1 Submissions may be put forward using one of the following methods:

a) The GNWT Contract Event Opportunities Website

Submissions will be accepted through the Contract Event Opportunities website under the following conditions:

- the Submission is received prior to the Submission Deadline specified and is uploaded through the Contract Event Opportunities website;
- the Submission should be submitted in Portable Document Format (PDF), unless otherwise specified by the GNWT;
- the Submission does not exceed 100 megabytes in size; and

the GNWT shall not accept liability for any claim, demand or other action for any reason
whatsoever, including where an uploading process is interrupted, a Submission is not received
in its entirety, is illegible in whole or in part, or which is uploaded to an incorrect event or
website.

Submission uploads may not necessarily be immediate and can experience delays. Respondents should ensure that their Submission is uploaded with sufficient time to account for any delay; four (4) hours prior to the Submission Deadline is recommended. Respondents are encouraged to confirm their Submission has been successfully uploaded by signing back into the system and viewing their Submission.

Note: To amend a Submission prior to the Submission Deadline, Respondents must cancel their original Submission and upload the revised Submission.

b) By Facsimile Transmission

Submissions will be accepted by facsimile transmission under the following conditions:

- the Submission is received in its entirety prior to the Submission Deadline at the following facsimile number: (867) 920-4112;
- the Respondent acknowledges that the GNWT cannot guarantee the confidentiality of information contained in a Submission sent by facsimile transmission; and
- The GNWT will not be liable for any claim, demand or actions for any damages whatsoever should a facsimile transmission be interrupted, not received in its entirety, received after the specified submission deadline, received by any other facsimile unit other that stated herein, or for any other reason.
- Submissions should include a facsimile cover/transmission page that identifies the total number of pages, the Respondent's name, the RFI Event ID, the RFI title, and the Submission Deadline
- 4.2 After the Submission Deadline has passed, Respondents who have submitted a facsimile version of their Response may be contacted and provided with instructions for the submission of an electronic version of the Response. The electronic version of the Submission then must be submitted within the specified time period.
- 4.3 In the event of any discrepancies or conflicts between the faxed version of the Submission and the electronic version of the Submission, the faxed version shall govern.
- 4.4 Amendments to Submission submitted using the facsimile method may also be submitted by facsimile and will be accepted under the following conditions:
 - the amendment is received prior to the specified Submission Deadline at the facsimile number stated in paragraph 3;
 - the GNWT will not accept liability for any claim, demand or other actions for any reason should a facsimile transmission be interrupted, not received in its entirety, received after the stated Submission Deadline, received by any other facsimile unit other than that stated herein, or for any other reasons; and
 - the GNWT cannot guarantee the confidentiality of information contained in the amendment.
- 4.4 Respondents may not amend their Submission after the Submission Deadline, unless as a result of negotiations commenced by the GNWT but may withdraw their Submission at any time.

- 4.5 E-mail submissions will not be accepted.
- 4.6 Responses will not be accepted through mail, at the physical Procurement Shared Services offices or through any facsimile number other than the number stated in paragraph 4.1 b).
- 4.7 Submissions received after the specified submission deadline will be rejected and returned to the respondents unopened.
- 4.8 The GNWT has the right to cancel this RFI at any time and to reissue it for any reason whatsoever without incurring any liability and no respondent will have any claim against the GNWT as a consequence.
- 4.9 Addenda issued prior to the Response Submission Deadline are incorporated into and form part of this RFI. By submitting a Response the respondent acknowledges having received all Addenda issued with respect to this RFI. It is the responsibility of all Respondents to contact the Contact Person referenced in Section 2, of this RFI to ensure receipt of all Addenda prior to submitting a Response.
- 4.10 The GNWT is not liable for any costs of preparation or presentation of Responses even if this RFI is cancelled.
- 4.11 The Response and accompanying documentation submitted by the respondents will not be returned.
- 4.12 It will be a term of the resultant agreement that the provisions of the GNWT's Harassment Free and Respectful Workplace Policy are applicable to and govern the relations between the successful respondent and its employees, agents and representatives and any employee of the GNWT for the term of the contract. A copy of the Harassment Free and Respectful Workplace Policy can be found at the following website: http://www.hr.gov.nt.ca/policy/.
- 4.13 All responses to this RFI become the property of the GNWT and will be held in confidence, subject to the provisions of the *Access to Information and Protection of Privacy Act*. This Act allows any person a right of access to the records in the custody or under the control of a public body subject to limited and specific exemptions. Respondents to this RFI consent to the GNWT incorporating any submitted ideas, concepts, approaches, or strategies into any planning, design, procurement, or contractual activities related to any aspect of the project without any obligation, liability, or consideration on the part of the GNWT. The GNWT will not be responsible for any costs incurred by any vendor in responding to this RFI.

