Chronic Pain Prevention & Management Strategy

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PREPARED BY:

Dr. Brenda Lau, MD, FRCPC, FFPMANZCA, MM (Pain Management), CGIMS, FRCPC Founder (Pain Medicine)
Brenda Poulton, RN, MN, NP, CPE
Doug Zabkar, Project Management/Strategy Development, Western Management Consultants

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Executive Summary

Northern Health identified in early 2014 that there was a need to improve and enhance chronic pain management services for the population it serves. A Project Steering Committee was established in May 2014 to guide a review to develop a chronic pain strategy. This review was conducted by an External Panel comprised of individuals with chronic pain expertise. The strategy developed is intended to guide the development and delivery of regional services over the next 5 to 10 years.

The nature of impact of pain on society and on the health system is significant. Pain is the number one reason people seek health care treatment, accounting for about half of all physician visits. It is estimated that pain is costing society more than cancer, heart disease, and HIV combined. From Northern Health's perspective, there exists a high demand for chronic pain services:

- 60,000 adults in Northern Health experience chronic pain.
- Between 550 and 890 individuals living in residential care beds experience chronic pain.
- In 2012/13, chronic pain accounted for close to over 73,000 unscheduled Emergency Department visits.
- In 2012/13, there were approximately 372, 000 additional physician visits across Northern Health resulting from chronic pain patients due to higher consultation rates.
- 34,800 chronic pain patients experience depression or anxiety.
- Approximately 1,400 Northern Health staff experience chronic pain, which results in 39,900 lost work days per year. This lost time contributes to human resource cost pressures (sick time and resultant overtime, long-term disability).

The External Panel conducted a comprehensive consultation process, interviewing 130 care providers from 24 communities across all three HSDAs. Interviewees acknowledged that Northern Health does not currently provide a coordinated pain service and that existing pain services provided do not meet the current needs of the region. Several pockets of pain expertise exist within Northern Health. There are opportunities to leverage this expertise but significant additional capacity needs to be developed in order to implement a comprehensive, organized, and effective evidenced-based chronic pain service to meet the current and future needs.

Best practice research in pain care identifies chronic pain as a chronic disease. As such, there should be a focus on prevention, education, and self-management at the community and primary care levels. Consistent with this chronic disease philosophy, research also supports access to a full range of pain services in a patient-centred manner via a tiered or "stepped" approach to care. In this model, patients are treated at the lowest appropriate service tier in the first instance, and only "stepping up" in care levels as clinically required. By focusing on building capacity in the lowest levels of care, it is estimated that between 80%-90% of chronic pain care should occur outside the hospital setting.

Strategies

The External Panel took into account results from the consultation process, best practice research, and past experience and expertise in coming up with nine recommendations. These recommendations were also informed by the Steering Committee's guidance to:

- Acknowledge and align with other initiatives underway within Northern Health;
- Be realistic and affordable for Northern Health to implement;
- Optimize/leverage existing infrastructure in the North;
- Recognize, learn from, and share excellent practices within Northern Health; and
- Optimize pain management care capacity within home care and primary care resources.

The strategies are as follows:

1. **Service Model**: Implement a stepped care-based Chronic Pain Prevention and Management model that:

    - Is **patient-centred** and focuses on the spectrum of biological, psychological, and social needs of the individual and their families;
    - **Promotes prevention** by providing education in the community **AND** by working collaboratively with other Northern Health programs to prevent acute pain progressing to chronic pain;
    - Provides **regional access** to a broad scope of pain services; and
    - Has a specialized pain unit that provides a **full scope of advanced pain services** for complex pain **AND** that is a **teaching/quality resource** for all Northern Health chronic pain care providers.

2. **Chronic Pain Prevention and Management Program:** Create a region-wide Chronic Pain Prevention and Management program within Northern Health to oversee the development and management of coordinated and organized chronic pain services across Northern Health.

3. **Regional Pain Centre:** Formalize the UHNBC Pain Clinic as a regional pain centre for tertiary assessment, interventional procedures, education, and research.

4. **Education for Communities and Patients:** Provide support to communities and their citizens to become knowledgeable, empowered, and supported in their pain care.

5. **Chronic Pain Education for Care Providers:** Develop and implement a chronic pain education program to ensure that Northern Health has sufficient, appropriately trained, and knowledgeable resources in order to support the provision of pain services as set out in the Chronic Pain Prevention and Management Model.

6. **Support for Care Providers:** Provide supports to chronic pain care providers to enable them to be able to efficiently and effectively provide care.

7. **Integration with Acute Services:** Integrate chronic pain services with Northern Health acute services to promote the early identification of pain and to prevent acute pain transitioning to chronic pain.

8. **Resources:** Ensure that appropriate staffing and resources are in place to support the provision of chronic pain care as set out in the Chronic Pain Prevention and Management model.

9. **Quality Improvement:** Establish a performance-based quality improvement and evaluation framework to support the development of standards, setting targets, measuring outcomes, evaluating results, and providing improvement feedback.

Early Implementation Ideas

Northern Health will need to improve chronic pain knowledge in order to increase its capacity to provide effective pain care. This capacity should be built for both patients and care providers. A number of high impact, low cost initiatives that leverage existing resources have been identified that can be undertaken in the next 18 months. These initiatives will make a significant impact on Northern Health's capacity in the short term and enable it to better implement the recommendations made in this report.

