# APPENDIX B - UPDATED READINESS ASSESSMENT OF AN EMR SYSTEM FOR LITTLE RED RIVER CREE NATION


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## BACKGROUND

GMAK Consulting completed a Readiness Assessment for an EMR System in Little Red River Cree Nation (LRRCN) in 2017. Significant changes to clinical processes and technology advancements have occurred in all three LRRCN communities, including the development of a new Nursing Station at John D'Or Prairie. LRRCN, with support from Indigenous Services Canada (ISC) and First Nations Technical Services Advisory Group (TSAG), will be engaging in the upcoming EMR Implementation Planning Project. To facilitate and form that project, as well as to document and highlight the changes at LRRCN, GMAK Consulting was engaged to update the initial Readiness Assessment.

The Readiness Assessment Update will focus on the following:

- Clinical and Health Programming
- Staff Complement including Band Staff and First Nations and Inuit Health Branch (FNIHB) Staff
- Clinical and Admin Resources
- Technology
- IT Infrastructure
- Willingness and Motivation to Implement an EMR System

Provider Work Flows will be captured as part of the EMR Implementation Plan and are not part of this work.

GMAK Consulting has been engaged in a variety of EMR projects across the province of Alberta with other First Nations communities. Most recently, partnering with Deloitte, GMAK Consulting delivered an EMR Assessment of the Stoney Nakoda Nation. Findings from Stoney Nakoda Nation, in addition to the numerous clinical and patient outcomes described in the initial Readiness Assessment, have led to the need for an EMR Implementation Plan for LRRCN. This Readiness Assessment Update will assist to understand the underlying clinical and technology environment at LRRCN.

## CURRENT STATE – DEMOGRAPHICS

Little Red River Cree Nation is a First Nations Band in Northern Alberta. It is located approximately 130 km East of High Level, AB. LRRCN is comprised of the three communities of Fox Lake, John D'Or Prairie and Garden River. There are approximately 4,763 residents living within LRRCN, and another 1,315 off reserve, with approximately 55 percent of residents living in Fox Lake, 30 percent in John D'Or Prairie and 15 percent in Garden River.

## CURRENT STATE – CLINICAL AND HEALTH PROGRAMS

Some Health Programs have changed or been modified since the initial 2017 Readiness Assessment was completed. In addition, new Health Programs and pilot programs are currently

being delivered at LRRCN. All programs were affected by the global COVID-19 pandemic in varying degrees. COVID-19 also highlighted the greater need for a holistic and comprehensive EMR system. Paper charts and incomplete medical and vaccine records led to a variety of complexities, including, but not limited to, increased workloads, missing vaccine information, and potential errors at LRRCN.

Primary Care and Public Health are delivered by FNIHB/ISC Nursing, while Home Care is delivered by the Band.

## PRIMARY CARE

Each community maintains their own Nursing Station in which Health Services are delivered. Each of the Nursing Stations are providing Primary Care Services Monday to Friday from 8 am to 5 pm, with additional support from an On Call Nursing Team. Primary care staffing is a mix of Nurse Practitioners (NP) and Registered Nurses (RN), with a recently added NP lead (who also leads the On Call Nursing Team). Currently, Primary Care is being staffed by FNIHB, as well as staffing support from two external agencies: Canadian Health Care Agency (CHCA) and Bayshore. Both external staffing agencies have contracts with FNIHB; however, they are sometimes limited in the staffing hours they can provide. Nursing estimates that approximately 50-60 percent of staffing hours are provided by FNIHB staff, 30-40 percent from CHCA, and about 10 percent from Bayshore.

The Primary Care Nursing Team is currently made up of the following:

| | |
|---|---|
| Primary Care - Part Time | 2 NPs<br>14 RNs |
| Casual | 4 NPs<br>4 RNs |

Each Nursing Station has a Nurse-In-Charge (NIC). At Garden River, the NIC is a 0.6 full-time equivalent (FTE), at John D'Or Prairie the NIC is a 1.0 FTE, and at Fox Lake the position is currently vacant. Each Nursing Station has a Pharmacy Clerk that is supported by a remote Pharmacist. In addition, there are agency Paramedics in each Nursing station provided to FNIHB by Advanced Paramedic Limited (APL).