5. ANTICIPATED CONTRACT TERM & RENEWAL OPTIONS

5.1 If subsequent competitive bidding opportunities are issued, the GNWT will endeavor to advise any Respondent responding to this RFI. Vendors are advised to monitor the GNWT Contract Event Opportunities website for any such opportunities, which will be open to all Respondents regardless of whether or not a response to this RFI has been submitted.

SECTION 2

TERMS OF REFERENCE

1. BACKGROUND

The Government of the Northwest Territories (GNWT) is planning for the retirement of core systems as part of a coordinated modernization of eHealth systems across the territory. We have restarted the NWT Electronic Health Record (EHR) program with the following vision:

- There will be a more complete client record supporting seamless care for providers, partners and clients by enabling the right information to be accessed to make the best care decisions; and
- Clients will have better access to their own information, and it will be easier for care providers to communicate with clients and each other.

The NWT Health Information Framework depends on multiple information systems to manage territorial health services for clients (patients). NWT Health and Social Services (HSS) has a backlog of aging systems, deferred maintenance, and replacement needs.

Implementing an Electronic Health Record is a pan-Canadian priority requiring collaboration of the Federal, Provincial, and Territorial governments, Canada Health Infoway, as well as other organizations involved in the delivery of health care. The NWT EHR is planned to align with jurisdictional partners to achieve a shared Canadian vision of a coordinated patient record.

The program embeds the EHR vision across all projects involving a patient care record, using each engagement as a step to achieve the large initiative. The most complex component, from a resource, clinical, business and client need perspective, is a shared client chart.

The current Territorial Electronic Medical Record (EMR) system (Wolf) provides a single primary care chart where various care providers collaborate, however the system was designed for use in a primary care clinic, not territorial use across various primary care facilities.

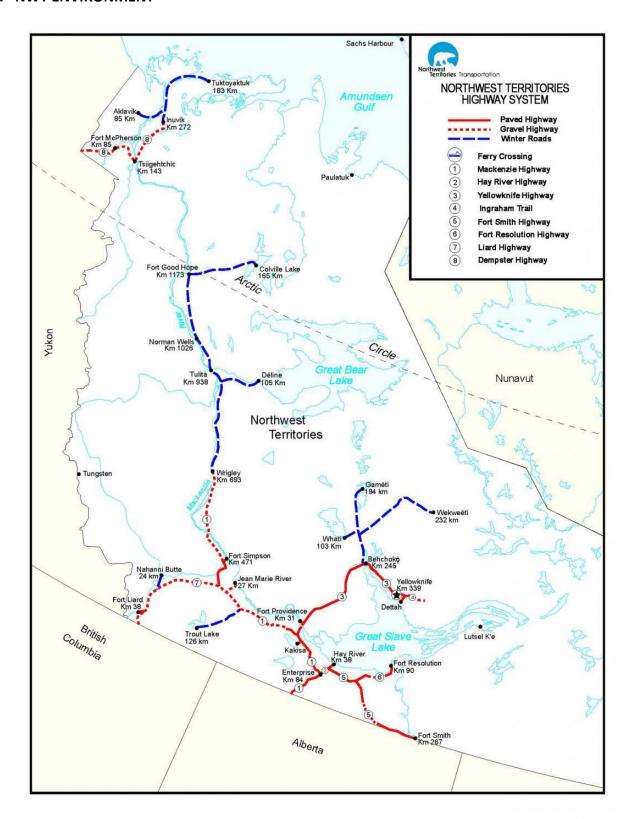
Primary care and outpatient specialist services are documented in the EMR. The NWT EMR has been extensively customized to fill gaps, but it was not designed for enterprise use and does not include all critical components to support client centric care across services.