Background

Northern Health identified in early 2014 that there was a need to improve and enhance chronic pain management services for the population it serves. While some chronic pain management services are being delivered across the Health Authority, they are not adequately meeting their patient needs. Northern Health commissioned the development of a Chronic Pain Prevention and Management Strategy that will take into account best practices and future needs for these services. The Chronic Pain Prevention and Management Strategy is intended to guide the development and delivery of regional services over the next 5 to 10 years.

Project Approach

An External Review Panel ("the Panel") with expertise in chronic pain management was identified to conduct this engagement (team members are listed in Appendix 1). The Panel was tasked with developing strategies based on the following steps:

1. Assessing the current state of patients' needs, chronic pain management services, and Northern Health's ability to meet the health needs of the existing population.
2. Determining the future demand for chronic pain management and appropriate related services, to support the target population.
3. Defining the roles of acute care facilities, chronic disease programs, and specialist and primary care service providers with respect to chronic pain management services.
4. Determining how to promote collaboration and partnerships among these different facilities and health care professionals for the delivery of chronic pain management services.
5. Identifying resources (human resources, equipment, capital, operational, etc.) required per site and/or across the region to meet the chronic pain management service needs, recognizing the reality of capital and operating fiscal restraint across the health sector.
6. Developing processes to ensure resources are utilized in an efficient and effective manner in order to maximize access to chronic pain management services for patients in Northern Health.

Project governance was established to guide this review:

- Dr. Ronald Chapman, Vice President of Medicine, and Penny Anguish, Chief Operating Officer, Northwest HSDA, of Northern Health were the Executive Sponsors charged with leading the development of the Chronic Pain Prevention and Management Strategy.
- A Steering Committee was established to provide expertise and guidance to strategy development. Steering Committee members are as follows:

    - Dr. Suzanne Campbell;
    - Olive Godwin;
    - Stacey Joyce;
    - Dr. Richard Kraima;

- Rachelle Miller;
- Dr. Devan Reddy;
- Dr. Inban Reddy; and
- Denys Smith.

An initial project meeting was held on May 27, 2014, to review project objectives, participant roles and responsibilities, and the project approach. The Steering Committee and Executive Sponsors tasked the Panel to develop a practical strategy for Northern Health that takes into account the following principles:

1. Acknowledge and align with other initiatives underway within Northern Health;
2. Be realistic and affordable for Northern Health to implement;
3. Optimize/leverage existing infrastructure in the North (e.g. coordinate with BCCA; Community Care Clinics);
4. Recognize, learn from, and share excellent practices within Northern Health; and
5. Optimize pain management care capacity within home care and primary care resources.

Definition of Chronic Pain

The International Association for the Study of Pain (IASP) defines pain as a sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.

From this definition, it is important to note the following (MBF 2007):

- Pain is always subjective; there are no objective measures. However, pain-related disabilities, pain-related behaviours, and influencing factors are measureable;
- Pain is an experience with sensory and emotional aspects;
- The relationship between tissue damage and pain is variable, so the size of an injury can be a poor guide as to how much pain someone is in. The body sends signals from the injury site to the brain. These signals only become experienced as pain when they reach the conscious brain, and the person interprets them as pain. That interpretation is influenced by many factors, including past experience, beliefs, and the situation; and
- Pain is expressed in behaviour - that is how we communicate it to others and an important effect of pain is on behaviour and related disabilities.

There is no absolute distinction between acute pain and chronic pain - rather, they are recognized to be part of a continuum whereby features of inflammatory, somatic, musculoskeletal, visceral, neuropathic, and cancer pain may be components of pain of varying durations (CPS 2010).

Therefore, the IASP has defined **acute pain** as pain of recent onset and probable limited duration. It usually has an identifiable temporal and causal relationship to injury or disease. Acute pain is usually transitory, lasting only until the noxious stimulus is removed or the underlying damage or pathology is

healed. In distinction, **chronic pain** commonly persists beyond the time of healing of an injury (typically more than three months) and frequently, there may not be any clearly identifiable cause. (IASP 2014)

For purposes of this review, chronic pain refers to chronic, non-malignant pain. Malignant pain is pain related to cancer. (IASP 2014).

Acute or chronic malignant pain is currently being managed in Northern Health through partnership with the BC Cancer Agency utilizing their cancer management guidelines, BC Palliative care guidelines, Hospice Palliative care guidelines, and province-wide Pain and Symptom Management Palliative Care guidelines and clinics. Hence, this is considered out-of-scope.

The Chronic Pain Prevention and Management Strategy addresses chronic, non-malignant pain.

Impact of Chronic Pain

It is estimated that one in five Canadians suffer from chronic pain (Reltsma 2011). Statistics Canada 2013 statistics show 9.7 to 15% of the Canadian population experiencing moderate to severe chronic pain (Statistics Canada 2013); children are not spared and the prevalence rate increases with age (Van Dijk 2006). Pain is the number one reason people seek health care treatment, accounting for about half of all physician visits.

Risk factors for developing chronic pain are biologic, sociologic, psychological, and environmental. Chronic pain is more common in those with depression, anxiety, and substance-use disorders. Pain-associated disability is also more common in those from lower socio-economic strata and in those who dislike their work or feel underpaid and unsupported at work. Risk is higher in certain vocations (e.g., truck driving), in survivors of overwhelming trauma (e.g., childhood abuse, natural disasters, combat), and in those genetically sensitive to noxious stimulation. Conditions commonly associated with chronic pain include: spine disease, headache disorders, fibromyalgia, neuropathies, and arthritis (WHO 2008).