The Paramedic Team is currently made up of the following:

| | |
|---|---|
| Team Lead | 2 Paramedics that rotate on/off schedule with each other |
| Paramedics | 4 Paramedics<br>➢ 2 based in Fox Lake<br>➢ 1 based in Garden River<br>➢ 1 based in John D'Or Prairie |
| Primary Care Paramedics (PCP) | 3 PCPs<br>➢ 2 based in Fox Lake<br>➢ 1 based in John D'Or Prairie |
| On Call Paramedics | 6 paramedics that are called on as needed |

The paramedic team actively participates in providing care at the Nursing Stations with the Primary Care team. They respond to emergent and urgent calls from the community via a Medical Emergency Response Vehicle (MERV). Generally, the paramedic team will stabilize and transport the patient back to the Nursing Station to provide ongoing treatment. If a patient needs to be transported out of the community, a call to RAAPID (Referral, Access, Advice, Placement, Information & Destination) is made.

RAAPID is a call centre that provides a single point of contact for consultation, advice and logistical support to transport urgent and emergent patients as needed. RAAPID provides a recorded line with all key members on the line including physician support, STARS, AHS and EMS in real time. Front line staff have stated that RAAPID can be time consuming and they will occasionally call the North Communication Centre (NCC) and the physician directly to transport a patient.

There are physician groups that provide support to LRRCN. The physician groups are affiliated with the Fort Vermillion Medical Clinic and High Level. Currently, there is support at Garden River and John D'Or Prairie; however, there is no consistent physician support at Fox Lake.

LRRCN is still using the On Call Nursing Support that was originally created as an interim solution, approximately 12 years ago. This is supported by three NPs that provide primary care and nursing support during the day, as well as afterhours to LRRCN. They are based virtually and do not document in the patient charts. The On Call Nursing Team has FNIHB provided laptops and two of the three have FNIHB printers.

HOME CARE

Home Care is administered by LRRCN and the Band is responsible for the delivery of care as well as the staff. The Home Care RN leads the Home Care team from John D'Or Prairie to provide care to all three communities. The Home Care team travels to Fox Lake and Garden River to provide care. They generally travel on Physician days, which was previously Thursdays in Fox Lake and Wednesdays or Fridays in Garden River.

The Home Care Team is currently made up of the following:

| | |
|---|---|
| Team Lead | 1 RN |
| LPNs | 2 LPNs<br>➢ 1 LPN - Based in John D'Or Prairie<br>➢ 1 LPN - Goes to Fox Lake three times a week and Garden River two times a week |
| HCAs | 4 HCAs<br>➢ 2 HCAs in Fox Lake<br>➢ 2 HCAs in John D'Or Prairie |
| Current posted positions | 1 RN – Full Time for Fox Lake<br>1 HCA – Full Time for Garden River |

COMMUNITY & PUBLIC HEALTH

The programs in Community and Public Health are under the LRRCN mandate and FNIHB plays an integral role in the planning and delivery of some of these programs. FNIHB is involved in the broader Immunization Programs that include Well Child Care, Adult Immunizations, School Program, and Prenatal care. These were supported during the COVID-19 response through a Surge Nursing Team that was provided by ISC.

Primary Care and Community & Public Health work collaboratively to deliver a variety of programming, including Mental Health and Addictions, Communicable Diseases (CDOM), TB Testing, Pre-and-postnatal Infant Assessments, Healthy Beginnings, Sexual Health, and other programs.

Other Public Health Services such as Native Nation Alcohol Drug Abuse Program (NNADAP), Maternal Child Health (MCH) and Transportation services are under the leadership of the Band Health Director. It was reported that the Aboriginal Diabetes Initiative (ADI) is currently not running. Each community has one Transport Clerk that is part of the Band staff.

There is a new Clinical Counsellor program being piloted at LRRCN. It is being delivered by an external organization, Northern Counselling & Therapeutic Services (NCTS) under the Mental Wellness program. These counsellors are external to LRRCN and chart independently of the current patient record.