The Hospital Information System (HIS) technology (MediPatient) is used in all four regional in-patient facilities located in Yellowknife, Inuvik, Hay River and Fort Smith. It was not designed to share information between facilities, creating a continuity of care gap when patients are transferred from one site to another. The system is not used for clinical charting, and each in-patient facility manages paper charts. The current HIS supports admission/discharge, radiology, rehabilitation, and scheduling functions. It has also been used as the Radiology Information System (RIS) so that functionality will need to be replaced with the NWT EHR or by procuring a RIS solution as well.

Both systems have been expanded into additional programs and services in absence of a true EHR. Patient records are a combination of paper and electronic systems with both automated and manual processes support the exchange of information.

This EHR initiative will replace the EMR and HIS solutions with an integrated solution or may require more than one solution to provide the desired functionality. The outcome will be a single patient record for primary, ambulatory and in-patient care. The initiative is required to continue improving coordinated health services in the NWT.

2. NWT ENVIRONMENT



a) Healthcare Delivery Challenges:

Delivering Healthcare in the Northwest Territories (NWT) is similar to the rest of Canada, but with important differences that occur frequently:

- Healthcare Providers may deliver a single service, multiple services, rotate into the north, provide virtual care remotely across the NWT or from outside the NWT, or reside and provide services within a home community;
- Healthcare Providers often work in several service areas, across multiple facilities, and travel to various NWT communities;
- NWT clients often travel to larger communities or are transferred to Alberta to receive specialized care that is unavailable in their home communities;
- A client can have multiple providers during care, which means that the right information must be shared, at the right time, with their care teams;
- Clients often have to repeat their health story to each different provider, so they have information to make care decisions; and
- Clients move through facilities, communities, and work with different providers over the course of their care. A chart must connect these care encounters to the client, while protecting client information.

b) Technical Challenges:

These are the technical challenges and limitations that are present in NWT:

- Internet connectivity:
 - o Internet interruptions are frequently encountered and there is little or no redundancy available with a single connection to southern Canada.
- Low bandwidth with some communities only having a satellite internet connectivity; and
- Technical resources:
 - o Acquisition, training and retention of technical resources can be challenging due to the isolating nature of servicing a large geographical area that has a sparse population.

Planned and already-in-progress patient care record initiatives across the NWT Health and Social Services System are being aligned to determine the most appropriate sequence of system replacements and new implementations.

Information is needed to support clinical care, business and program decisions, and there is an increased importance for privacy and secure sharing of information between providers and patients. Health information systems must allow health staff throughout the territory to find patient information quickly and securely to provide informed care.

This initiative will replace these two end-of-service-life systems that are critical to service delivery and create the foundation that future care systems will build on.

3. RFI OBJECTIVES

GNWT has issued this Request for Information to assist with the preparation for procurement(s) for the NWT EHR initiative.

These are the objectives of the RFI:

- a) To better understand the capabilities/features that we can expect from the EHR to:
 - To determine the scope of the EHR procurement;
 - To assist with EHR phase planning and allow for better Request for Proposal (RFP) planning;
 and
 - To provide an understanding of what additional capabilities that we will need to maintain, replace, or acquire outside of the EHR procurement.
- b) Provide an opportunity for Respondents to outline the information that should be provided in the EHR RFP to allow them to better respond to the procurement, reduce risk and enable better costing for EHR implementation.
 - Information examples:
 - Detail of the requirements;
 - Current State documentation;
 - Human resource capabilities; and
 - Technical infrastructure.
- c) Request Respondents to provide information regarding what they would expect for us to have in place to accommodate implementation and operations. This will provide more time for us to prepare for this initiative.
 - Information examples:
 - Governance;
 - o Human Resources; and
 - Technical Infrastructure.
- d) Will help us to better understand/define the following:
 - What capabilities are in scope of the EHR?
 - Should GNWT procure for both acute, primary and ambulatory care separately or will the EHR provide all or most of the desired capabilities?
 - What registry (provider, client, terminology, location) functionalities are available in the solution? and
 - Are there third-party solutions that are needed to support the vendor solution?