Chronic pain is the most frequent cause of suffering and disability and can become so debilitating that it affects every aspect of a person's life – the ability to work, go to school, perform common tasks, maintain friendships and family relationships – essentially to participate in the fundamental tasks and pleasures of daily living (IOM 2011).

Sixty (60) percent of chronic pain sufferers eventually lose their job, suffer loss of income, or will have a reduction in responsibilities as a result of their pain (CPS 2010). Those chronic pain sufferers that are employed have a mean number of 28.5 lost work days per year (Lynch 2011). Untreated acute pain can lead to chronic pain syndromes and increased disability. It leaves more people disabled than cancer or heart disease (CPS 2010, Turk 2002).

Chronic pain represents a large financial burden to the economy. Expenditures include the direct costs related to treatment and provision of health care services, and indirect costs such as those associated with loss of productivity, lost tax revenues, and disability payments (Guerriere 2010). Chronic pain is

said to be costing society – both governments and individuals – more than cancer, heart disease, and HIV combined (CPS 2010, Phillips 2008).

Estimating the impact of chronic pain on the health system:

- It is estimated that between 50% and 80% of individuals in residential beds experience chronic pain (Parmlee 2010).
- Many patients use the Emergency Department to manage their chronic pain. Up to 28 % of all of Emergency Department visits have been estimated to be related to chronic pain (Todd 2010).
- In 2007, Boulanger et al (Boulanger 2007) reported that people with severe chronic pain had seen a physician more often (average of 10 versus 3.8 consultations per year).
- Those with chronic pain were five times as likely to utilize health care services (CPS 2010). Fifty-eight (58) % of them experienced symptoms of depression or anxiety, co morbidities that increased the utilization of health care resources (Sipkoff 2003).
- Access to tertiary pain centres in BC is limited and average wait-times are 18 to 24 months (PainBC 2010). These pain centres are unable to meet clinical demands of chronic pain patients in BC.

Estimates of the impact of chronic pain to Northern Health are calculated by applying the above research findings to the Northern Health population demographics and staff:

- 60,000 adults in Northern Health experience chronic pain.[1]
- Between 550 and 890 individuals living in residential care beds experience chronic pain.[2]
- In 2012/13, chronic pain accounted for close to over 73,000 unscheduled Emergency Department visits.[3]
- In 2012/13, there were approximately 372, 000 additional physician visits across Northern Health resulting from chronic pain patients due to higher consultation rates. [4]
- 34,800 chronic pain patients experience depression or anxiety.[5]
- Approximately 1,400[6] Northern Health staff experience chronic pain, which results in 39,900[7] lost work days per year. This lost time contributes to human resource cost pressures (sick time and resultant overtime, long-term disability).

Northern Health has a high demand for chronic pain services and these patients are heavy users of health resources and have a significant impact operating costs.

[1] Calculated at 20% of total Northern Health population of 300,000 (2012/13)
[2] Calculated as between 50% and 80% of total residential care beds of 1,112 (2012/13)
[3] Calculated as 28% of total Emergency Department visits of 261,873 (2012/13)
[4] Calculated as difference between chronic pain patient annual visits (10.0) and non-pain patient visits (3.8) applied to estimated number of people with chronic pain (60,000)
[5] Calculated as 58% of people with chronic pain (60,000)
[6] Calculated as 20% of the Northern Health workforce (7,000)
[7] Calculated as the number of Northern Health workers with chronic pain (1,400) each taking 28.5 days off work per year due to pain issues

Geography and Demographics

Northern Health covers an area of 600,000 square kilometers and is the largest territory of the regional Health Authorities in the Province. It is organized into three HSDAs: Northeast, Northern Interior, and Northwest.

Northern Health provides health services to approximately 300,000 people. A portion of these people are concentrated in the larger towns while many are dispersed in smaller rural, remote communities. Due to its resource-based economy, the North generates much of the province's GDP. However, many communities suffer from poor economic diversification, which contributes to lower socio-economic standings.

Northern communities are not as healthy when compared to the southern part of the province. There is a higher prevalence of chronic disease, which is attributed to risk factors such as: smoking, obesity, physical inactivity, and poor nutrition.

Also, mental health and substance use issues continue as endemic factors in northern rural communities. While some Aboriginal communities face particularly severe challenges, as demonstrated by evidence of higher rates of addiction and suicide, non-Aboriginal communities face significant pressures as well. Mental health and substance use issues pose a significant challenge to the health care system and often impedes assessment and treatment for chronic pain (Northern Health Service Plan 2013).

Available health resources vary widely from community to community with fewer resources (both number and types) being available in rural towns. People in these communities often must travel to seek out care and the sheer size of the region makes accessing services more difficult and expensive. People in the North are described as being stoic and not active in seeking out health care. This cultural characteristic, combined with the burden of travel, impacts early diagnosis and treatment. There are few pain resources in Northern Health. The resource variability, geography, and culture issues cited above impact the population's ability to access timely pain treatment.

The North has seen growth in its transient workforce due to the initiation of some large infrastructure projects and the growth in the oil and gas industry. Many of these workers are from out of the region and/or province and do not have General Practitioners (GPs). They have difficulty accessing care and do not have continuity of care as they move between communities. From a pain perspective, these workers are on time-limited contracts and often only want a quick fix for their pain – medications – as they cannot afford to take time off work to properly treat their conditions.

These above-noted cultural, geographic, and demographic factors are important considerations when developing an overall service model for chronic pain.