The Public Health Nursing Team is currently made up of the following:

| | |
|---|---|
| Public Health - Part Time | 5 RNs |

## CURRENT STATE – DOCUMENTATION

PRIMARY CARE

Primary Care, including the physician groups, are documented in the client paper charts. Clients will have a “home site chart” in the community they predominantly access care in, and can have “transient charts” in the other two communities. On occasion, if the care provider cannot find a transient chart, they may start a new one. This can lead to a client having more than one transient chart in a community. Nursing has stated that most residents of LRRCN have three charts, one home and two transients.

Pharmacy is using the KROLL Pharmacy Management system, although Nursing has mentioned numerous flaws with the processes around its use. Nursing is using KROLL directly as a dispensary profile, to create prescription labels, reorder medications from McKesson, and somewhat as an inventory management tool.

Currently, the pharmacist is off site and is not directly involved in dispensing medications. Nursing will self-dispense or utilize the onsite Pharmacy Clerks (non-regulated staff) to dispense

medications. The information that is inputted into KROLL is not connected to Netcare and does not become part of the patient's medication requisition. This is not uncommon, as only licensed pharmacies using KROLL are uploaded to Netcare. As such, hospital pharmacies are also not connected to Netcare. Inventory management of medications through KROLL has been challenging as there are inconsistencies in how Nursing uses the inventory management tool. Some nurses will record the number of bottles administered, while others will record the number of pills administered. In addition, expired medications are not recorded in KROLL and are often thrown out without documentation. Training and standardized processes in a future state EMR will be critical to solving this issue. In addition, using the Best Possible Medication History (BPMH) in a future EMR state could create better medical management, as well as better medication requisitions for patients.

Primary Care is still using separate charts for prenatal patients. These were originally created as the main charts were unorganized, lacked the necessary information and to keep all relevant information related to the pregnancy in one place. The prenatal chart used to be kept separate from the main charts; however, they are now put directly into the main charts leading to duplication in charting. In addition, in John D'Or Prairie and Fox Lake, a spreadsheet has been created to track all prenatal patients. This spreadsheet automatically populates timelines for assessment dates and tracking of critical milestones during the pregnancy. Garden River is currently the only community not using the spreadsheet.

Previously, Primary Care nursing staff was using an electronic Nursing Activity Report (eNAR) to track patient demographics data. Nursing reports that this is now being captured via paper versions of NARs. The initial rollout and implementation of eNARs was difficult due to technology and connectivity issues. These issues are likely now resolved with the improvements to digital connectivity. This data can likely be captured via a new EMR system, which would improve nursing efficiencies and allow for more direct care time.

When Primary Care is involved with immunizations, they will record this data in the Community Health and Immunization Program (CHIP). CHIP is used across Primary Care, Community Care, and Home Care for immunization records. CHIP is also fully integrated across the province as the primary source for immunization records within First Nations communities.

The paramedic team charts directly into the client paper charts. They also use an Emergency Patient Care Record that is a triplicate form to record all urgent and emergent patient interactions.

Patient lab work is often taken in the Nursing Station or via Home Care and sent off-site for analysis. Fox Lake and John D'Or Prairie have daily lab pick-ups, while Garden River is usually picked up on Fridays or sooner if someone is going between Nursing Stations. Lab work is then sent to High Level or Fort Vermillion via Medivac as available. Results are mailed and faxed back to the Nursing Station, as well as the Ordering Provider. This sometimes leads to duplication of records being sent and uncertainty over follow up. The NP generally follows up with lab work, however currently a formalized process is not in place.