SECTION 3

GENERAL INSTRUCTIONS

In order to provide the information that is required to develop an RFP for NWT to acquire an EHR solution, Respondents are required to complete the questions in **Appendix "A"**. The answers should be kept to a one or two sentences if possible. Additional supporting information should be kept to a minimum, however, if required are clearly labelled in **Appendix "A"** in the corresponding section.

As indicated, the RFI will not be evaluating the individual solutions but instead used to analyze the results to determine the scope of the EHR solution capabilities to provide for a better RFP for an EHR.

APPENDIX "A"

Section 1:

Respondents to provide a brief description of your company.

Section 2:

Business Capability Modeling is a technique for the representation of an organization's business anchor model, independent of the organization's structure, processes, people or domains. GNWT has developed a Health and Social Services Business Capability Model to provide a high-level understanding of the capabilities that are required in order to provide the desired services to our residents. The Business Capability Model is represented in a diagram of all potential areas that could fall under the EHR solution.

Respondents are required to fill in the table per Clinical Services area.

Section 3:

Technical Capability Model is similar the Business Capability Model but is only representing the technical capabilities that may be needed for the EHR solution.

Section 4:

General Functionality Questions are questions that are outside of the capability models or of specific importance for EHR planning.

Respondents are not to provide pricing as part of the RFI. Any pricing provided will be removed from consideration. Respondents should provide an overview of your solution pricing model.

APPENDIX "A"

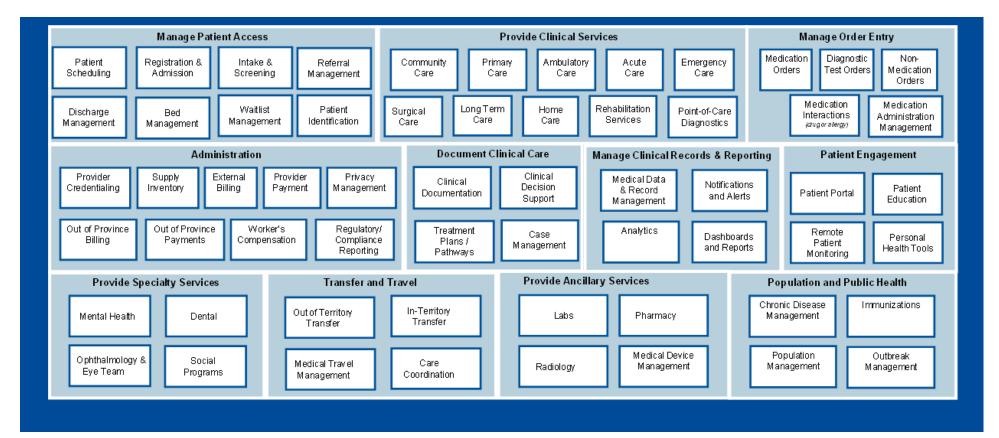
RESPONDENTS INFORMATION

Please provide only one or two precise sentences as a response for each of the questions in this document.

1. COMPANY PROFILE

Description of the Company	Answers
Please provide a brief description of your company, inc	luding but not limited to the following.
Name of Company	
Brief Company Profile	
Name of a key contact person, including telephone numbers, and email address	
The services that your company could provide related to the proposed solution	