Current State Findings

The Panel conducted extensive consultations via face-to-face meetings and/or video/tele-conference calls with each HSDA. In total, 130 people were interviewed. An interview guide was developed and sent out to each stakeholder in advance of the consultations. The interview guide focused on:

- Current services offered and patient volumes;
- Access to services;
- Quality of care;
- Challenges and opportunities;
- Education;
- Research; and
- Partnerships.

A list of those Northern Health staff that participated in these consultations is provided in Appendix 2. Key findings from these stakeholder consultations are provided below:

Current Services

The scope of pain services varies widely across Northern Health. The services available are not provided in a coordinated, programmatic approach, but rather are provided based on care providers taking a special interest in pain and increasing their knowledge and skills. Most GPs are familiar with basic prescription-based treatments but few are knowledgeable in alternative non-prescription treatments. During the consultation process, all interviewees were asked whether they thought patients' chronic pain was being treated in an optimal way. Almost without exception, all said "no", which indicates that the need for pain services is not currently being met.

A number of chronic pain resources were identified during the review process:

- Northern Health has one tertiary hospital-based pain clinic which is located at UHNBC in Prince George. The clinical services are mainly interventional procedures with a focus on spine blocks and intrathecal pumps. Services are provided by one anesthesiologist and one GPA (GP with a specialty in anesthesia) supported by 1.5 FTE of nursing and 1.0 FTE of clerical staff.
- Each of the HSDAs has access to physicians traditionally trained with some pain interventional expertise (e.g. anesthesiologists, GPAs and radiologists) and access to fluoroscopy or ultrasound technology. Access to these resources and to more advanced procedures varies by community.
    - There is one radiologist in Dawson Creek and resources in Quesnel providing fluoroscopy guided facet blocks.
    - The GPAs are most active in providing some pain interventions in Smithers, Hazelton, Dawson Creek, and Quesnel.
    - Lidocaine infusion therapy has been used in Smithers, Terrace, and Quesnel.

- The tertiary settings also have varying levels of allied health providers traditionally associated with pain services such as occupational therapy, physiotherapy, nurses, pharmacy, and social work. Some communities also have access to independent living workers and mental health liaisons.
- Advanced pain-related specialist services are anesthesiologists, fellowship-trained pain specialists, rheumatologists, neurologists, pediatric pain specialists, palliative care specialists, psychiatrists, addiction medicine specialists and physical medicine and rehabilitation specialists.

    - Rheumatology and/or internal medicine are available in Prince George, Fort St. John, Fort Nelson, and Prince Rupert and teleconferenced to Masset providing disease specific diagnosis.
    - Neurology clinics currently covering general neurology services are not necessarily focused on headache or neuropathic pain and are held in Prince George.
    - There is one multiple sclerosis clinic in Prince George.
    - Northern Health does not have any fellowship-trained pain specialists, or physical medical and rehabilitation specialists.

- All Nurse Practitioners (NP) provide primary care and work in the community. The NP role could be expanded in the acute care setting to support program development, education, mentorship, clinical assessments, and pain management. A number of the NP's have been involved in the early introduction of the Pain PSP module or were providing some of the care for complex primary patients whose needs may include chronic pain.
- There are no advanced practice nurses (Clinical Nurse Specialists-CNS, NPs) in the acute care setting in supporting program development, education, clinical assessments and pain management.
- None of the hospitals in Northern Health have an established acute pain service. Acute pain therapies, such as epidural and patient-controlled analgesia, are incorporated in Prince George and Fort St. John but dedicated staff or resources do not exist. Communities such as Dawson Creek, Quesnel, Smithers, and Terrace provide patient-controlled analgesia or home-based pump delivered opioid infusions. However, there are no region-wide protocols to support the expanded use of these therapies across acute care settings. Most small rural hospitals do not have ultrasound technology required for some advanced interventional treatments.
- No formal psychology services were noted during the review. However, Northern Health has a robust mental health program with nurses, counselors, and liaisons at the frontline in most hospital sites. Some mental health resources are co-located in Primary Care Homes and in health clinics and will do outreach work in the community. There is limited access to psychiatry services for most communities with most psychiatrists residing in larger communities. Telehealth consultations are being accessed by Mackenzie, Fort Nelson, and Fort St. James. Where addiction services exist, they are delivered in a community-based clinic with a physician, a nurse, and a mental health worker.
- At the primary care level, there are numerous GPs with additional training.

    - GPs and NPs with special interests in pain consultation/counseling are piloting services in community-based practices in Vanderhoof, Smithers, Prince George, Quesnel, and in the

Northern Health unattached patient clinics/Primary Care Homes in Fort St. John and Prince George (Blue Pine Clinic).
    - GPs with special interests in oncology/palliative care (GPO) are located in Fort St. John, Smithers, Vanderhoof and Prince George.
    - GPs with acupuncture skills are located in Masset.
    - GPs with addictionology training often provide these services in clinics set up with mental health and addictions and/or community-based day treatment programs (Prince George, Fort Nelson, Fort St. James, Quesnel, and Kitimat) and rarely but also in some community-based GP practices (Terrace, Dawson Creek, and Smithers).

- Health units and clinics range from nurses only to interdisciplinary Primary Care Homes consisting of Chronic Disease nurses, social work, occupational therapy, physiotherapy, mental health, and independent living workers.
- Residential care facilities vary in size and in staffing. Most of the direct care is provided by care aides, and supported by licensed practice nurses (LPNs) and registered nurses (RNs). No residential care facility has a resident NP or physician.
- Chronic disease program, chronic disease management (CDM) nurses, and practice support coaches are available in various communities such as: Fort St. John, Terrace, Prince George, Fort St. James, Masset, Kitimat, Prince Rupert, Smithers, and Quesnel.