## ON CALL NURSING

The On Call Nursing Support team is still documenting on an excel sheet on their own computers. The NP will document the patient information, time of call, who is calling, which community, the position of the caller and chart notes in the excel sheet. This charting never makes it to the client chart in LRRCN. This charting is saved, approximately once a month, on a localized drive on the FNIHB computers that only the On Call NPs, Nurse Manager, and Director of Nursing have access to. To move the charting to the localized L: drive, the NP must log into the Health Canada VPN (Virtual Private Network). If a medication prescription is required, the On Call NP will either give a verbal order to an NP, or fill in a prescription template on a word document and electronically fax it to the Nursing Station, paramedic, pharmacy, or physician group. Throughout the whole process, the On Call Nursing NP has no access to the client's medical chart. There is significant risk with this process as the On Call NP may have limited information regarding potential allergies, drug interactions or other clinical concerns. In addition, there is a significant risk to patient safety by receiving a verbal order for medication as a translation error could result in the wrong dose, frequency or drug being administered. Approximately 90 percent of the prescriptions are verbal orders. The On Call Nursing Team has FNIHB provided laptops and use their personal home internet connections.

## HOME CARE

Home Care has fully implemented and is using the OKAKI CARE EMR (Community Assessment Response and Empowerment). CARE was trialed by Primary Care unsuccessfully in the past as it did not meet the needs of Primary Care. Currently within CARE, each community has a different database that requires the user to log into. Each of these databases requires specific access permissions and credentials for each user and users are only able to access their own community. There is the potential for residents to have different medical records on the same EMR system but in a different community's database. Each of these residents will also have at least one "home site" paper chart with Primary Care, in addition to potentially having a "transient" paper chart in each of the other communities as well. All Home Care staff, including RNs, LPNs and HCAs are documented in CARE.

OKAKI CARE now has the ability to complete RAI assessments. This was previously a gap in CARE EMR that required Home Care to use Momentum EMR to complete the RAI-CA and the RAI-HC. Home Care states they no longer have Momentum on any computers that they have access to.

## COMMUNITY HEALTH

Community and Public Health document in a variety of places, depending on the programming, who is involved, and where the services are delivered.

Communicable Diseases charts in the client's paper charts. All immunization programs, including TB testing, pre/postnatal, Well Child, School Immunizations (grades one, six, nine) chart in CHIP.

Programs such as Good Food Box are currently not charting; however, Nursing has expressed the desire for group documentation to be an available feature in a future EMR system.

NNADAP has staff in each community that charts in their own paper files. Group and individual patient data is often recorded and stored in the NNADAP office in paper files that do not become part of the patient's medical health record. Every community will have its own charts and every NNADAP worker will keep their own notes. Maternal Child Health (MCH) is similar, as each staff will have their own files and they are not part of the patient's medical health record. MCH staff utilize CHIP but do not access the patient's medical charts.

REFERRALS

Standardized processes for referrals between Health Care Professionals at LRRCN are a noted gap. In addition, secure messaging is not currently an option for staff at LRRCN. Primary Care is using informal messages between providers to relay information. Staff will sometimes call other Nursing Stations to get information as needed. Messages to physician groups can be faxed to the Fort Vermillion clinic using the Referral Template Form Note. However, these physicians do not have access to medical information or the patient's paper chart if they are not on-site. The same form is used for referral to Mental Health and Wellness.

Referrals around skin and wound care highlight some of the largest concerns with the lack of an EMR. These referrals can go to and from Primary Care, Home Care, Physician and On Call Nursing as needed. Health Care Providers are texting photos of wounds to each other to provide consultation and treatment. This causes concern for health data and privacy, as these photos contain health information. Although, they generally do not contain patient data along with the photos. On Call Nursing uses phone calls as their primary source of sending and receiving referrals as their remote work does not provide other options.

An EMR with secure messaging and the ability to upload documents or photos would be considered best practice and would increase efficiencies and effectiveness of communication between Health Care Providers.

NETCARE

During the initial Readiness Assessment, Netcare was being rolled out to LRRCN. The ongoing support of Netcare access is still a priority for ISC. Previously, not all staff that could benefit from access to Netcare were able to access it. This has improved and currently, all staff that require Netcare at LRRCN, have access to it. Home Care staff can access Netcare through the OKAKI CARE system using their individuals credentials, while staff in Primary Care and Community and Public Health are accessing Netcare through the portal. The uptake and rollout of Netcare has greatly improved since 2017. Nurses on reserve in Alberta were the first to have access to Netcare under their own authority and not under the authority of a physician or Alberta Health Services. Access to Netcare provides Health Care Providers access to patient health information, including lab and clinical reports and specialist assessments.