2. BUSINESS CAPABILITY MODEL



Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Manage Patient Access	The process of ensuring that patients have appropriate and time	nely access to healthcare services an	d resources.
Patient Scheduling	Ability to enable patient/client/resident/service users to identify and locate an appropriate provider, specify a preferred appointment date and time, book an appointment and receive confirmation. Includes management of rules for making appointments, timeframe needed, and pre-testing needed, along with cancellation and re-scheduling rules.		
Registration / Admission	Collection of a patient/client/resident/service user's demographics, health history, insurance coverage and other data at the start of care.		
Intake & Screening	Collect relevant information to determine needs and eligibility when a person seeks services.		
Referral Management	The process by which a referral is created, tracked and completed for a patient to another service or specialty.		
Discharge Management	Processes for a patient/client/resident/service users to leave the current treatment protocol (e.g., inpatient, physical therapy, ICU) and/or move to another department or facility or released from care.		
Bed Management	Processes to allocate and provision beds to patients, clients, residents and service users.		
Waitlist Management	The process of organizing, prioritizing and overseeing a list of patients who are waiting for a particular care service, procedure or treatment.		
Patient Identification	The process of accurately identifying and confirming the identity of an individual interacting healthcare system. A critical step in ensuring patient safety, effective communication, and delivery of appropriate care.		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Provide Clinical Services	Services relating to the diagnosis and treatment of p	patients	
Community Care	Care in the community outside of clinics, schools, offices, public spaces etc.		
Primary Care	First level or general health care in a community-based clinic.		
Ambulatory Care	Medical services performed in hospital on an outpatient basis, without admission.		
Acute Care	Care provided to patients staying in hospital to receive treatment for a disease or severe episode of illness for a short period of time.		
Emergency Care	Emergency care for patients that need immediate action or experience a sudden illness.		
Surgical Care	Services provided for the treatment of various conditions and diseases through surgical intervention. A comprehensive management of patients before, during and after surgery.		
Long Term Care	Clinical and personal support services to meet a person's health or personal care needs in a homelike setting during a long period of time, provided to people who are unable to perform basic activities of daily living.		
Home Care	Clinical and personal support services to patients/clients/service users in their home.		
Rehabilitation Services	Person centered services across the lifespan to address functional impairments in core areas of function, including mobility, communication/sensory, activities of daily living, work and leisure.		

Point-of-Care Diagnostics	Diagnostic tests that are performed at or near a patient and at the site where care or treatment is
	provided with quick results.

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Manage Order Entry	Capability to create any type of order and track the fulfillment	and outcome of that order.	
Medication Orders	The process by which providers orders/prescribes required medication for a patient		
Diagnostic Test Orders	The process by which providers order recommended diagnostic tests or services		
Non-Medication Orders	The process by which non- medication/services/supplies orders are requested and processed (example: crutches, hearing aids etc.).		
Medication Interactions (Allergy & Drug)	The ability to determine whether there are adverse effects based on a prescribed drug and or another drug and the patient's medical history.		
Medication Administration Management	Full cycle management of medication ordering to dispensing and tracking for the patient		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Administration	Management of a patient's share of costs of a covered healt	h care service.	
Provider Credentialing	Gather, validate and manage provider qualifications.		
Supply Inventory	Procurement, inventory management and distribution tracking.		
External Billing	Billing for NWT patients that have external coverage providers (DND, NIHB, Blue Cross) (may/may not have NWT HC)		
	Patients/Clients requiring service provisions related to a public health concern (ie: infection or disease management) that would not be billed directly.		
Provider Payment	Payments paid to providers.		
Privacy Management	Manage privacy requirements and safeguards based on corporate, legislation and regulatory requirements.		
Out of Province Billing	Billing for patients/clients/service users to that do not have NWT healthcare coverage.		
Out of Province Payments	Payments for patients/clients/service users that are treated at a province outside of NWT.		
Worker's Compensation	Provides medical expenses, lost wages, and rehabilitation costs to employees who are injured or become ill "in the course and scope" of their job.		
Regulatory/ Compliance Reporting	Ensure conformance with legislation and governmental regulations.		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Document Clinical Care	Written, printed or electronic record that provides evidence of	of clinical care.	
Clinical Documentation	Record that provides a summary of the patient/client/resident/service users history, assessment, diagnosis, treatment, and outcomes.		
Clinical Decision Support	Provide clinicians, staff, patients or other individuals with knowledge and person-specific information to help inform clinical care.		
Treatment Plans / Pathways	Detailed plan with information about a patient's disease, the goal of treatment, the treatment options for the disease and possible side effects, and the expected length of treatment.		
Case Management	Record of the various services and planning which reflects a comprehensive approach to care, that ensures use of available and appropriate resources.		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Manage Clinical Records & Reporting	Wide variety of documents generated on, or on behalf of, all	the health professionals involved in	patient care
Medical Data & Record Management	The management of information in an organization throughout its life cycle, from the time of creation or inscription to its eventual disposition		
Notifications and Alerts	Crafting successful programs, processes and follow-ups etc. that remind patients/clients/residents/service users/providers/contacts within the NWT and other jurisdictions of upcoming appointments, medication refills, glucose readings, weigh-ins, etc.		
Analytics	Analyzing patient/client data to support clinical/care decision making. It involves examining patient/client outcomes, identifying patterns of disease, predicting risks and evaluating treatment effectiveness.		
Dashboards and Reports	Information that provides at-a-glance views of key performance indicators (KPIs) relevant to a particular objective or business process; includes the process of obtaining reporting for departmental/process management.		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Patient Engagement	Providing services and tools to support ongoing interaction v	vith patients.	
Patient Portal	Provide patients/clients/service users and families with online access to education, appointment scheduling, patient assessments, immunization/well child records and access to basic patient information such as lab data, and other interactive tools.		
Patient Education	The process of educating patients/clients to influence behavior and produce the changes in knowledge, attitudes and skills necessary to maintain or improve their or their dependents' health.		
Remote Patient Monitoring	The use of digital technologies to monitor and capture medical and other health data from patients and electronically transmit this information to appropriate providers and/or systems.		
Personal Health Tools	Wearables, apps, virtual assistants and self-assessment tools that allow individuals to establish programs to track diet, exercise and routine care, and to monitor chronic illnesses.		