Overarching Findings

The following overarching findings were identified during the consultation process:

- **Support for Pain Strategy:** There is recognition of and support by those interviewed for the development and implementation of an integrated, Northern Health-specific Chronic Pain Prevention and Management Strategy. The strategy should be coordinated across Northern Health and have a significant regional service delivery component.

- **Limited Specialized Expertise:** Across all levels of care, there is an inadequate supply of specialists and individuals with pain expertise, which presents a major barrier to providing and coordinating stepped pain care across the region. Interviewees highlighted the importance of education for professionals, patients and families as well as an interdisciplinary approach to pain management. Northern Health does not have the same level of expertise/capacity of the larger, urban-based health authorities.

- **Referrals outside of Northern Health:** Many patients with unresolved pain issues are being referred to pain clinics in other regions (Vancouver, Victoria, Kelowna, and Edmonton), all of whom have long wait lists and are themselves experiencing resource challenges. Patients face challenges travelling long distances for these services as often multi-day treatments are required. Overwhelming, interviewees identified the need for timely access to additional stepped pain care in the region.

- **Low Awareness of Existing Resources:** Many care practitioners are not aware of existing pain education and clinical resources that are available to both patients and care providers.

- **Over-Reliance on Prescriptions:** Most GPs rely on prescriptions to manage pain and many clinicians do not have the knowledge/expertise on alternative treatments. However, when medications are appropriate, many stakeholders strongly highlighted the need for improved appropriate access, safe prescribing practices, and monitoring. These factors were particularly important for the safe use of opioids in non-cancer pain.

- **Little Sharing of Helpful Practices:** There are a number of pockets of advanced pain care across Northern Health and staff who have a strong interest in improving pain services in their communities. However, there is no mechanism to share this expertise across communities or HSDAs. Three Divisions of Family Practice exist (North Peace, Northern Interior Rural, Prince George) and interviewees have enthusiastically noted how much their respective organizations have enabled discussions and innovative ideas.

- **No Support for Complex Treatment:** Physicians with more advanced pain skills are afraid to "advertise" that they provide pain services. The fear is that they would become flooded with pain patients. Pain patients are complex and challenging to treat and GPs feel they do not have the proper support to service the patients.

- **Wide Variation in Services by Community:** Chronic pain care is somewhat dependent on geographic location, availability of skilled resources, and physical resources (e.g. facilities, equipment).

Interviewees acknowledged that Northern Health does not have a formal chronic pain service. As such, many comments made highlighted gaps in service and opportunities for improvement. Appendix 3 provides a detailed summary of the comments collected on the current state. Interviewees were also asked for their top priorities for improving chronic pain services. A summary of these ideas is provided below:

- Upskill in pain education for all care providers (physicians, nurses, care aides, etc.) to increase the scope of treatment options available in primary care.
- Improve resources for patient/family education to better promote patient self-management.
- Increase use of NPs in residential and palliative care to alleviate physician shortage.
- Increase access to regional pain clinics.
- Increase focus on holistic, patient-centered pain service with adequate supports for GPs (psychosocial supports).
- Availability of pain guidelines/algorithms, templates, and order sets to better guide treatment for common conditions.
- Increase access to pain specialists for complex consultations.
- Implement pain assessment tools for all care team members.
- More layered care options beyond existing services.

- Guidelines for opioids use and management.
- A centralized, specialized, interdisciplinary chronic pain clinic that provides a broad scope of services.
- Better access to allied support in smaller communities.

The Patients' Voice

Chronic pain can be frustrating and difficult to treat and frequently providers lack the time, knowledge, or supports to manage pain effectively. Patients may be told to learn to simply "live with it", left to seek alternative methods, or find empathetic health care providers on their own. Patients with chronic pain may be labelled as "malingers" and "drug seekers" or "frequent flyers" as they struggle to find treatments that will relieve pain and improve quality of live. These circumstances promote the cycle of high use of health care services and significant impact on daily function resulting in the inability to attend work or actively participate in family life, and often social isolation (Dewar 2009).

As part of this Northern Health Chronic Pain Prevention and Management Strategy Review, a patient survey was circulated to chronic pain patients via various primary care providers to provide the "patients' voice" as to how they view the current system meets their needs. While Northern Health patients identified unique problems and gaps, there were also common findings throughout recent pain management service reviews done across the province.

Common themes emerge from recent consultations with providers and people and families living with chronic pain. Numerous gaps in current available care, as well as system navigation problems, were identified across the province. These were:

- Increased education for people living in pain and families.
- Increased pain education for health care providers.
- Improved access to pain care, specialized pain care, and services.
- Improved access to alternative and complementary therapies (physiotherapy, massage, acupuncture, yoga etc.).
- System improvements – access, navigation, communications, resources, and knowledge of resources.

Northern Health Patient Survey Feedback

There was a limited response (8) from patients but those that did respond had been in pain for 5 to greater than 10 years and identified numerous challenges with living in pain and barriers to find effective care.

Pain had a significant impact on many areas of their lives, including:

- Enjoyment and quality of life.
- Emotional well-being.
- Employment and finances.
- Ability to care for and participate in family life.
- Maintain social and family relationships.
- Ability to perform activities of daily living.
- Sleep and mood.