## CURRENT STATE – INFORMATION TECHNOLOGY INFRASTRUCTURE

The IT infrastructure in LRRCN has significantly improved since 2017. These improvements include the installation of fibre cabling to the Nursing Stations, as well as cell phone towers to each community in LRRCN.

TSAG continues to provide connectivity and IT Support to the Band and its computers. The Band purchases its own hardware and TSAG provides support as necessary. FNIHB staff devices are provided via ISC and have different user and access requirements. Applications are limited on FNIHB devices.

### CONNECTIVITY

Connectivity at LRRCN has drastically improved over the last five years. Previously, connectivity was brought into LRRCN through a wireless connection from the Axia Supernet network. ATG has now run their own fibre lines into the communities and directly into the Nursing Stations. There are no longer wireless hops for connectivity, which has led to a faster and more stable internet connection. ATG provides the fibre cabling from the Supernet POP to the Nursing Stations.

Nursing Stations were previously receiving up to 5 Mbps; however, with the fibre cabling that was run to the Nursing Stations, the current speed for each site is 50 Mbps. The costs have also decreased, resulting in the Nursing Stations receiving 10x the speed at a lower price (paid by TSAG via funding from ISC).

While previously, there was no cell phone coverage within the three communities, as of March 30, 2022 there have been additional cell phone towers added, resulting in full cell LTE coverage across John D'Or Prairie. The Garden River and Fox Lake cell towers will go live in August 2022. Nursing staff have commented on the connection improvement within the Nursing Stations and in the community.

### HARDWARE & SOFTWARE

There is still a mix of Band and ISC supplied computers and devices. FNIHB staff receive hardware and devices from ISC. The Band computers can be purchased anywhere and ATG also sells some computers to the Band. TSAG is not involved in the purchase of these devices and they do not track inventory. TSAG does support these computers and devices as needed.

### PRIVACY AND SECURITY

Most of the computers require a username and password to access the computer. FNIHB computers have a log in for the computer, a separate login for the Health Canada VPN, and then a login for different programs including emails or Netcare (triple protected). Band computers may have logins for the computer, but not necessarily. These computers do not access health information without a log in to a particular program.

## CURRENT CLINICAL RISKS

The clinical risks of not having a complete medical health record were highlighted and amplified during the COVID-19 pandemic and the vaccination rollout. Frontline nurses that participated in vaccine delivery shared stories of difficulties with recording patient vaccination records into the proper electronic medical record and the complete client record. Nurses were sometimes recording vaccine information on paper and later inputting the record into CHIP in an inefficient and potentially incorrect manner.

Clinical risks with segregated paper charts have been well-documented in the past. Multiple charts for one resident creates a potentially incomplete summary of the patient's history and medical information. An incomplete medical record can pose a risk to the patient and the clinician providing care. The clinician is relying on incomplete information to make medical and clinical decisions that can affect the patient's health and safety of care. In addition, this duplication of charts may lead to critical medical information being lost. An EMR system, with access to the full medical history, would provide a safer practice for the clinicians and better clinical outcomes for the patients.

## IT CONSIDERATIONS AND MITIGATION STRATEGIES

Several IT considerations that were issues in 2017 have improved and are no longer issues when determining an EMR Implementation Plan for LRRCN. These include improvements to the IT infrastructure, connectivity, EMR feature updates within current systems being used, and new Nursing Stations being built.

### STANDARDS AND REPORTING REQUIREMENTS

*Challenge – Duplication of record keeping and reporting requirements.*

A record is often created in a paper system and then later transcribed to an electronic reporting system.

*Mitigation*

Ensure that reporting requirements are built into the new EMR system to alleviate the need for duplication of paper reporting.

### TECHNOLOGY

*Challenge – End User Devices (Printers and PCs)*

Currently in LRRCN, different models of computers and devices are being used at the three Nursing Stations. This may pose an additional challenge for those supporting the hardware that

will be used to access the EMR system that is implemented. Maintaining applications across different hardware and software may add an additional layer of complexity.