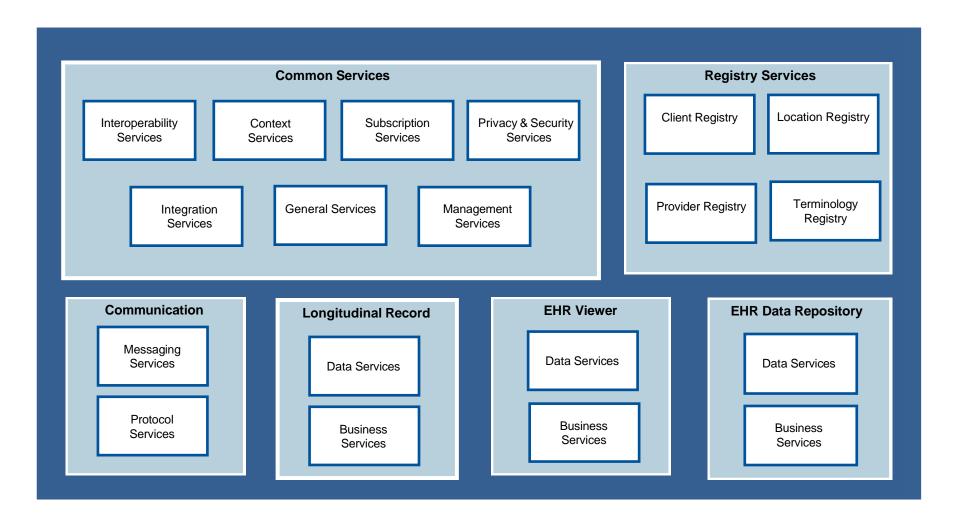
Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Provide Specialty Services	Providing multichannel access to patients and providers.		
Mental Health	Services relating to mental health and addictions counseling.		
Dental	Track dental services provided to patients.		
Ophthalmology & Eye Team	Track eye services provided to patients.		
Social Programs	Services available to patient/client/resident/service users and their families, ensuring that discharged patients will receive appropriate care in the community (internal or external to the NWT). Areas of Care: Child and Family Services, Adult Social Work, Medical Social Work, Community Social Work.		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Transfer and Travel	Providing service for travel required for medical and social	al care/treatment	
Out-of- Territory Transfer	The process by which patients/service users/residents/clients are referred or permanently move to other services or specialties outside NWT		
In-Territory Transfer	The process by which patients/service users/residents are referred or permanently transferred to other services or specialties within the community or other NWT service programs.		
Medical Travel Management	Process to manage travel required for medical care.		
Care Coordination	Organizing patient/service users care/support activities. Sharing information amongst all of the participants concerned with a patient's/service users care to achieve safer and more effective care/support.		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Provide Ancillary Services	Providing supplementary healthcare services that support the primary and acute care provided to patients.		
Labs	The process of performing tests, managing results, and providing reports for clinicians.		
Pharmacy	The process of preparing, preserving, compounding, and dispensing medical drugs.		
Radiology	Imaging technology to diagnose and treat disease, including performing, receiving, and providing reports		
Medical Device Management	The activities that are performed by an organization to design, plan, deliver, integrate, operate and control medical devices used for patient care, testing and treatment.		