Barriers identified in accessing supports or treatments to deal with pain were:

- Supports needed were not available in their area.
- Finding providers that were supportive and empathetic.
- Long wait lists for the supports & assistance needed.
- Not having information about different treatment and services.
- Cost of medications.
- Cost and availability of alternative treatments.
- Ineffectiveness of medication and treatments.

Improvements identified that would positively impact their pain and lives were:

- Being treated with dignity and respect.
- Providers with knowledge to effectively manage pain.
- Improved access to support services.
- Increased time with providers to find effective treatments.
- Medications that would more effectively treat pain.
- Access to alternative treatments.
- Decreased costs for medications, alternative treatments and support services.
- Access to fitness centers to maintain mobility.

Several patient surveys have been conducted in BC in recent years. The results of these surveys largely mirror those of the Northern Health Patient Survey. More details on these surveys are provided in Appendix 4.

Best Practices in Pain Care

This section outlines current best practices in chronic pain management services based on the experiences of the Panel members, and review of literature (both peer reviewed and grey literature). These best practices will inform the specific strategies recommended for Northern Health.

Chronic Pain is a Chronic Disease

Chronic pain arises because of neuroplastic changes in the central nervous system and is physiologically different from acute pain. Chronic pain can originate from injuries leading to acute pain but also has other causes. Increasingly, chronic pain is being classified as a chronic disease and not simply a symptom of other illnesses (Conway 2011). The definition for chronic disease - as used in the framework for a Provincial Chronic Disease Prevention Initiative in 2003 (CORE 2010) is as follows:

> *"chronic diseases are usually characterized by complex causality, multiple risk factors, a long latency period, a prolonged course of illness, function impairment or disability, and in most cases, the unlikelihood of cure"*

As such, the principles of care for chronic pain should be similar to those of other chronic diseases with a focus of a chronic disease care model on prevention, education on self-management, and health and wellness education for patients and their families. The management of all pain – acute, sub-acute, recurrent pain, chronic non-cancer, and cancer-related pain should be integrated so the biological, psychological, and social needs of patients, no matter the condition, are addressed in a timely and coordinated manner (CPS 2010, Conway 2011).

In a stepped care model, treatment is patient- centered and recognizes that different people require different levels of care. Patients are treated at the lowest appropriate service tier in the first instance, only "stepping up" to intensive/specialist services as clinically required. More intensive treatments are generally reserved for people who do not benefit from simpler first-line treatments, or for those who can be accurately predicted not to benefit from such treatments. Results of treatments are monitored systematically and changes are made ("stepping up") if current treatments are not achieving desired outcomes (Hayes 2011). This model often increases effectiveness of treatment while lowering the overall costs of care (Conway 2011).

Prompt Access to Skilled Professionals

Current pain knowledge and resources exist to provide safe relief and/or improved quality of life for 90% of the individuals experiencing chronic pain (ANPS 2010, Gatchel 2006); yet, it remains one of the most poorly treated diseases. Evidence suggests that early treatment of acute pain can prevent the development of chronic pain and that early treatment of chronic pain improves the potential outcome of chronic pain treatments. There is unequivocal evidence of the cost-effectiveness of chronic pain strategies that encompasses interdisciplinary care provided in a stepped approach to care based on the level of need.

There are significant gains to be made through prevention, community awareness, early intervention, and better access to chronic pain services necessary to reduce disability, inappropriate healthcare use, and economic burden. Building capacity at the lowest service levels can have a big impact on access in a cost effective manner. Education of primary health care providers and development of better tools to support effective management in the community must be supported in order to maximize the potential

to intervene (MBF 2007). Research indicates that interventions that target working with appropriate pain management, together with other support such as job flexibility, could significantly reduce lost productivity costs due to chronic pain.

Early assessment and intervention should be encouraged, particularly where chronic pain is limiting the ability of people to participate in daily activities, family life or return to work. This process can be facilitated through awareness and education of both people with chronic pain and society as a whole (e.g. medical practitioners, employers, and carers). In the workplace context, these strategies are needed to counter workplace misperceptions and discrimination against people with chronic pain (ANPS 2010).

Evidence-Based Treatment in a Patient-Centered Approach

Over the last two decades, epidemiological and 'risk factor' research has provided very strong support for a body of pain behavioural research, which underpins the 'biopsychosocial' model of pain (Conway 2011). This model comprises three components: physical, psychological, and environmental, which can overlap. So to assess a person suffering from pain, it is important to assess the contribution of factors in these three areas to the pain experience of each patient. This often means that more than one category of health professionals may be required to make a full assessment and to communicate with each other to weigh up the relative contributions, enabling selection of the most appropriate treatment or treatments in a "psychosocial" model using an interdisciplinary approach. It is important that interdisciplinary care be provided at all levels of care and with seamless transitions from primary to tertiary care (Conway 2011).

There is strong evidence for the cost-effectiveness of chronic pain strategies that encompasses psychosocial, interdisciplinary care provided in a stepped approach to care based on the level of need. Pain management therapies include psychological, physical therapies, medications and procedures which should be delivered safely by skilled and knowledgeable providers adhering to current practice standards. For example, it is recognized that opioid drugs can be safe and effective when used as prescribed and appropriately monitored; patients must be carefully screened and treated as needed for mental health, substance use disorders and co-morbid conditions like sleep apnea.

Knowledgeable and Enabled Patients

Community-based tools and resources can have a positive impact on chronic pain. There is good evidence that chronic pain patients, their families, and supporters that have knowledge about their condition can reduce health care costs and the impact of chronic pain on their lives. For example:

- Adult education for back pain can have a positive impact on patient beliefs and clinical outcomes.
- Pain support groups can assist with support and rehabilitation and meeting needs that are not always available or appropriate to receive from health providers.