*Mitigation*

The hardware at each site could be upgraded to the same make and model, while running the same operating system to allow for effective support and a reduction in licensing and maintenance costs. If Band and FNIHB staff both need to access the EMR, exploring the ability to use the same hardware between Band and FNIHB would greatly improve the chance for a successful implementation. If it is not possible to standardize the hardware, all hardware will need to meet the minimum system requirements to operate the EMR program.

## CHANGE ADOPTION

*Challenge – Previous rollout attempts in the past*

In some cases, past attempts to deploy and expand usage of EMRs or new systems in LRRCN have been met with challenges and resistance. If the precedence and opinions of staff are that the deployments are disruptive and eventually unsuccessful, it makes future rollouts more challenging.

*Mitigation*

Currently, there is a strong appetite from frontline, support staff and management to implement a new EMR system. As implementation begins, all parties should be consulted on current pain points and be part of a User Acceptance Testing (UAT) process to ensure successful adoption. In addition, upfront training, as well as ongoing training and support, is critical. The creation of on-site "super users" to assist with in-the-moment issues will be required.

*Challenge – Remote Physicians/Health Provider EMR Usage*

The physician group is in the communities infrequently, presenting additional challenges with training and adoption. The On Call Nursing Team, Pharmacy and other health providers are also offsite when they provide care. Remote access to the EMR system would be necessary to ensure a full and complete client medical record.

*Mitigation*

Consultation with the remote working groups to create a workflow that allows them to easily access the EMR remotely would ensure buy-in and usage of the EMR system. In addition, full use and charting within the EMR can be established as a requirement to provide care to LRRCN, ensuring compliance.

*Challenge – Staff Turnover & External Staff*

FNIHB in LRRCN experiences high turnover as well as rotational and agency staff. Inconsistency in staffing creates a challenge for process development and training.

*Mitigation*

To ensure the EMR is successfully implemented, and staff are confident in using the new EMR, an in-depth policy and procedure manual should be created. In addition, the development of a quick reference manual for the user to refer to at the point of input will assist with common questions. Each staff should be orientated to the new EMR, as well as ongoing training and support. Finally, the user should have access to real-time support either onsite via an educator/"super user" or remotely through a system where the trainer can see the user's screen. Agency staff can be provided training materials to complete prior to coming to LRRCN.

A quick and simple, streamlined process for creating new user accounts and providing access will be essential regardless which EMR platform is chosen.

## PRIVACY AND SECURITY/SHARING

*Challenge – Privacy – Ownership, Control, Access, Possession (OCAP)*

The principle of OCAP is particularly important to consider when evaluating an EMR implementation. There are substantial challenges in maintaining the privacy of patient records while allowing data to be shared among providers and systems. The more information that can be made readily available to all health care providers about a patient's history and condition, the more likely the quality of care and health outcomes improves. Data custodianship will need to be determined, assigned and implemented to ensure ownership and possession of the data is maintained. In addition, currently there is no Privacy Officer or Lead Data Custodian identified at LRRCN.

*Mitigation*

All stakeholders, including the Band, health providers, FNIHB and physicians must understand the impacts and realities of what it means to be a custodian of the data. ISC is currently working on a separate project dealing with Privacy Impact Assessments (PIAs) and Data Custodianship. LRRCN can benefit from the outcomes of this project. Identifying a Privacy Officer or Lead Data Custodian should be considered as part of the LRRCNs data strategy.

*Challenge – Continuity and Migration of Data*

The issue of continuity and migration will need to be addressed and historical data will need to be stored and maintained from both a legal and quality of care standpoint. If paper charts or even

a current EMR system are decommissioned, a strategy will need to be implemented to maintain continuity and determine migration criteria.

*Mitigation*

The ability and strategy for data to be imported should make up part of the RFP evaluation for a potential new EMR implementation. There are also requirements for data from federal and provincial legislation that need to be followed.

## POTENTIAL RISKS WITH EMR IMPLEMENTATION IN LRRCN

Currently, the three communities are treated separately in terms of patient medical information. To achieve the goals of a complete patient medical record and removing multiple charts, LRRCN would need to create a system of information and privacy sharing across LRRCN as a whole. The system would need to ensure there are measures in place to eliminate duplication of patient records.