Capability	Definition	Provide Details Regarding Solution Functionality	Module that delivers the capability
Population and Public Health	Health status, health outcomes, and disease surveillance preople.	evention within a group of	
Chronic Disease Management	An integrated care approach to managing care for an individual with a long-term illness. Includes screenings, check-ups, monitoring and coordinating treatment, and patient education.		
Immunizations	Process by which a person becomes protected against an infection or a disease through immunizing agent or inoculation.		
Population Management	Manage an individual's costs or healthcare utilization for interventional purposes such as proactive and predisposing disease management, patient education, or surveillance to promote population health.		
Outbreak Management	Protect public health by identifying the source and implementing control measures to prevent further spread or recurrence of the infection or disease. Ensuring population surveillance and transmission trends can be observed and analyzed throughout the outbreak.		

3. TECHNICAL CAPABILITY MODEL



Capability	Definition	Provide Details Regarding Solution Functionality	Component delivering the capability
Common Services	Collection of services between the Electronic Health	Record components	
Interoperability Services	Handle resolution functions that interact between various repositories, and registries. It also handles		
	interoperability between EHR infostructures (i.e., between jurisdictions).		
Context Services	Provides session and caching services		
Subscription Services	Provide the capabilities to subscribe to events and manage the alerts and notification functions when enabled		
Privacy and Security Services	Authentication and authorization services including policy and permission management, as well as interfaces to security mechanisms		
Integration Services	Manage the integration, message brokering and service catalogue functions		
General Services	Provides services for auditing; log management and general error and exception handling		
Management Services	Provides services to configure the EHR and the associated Health Information Access Layer (HIAL) as well as providing services to carry out management function		

Capability	Definition	Provide Details Regarding Solution Functionality	Component delivering the capability
Communication Services	The first point of interaction between a Point of Serv These services provide the very basic connectivity of		
Messaging Services	Handle the message after the application and network protocol wrappers have been removed including, parsing, serialization, encryption and decryption, encoding and decoding, transformation and routing		
Protocol Services	Deal with the network, transport and application- level protocols. These services will support pluggable modules to support various protocols		

Capability	Definition	Provide Details Regarding Solution Functionality	Component delivering the capability
Longitudinal Record Services	The Longitudinal Record Service (LRS) layer is reaccess or place it in the EHR repositories (whether importance in this set of services is the EHR Indeevent or record published to the EHR.	er the data is held locally or one-or-more ot	her infostructures). Of key
Data Services	Handles the interfaces to the data repositories and manages the inflow and outflow of data		
Business Services (Service request management)	Handles the business messages (services requests) sent by PoS applications for processing		

Capability	Definition	Provide Details Regarding Solution Functionality	Component delivering the capability
EHR Viewer	The EHR Viewer would be used by persons who do not have an EHR-enabled PoS application. Because it provides an integrated view-only access to the data, the viewer is typically implemented within a web-browser interface. There are certain functions, however, that must still operate to ensure secure, appropriate access to information. A set of services allow the EHR to interact with the viewer as if it was "just another" PoS application.		
Data Services	Handles the interfaces to the data repositories and manages the inflow and outflow of data		
Business Services	Handles the business messages (services requests) sent by the Viewer for processing		