- Patients engaged in active self-management programs suffer less disability, have a more realistic view of their chronic pain, and accept it as a condition that can be managed and not “cured” and that a healthy lifestyle is still possible.

It is important to note that self-management strategies should be utilized across all levels of care and should evolve along with the chronic pain condition.

Recommendations

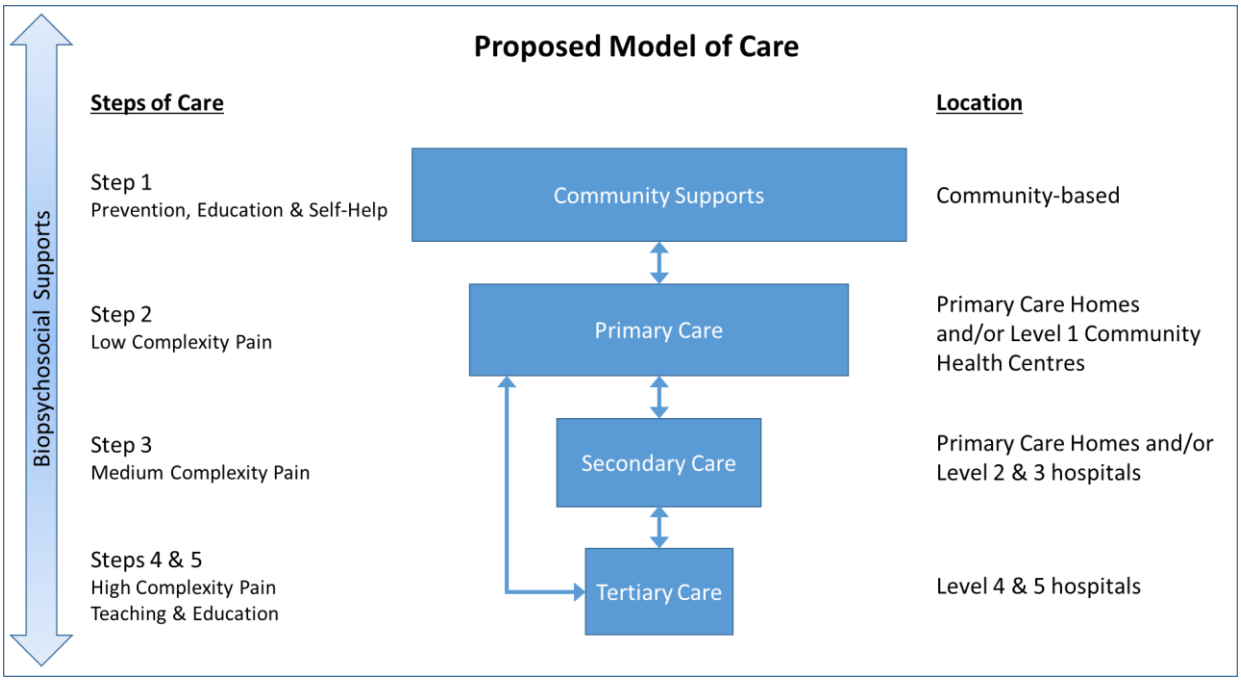
1. SERVICE MODEL

Strategy

Implement a stepped care-based Chronic Pain Prevention and Management model (Table 1) that:

- Is **patient-centred** and focuses on the spectrum of biological, psychological, and social needs of the individual and their families;
- **Promotes prevention** by providing education in the community **AND** by working collaboratively with other Northern Health programs to prevent acute pain progressing to chronic pain;
- Provides **regional access** to a broad scope of pain services; and
- Has a specialized pain unit that provides a **full scope of advanced pain services** for complex pain **AND** that is a **teaching/quality resource** for all Northern Health chronic pain care providers.

Table 1



It is anticipated that 80-90% of chronic pain services will occur in community, primary, and secondary care outside the hospital setting (CPS 2010, Gatchel 2006, IHA 2012). Primary Care Homes will play an important role in increasing capacity and access to interdisciplinary pain care appropriate to the biological, psychological and social needs of each patient. This model also defines specific roles for existing hospitals to provide advanced care and care where community resources are not available.

This model is premised on the following care guidelines:

- **Step 1 - Prevention, Education & Self-Help**

  Prevention, education, and self-help services are delivered at the community level. The goal at this stage is to empower the patient through knowledge of their condition and to prevent disability from chronic pain. Information provided to people and their families will include:

  - Education on the nature of chronic pain and pain self-management.
  - Existing provincially and nationally developed support programs.
  - Education on developing self-management skills.
  - Northern Health public health strategies.
  - Chronic disease programs.
  - Life coaching and solutions–focused counselling.
  - Healthy living promotion.
  - Workplace safety.

- **Step 2 - Low Complexity Pain**

  Low complexity pain services will be delivered at the primary care level in each community. These services will be delivered in Primary Care Homes that can be nurse-led clinics, GP private practices, and/or community health centres, depending on the resources available in each community. The focus of care at this level is to provide:

  - Early screening for signs of central sensitization that exacerbates or prolongs neuropathic pain and nociceptive pain of acute conditions.
  - Early screening for psychosocial yellow flags that exacerbates pain-related disability and poor function.
  - Early screening and recognition of potential substance abuse.
  - Early navigation and access to advanced pain service levels where appropriate (Step 3 or 4).
  - Early activation of advanced self-management to prevent occurrence of comorbid conditions such as mental health, substance abuse, and physical deconditioning.
  - Basic treatments to prevent acute pain from developing into chronic pain.