Another challenge will be the mix of staff at LRRCN. Currently, there are FNIHB, Band, external agencies staff, as well as a physician group providing care to residents of LRRCN. The external agencies (two for Nursing support, one for paramedic support, one for counselling and the physician group) will need to have strong communication and buy-in to ensure a successful EMR implementation. Determining user needs for these user groups will be critical for the EMR evaluation criteria.

## READINESS FACTORS

After consideration of the IT technical improvements, the clinical processes, and the noted desire from staffing to move from paper chartings to a Primary Care EMR system, LRRCN is well position to switch to an EMR system.

*READINESS FACTOR – IT Infrastructure*

The IT Infrastructure at LRRCN has improved to the point where the devices and access to devices are no longer a limiting factor for an EMR rollout. Band devices have limited security, however these devices will not be accessing the new EMR system. FNIHB devices, which are triple password protected, will be able to access the EMR system.

*READINESS FACTOR – Connectivity*

The connectivity issues at LRRCN are no longer a limiting factor for an EMR rollout. This includes the installations of fibre cabling to the Nursing Stations as well as cell tower improvements in all 3 communities.

*READINESS FACTOR – Front Line Staff Desire*

The staff that were consulted were overwhelming eager to move from paper charting to an EMR system that supported a complete patient record.

*READINESS FACTOR – Front Line Staff Understanding*

The vast majority of the staff consulted understood the impacts and had the ability to use and/or currently use an EMR system at another worksite. However, there are external agencies that provide support to primary care services at LRRCN, and these agencies will need to be informed, educated, and trained on the new EMR system as well as data security, privacy and OCAP concerns.

*READINESS FACTOR – Clinical Support to Staff for Rollout*

Staffing remains a challenge at LRRCN. The use of FNIHB nursing, as well as 2 external agencies, adds a level of complexity for rollouts as staff has limited time to learn and adapt to new processes and a new EMR system. A planned rolled out would be best supported with additional staff to cover clinical hours while the initial rollout is occurring. Similar to how a Surge Nursing Team was provided by ISC during the COVID-19 response, a Surge Implementation Team during the initial rollout could be provided. This would provide extra time for staff to get familiar and comfortable with the new EMR system, while being able to provide the care as needed.

*READINESS FACTOR – Band Engagement*

Band engagement from Band Leadership has been both supportive and occasionally unresponsive. Engaging Band Leadership often and early, as well as including Leadership on key working groups during the EMR Implementation Planning phase will assist in ensuring a successful rollout.

*READINESS FACTOR – OCAP and Data Management*

The principles of OCAP and data management need to be considered and highlighted during the RFP procurement process. It will be vital to ensure that the RFP clearly lays out the expectations to the potential EMR vendors what is required and expected from a data management and security standpoint.

*READINESS FACTOR – Clinical Workflows*

The Updated Readiness Assessment captures the health care programming and processes of the documentation workflows. The EMR Implementation Planning Project will identify and address any information gaps to ensure all clinical requirements are captured for the RFP.

*READINESS FACTOR – Funding to Implement EMR*

A likely criteria in the evaluation matrix for the successful EMR vendor will be the cost to implement and integrate with the existing systems in LRRCN. The funding to implement the chosen EMR system will need to be determined after the successful vendor is awarded the RFP.

| Readiness Factor | Readiness Level |
|---|---|
| IT Infrastructure | Ready |
| Connectivity | Ready |
| Front Line Staff Desire | Ready |
| Front Line Staff Understanding | Ready with Conditions |
| Clinical Support to Staff for Rollout | Ready with Conditions |
| Band Engagement | Ready with Conditions |
| OCAP and Data Management | Ready with Conditions |
| Clinical Workflows | To Be Determined during Implementation Planning Phase |
| Funding to Implement EMR | To Be Determined during Implementation Planning Phase – Post RFP Response |

**READINESS RECOMMENDATION – GO/NO GO**

The Updated Readiness Assessment for Little Red River Cree Nation provides a detailed overview of the changes to the technology and clinical changes over the last five years.