Capability	Definition	Provide Details Regarding Solution Functionality	Component delivering the capability
EHR Data Repository	In order for EHR data to be stored in and retrieved from services that deals with accessing and managing that access performed by software applications, encapsular consistent and coherent manner, regardless of the upgrouping provide the actual business logic that allows applications.	It data. This set of services substitutes lating the data in a manner that ensur nderlying database technologies. The	s for the direct database es the data is managed in a components of this
Data Services	Handles the interfaces to the data repositories and manages the inflow and outflow of data.		
Business Services	Handle the business messages (services requests) sent by PoS applications for processing.		

Capability	Definition	Provide Details Regarding Solution Functionality	Component delivering the capability
Registry Services	Repositories for identifiers of key attributes, in particular the patient, provider, location, user and clinical terminologies, to ensure that the right clinician or user accesses and provides the right information on the right person in relation to the right location. This ensures that the end user has valid, reliable and understandable information to make safe and health-enhancing decisions.		
Client Registry	Central repository of demographic information used to maintain consistent and accurate information about each patient registered by a healthcare organization.		
Provider Registry	Central repository of healthcare providers' demographic and licensing information.		
Location Registry	Central repository providing a comprehensive directory of all service delivery locations which are intended to deliver patient care.		
Terminology Registry	Central repository of clinical terminologies standards to ensure interoperability of clinical information. (i.e. SNOMED, LOINC)		

4. TECHNICAL CAPABILITY MODEL

Functionality	Questions	Proponent Comments
Base Components	What are the foundational functionalities of the solution that will need to be in place to have a minimally functional system? In other words, what modules/components of the solution will need to be implemented for us to start using the solution?	
Platform Technology	What technology is the system based on?	
Preparation	What resources, technical environment and governance would a Respondent expect for us to have in place to accommodate implementation and operations for the solution?	
Third-Party Software	Are there third-party solutions that are needed to support the vendor solution?	
RFP Information	What information could we provide that will allow Respondent to better respond to the RFP for the solutions (EHR)? Is there information that would allow for better responses and reduce Respondent risk?	
Additional Information	Is there any other information that you could provide that would better allow us to produce a better RFP for the solution? Have we missed anything?	
Hosting Options	What are the hosting options for the solution?	
Offline Access	How does the solution function if there is loss of internet connectivity? What are the offline capabilities?	
Infrastructure Requirements	What infrastructure is required to run the solution on- premise?	
Data	What data, analytics, data warehousing capabilities does the solution have or support? GNWT is currently at the beginning stages of developing a more comprehensive data repository and may be able to adjust to better accommodate the needs of the solution.	

Functionality	Questions	Proponent Comments
Value Add	Does the solution have any additional capabilities that have not been identified yet?	
Pricing Structure	Describe the components of the pricing of your solution such as hosting, implementation, licensing, integration, data migration, etc. This will allow us to request a more balanced price model in the RFP so that we can evaluate the solutions in the most consistent manner. Respondents are not to provide pricing as part of the RFI. Only the structure of the pricing model.	
Clinical Settings	What clinical settings (acute, primary, ambulatory) community (such as homecare, public health, school health) does the solution provide the needed functionality for?	
Virtual Care	Describe the functionality that the solution has to assist GNWT with providing virtual care for our residents?	
Lab Information	Could you provide an overview of the capabilities of the solution to process, store and manage data related to laboratory processes and testing?	
Implementation Partner	Is there a need for third-party professional services for the implementation of the EHR solution? If so, would the Respondent partner with the third-party or would there be an expectation for GNWT to identify and procure the implementation resources? Also, would there be an obligation to use the same implementation partner for future implementations of EHR modules?	
Future Implementation Support	After the initial implementation, could the implementation of future modules/components be accomplished with a third-party, independent of the EHR solution provider?	