The improvements to connectivity, IT infrastructure and technology make an EMR Implementation at LRRCN more likely to succeed than in the past. Although health delivery at LRRCN is complex, with multiple mixed employment status (Band, FNIHB, agency, visiting physician groups), all health providers and patients would greatly benefit from moving the current documentation processes to an integrated EMR system.

Given the improvements at LRRCN, the appetite from frontline staff, support from Band and Nursing leadership, and the benefits of moving from paper charting to a Primary Care EMR, it is recommended that LRRCN moves forward to the EMR Implementation Planning Phase.

# APPENDIX I

## BENEFITS TO IMPLEMENTING AN EMR SYSTEM

When determining the best outcome for LRRCN in regards to an EMR implementation, it is important to review the benefits of an EMR system. For LRRCN, where staff is rotational, the patients often move between the three communities and the physician group provides care on a visiting basis; the benefits are vast.

Removing multiple charts would vastly improve health outcomes for community members. A streamlined charting system and real-time access to medical data gives clinicians the relevant information they need while the patient is in front of them. An integrated medical chart presents a more coordinated and efficient process, improving patient safety and reducing medical errors.

Other benefits of an EMR include:

- Increased legibility and complete documentation, which reduces potential medical errors
- Enhanced privacy and security of patient data
- Reduction in duplication charting and multiple client charts
- Reduction in costs through decreased paperwork, improved safety, and improved health outcomes
- Ensuring all patient medical history, including allergies, immunizations, blood type, current and past medications, past procedures, lab results, testing and recommendations from other health providers are available and easily accessible in one location
- Reduced need for physical storage and security measures for medical information
- Increased efficiency with less time spent trying to find and learn relevant medical information from other sites, databases and/or charts
- Increased ability to track and report patient population data
- Monitor population trends and provide specific programming as needed
- Increased quality of care

# APPENDIX II

## OTHER RECOMMENDATIONS FOR A SUCCESSFUL EMR IMPLEMENTATION AT LRRCN

- Review all reporting requirements and include as many as possible in new EMR system (eg – eNARs)
- Review all clinical forms and include as many as possible in new EMR (referrals, lab requisitions, paramedic Emergency Patient Care Record, etc)
- Standardize procedures among staff (eg – medication inventory (bottle vs pill), referral/lab work follow up)
- Standardize IT devices such as computers, printers and phones as much as possible (band and FNIHB devices)
- Consider the use of a Surge Nursing Team during EMR Rollout to support clinical staff
- Ensure quick reference manual is at every point of entry device to support staff during rollout and ongoing
- Ensure a quick and simple, streamlined process for creating new user accounts and providing access to the new EMR system
- Ensure high levels of Band Leadership engagement
- Identify a privacy officer or data custodian
- Ensure working groups understand OCAP principles when evaluating RFP vendor proposals

## GLOSSARY

AHS – Alberta Health Services

APL – Advanced Paramedic Limited

ATG – Arrow Technology Group

BPMH – Best Possible Medication History

CARE – Community Assessment Response and Empowerment

CDOM – Communicable Disease & Outbreak Management

CHCA – Canadian Health Care Agency

CHIP – Community Health & Immunization Program

EMR – Electronic Medical Record

eNAR – electronic Nursing Activity Report

FNIHB – First Nations and Inuit Health Branch

FTE – Full Time Equivalent

HCA – Health Care Aide

ISC – Indigenous Services Canada

LRRCN – Little Red River Cree Nation

MCH – Maternal Child Health

MERV – Medical Emergency Response Vehicle

NAR – Nursing Activity Report

NCTS – Northern Counselling & Therapeutic Services

NIC – Nurse In Charge

NNADAP – National Native Alcohol and Drug Abuse Program

NP – Nurse Practitioner

OCAP – Ownership Control Access and Possession

RAAPID – Referral, Access, Advice, Placement, Information & Destination

RFP – Request for Proposal

RN – Registered Nurse

TB - Tuberculosis

TSAG – Technical Services Advisory Group

VPN - Virtual Private Network