- **Step 3 - Medium Complexity Pain**

  Medium complexity pain services will be delivered at the secondary care level. Care will be provided by interdisciplinary teams led by a GP, NP, or a specialist with an interest in and a practice that focuses on pain.

  - Ideally, services will be delivered in Primary Care Homes or, where resources are not available, virtually via co-located, affiliated, interdisciplinary team members.
  - Advanced pain therapies offered will be offered (advanced opioid prescribing, non-complex ultrasound guided procedures, basic subcutaneous infusion therapy).

- Referrals will be made to specialist care (e.g. internal medicine, pain, psychiatry, physical medicine and rehabilitation, etc.) as part of care where required.
- Referrals will be made to hospitals for specific treatments if resources are not available in the community.
- Where treatments are not effective, referrals will be made to tertiary care for advanced pain procedures.

- **Step 4 - High Complexity Pain**

  High complexity pain services will be delivered at the tertiary care level in a hospital setting. Care will involve a broad-based review which may include:

  - Advanced pain procedures and therapies
  - Complex care coordination.
  - Referral to non-Northern Health centres.
  - Coordinated specialist care.
  - Cross discipline medical and allied health specialty access.

  Once stabilized, patients will receive pain care and pain maintenance plans and will be discharged back to their GP for ongoing care.

- **Step 5 - High Complexity Pain - Prince George Pain Clinic**

  High complexity care, as described in Step 4 above, will be delivered at UHNBC. A regional pain clinic will reside at UHNBC that will have additional responsibilities not available at other hospitals delivering Step 4 services:

  - The regional pain clinic will serve as central referral centre for the Northern Health in providing a breadth of clinical pain services to:

    - Help manage in-patients with cancer and non-cancer pain in crisis.
    - Provide expertise in consultation with comprehensive recommendations in the whole person management of chronic pain.
    - Perform advanced outpatient procedures for pain patients who have not responded to strategies in the community.

  - The regional pain clinic will play a leadership role for Northern Health in providing chronic pain expertise and knowledge. It will:

    - Be the hub of advanced knowledge and the centre for clinical innovation, quality improvement, and research.
    - Be the Northern Health link and repository of provincial & national resources and pain information updates.

- Provide ongoing training and mentorship for Northern Health acute and chronic pain program to build capacity at all levels of care.
- Develop educational materials and chronic pain care guidelines.
- Develop relationships with other programs (e.g. mental health, acute services, and addictions).
- Provide and/or coordinate access to pain specialist consultations for all Northern Health communities.

- **Services by Level of Care**

  Services to be provided at each level of care are presented in Table 2. The existing Northern Health Distribution Framework defines services to be delivered at each Northern Health delivery site (see Appendix 5). These site levels have been incorporated into this table under Care Provider, as appropriate, to show how chronic pain services integrate with this existing Northern Health framework.

Table 2

Chronic Pain Service Prevention and Management Model

Services by Level of Care

Level of Care	Care Provider	Services Provided	Location

Step 1 Prevention, Education & Self-Help	Community-based resources	• Community-led:
		  ○ Ministry of Health-based resources on healthy communities
		  ○ Chronic Disease programs
		  ○ Community/Provincial organizations (Oasis, Arthritis Society, PainBC)
		• Patient-led health promotion programs
		• GP-led PSP programs on healthy communities
			All communities

Step 2 (a) Low Complexity Pain	Primary Care Home: Nurse-based clinics	• Basic pain screening • Counselling • Group pain/chronic disease management education • Pre-printed orders for basic medication use	Communities with nurse-based clinics
Step 2 (b) Low Complexity Pain	Primary Care Home: GP-based practices (single or group of GPs)	• Basic pain screening • Counselling • Group pain/chronic disease management education • Navigate patients to community- based pain resources (self-management, education, group programs)	Communities with GP-based practices

Level of Care	Care Provider	Services Provided	Location
		• Standard safe opioid prescribing including urine drug screening • Prepare patient pain management plans • Motivational interviewing	
Step 2/3 **Low/Medium Complexity Pain**	Level 1 Sites: Health Centres	• Depending on the resources available in rural communities, community health centres may provide Step 2 care and certain aspects of Step 3 care	Level 1 Sites: Fraser Lake, Hudson Hope, Houston, Stewart, Dease Lake, Granisle, Atlin, Southside, Valemount, Tumbler Ridge
Step 3 (a) **Medium Complexity Pain**	Primary Care Home: (GP, NP and/or specialist clinic that includes pain sub-specialized physicians & interdisciplinary team) OR Level 2 Sites: Small hospital with capacity for stable patients	• Navigate patients to community-based pain resources (self-management, education, group programs) • Provide chronic pain management group programs • Advanced pain therapies (advanced opioid prescribing, non-complex ultrasound guided procedures) • Individual/group counselling • Prepare patient pain management plans • Advanced pain assessments using interdisciplinary team • Cognitive behaviour therapy	Communities with Primary Care Home supports Level 2 Sites: MacKenzie, Fort St. James, McBride, Chetwynd, Masset, Queen Charlotte City, Burns Lake
Step 3 (b) **Medium Complexity Pain**	Level 3 Site Small community hospital	All services described in Step 3 (a). In addition: • Basic Subcutaneous infusion therapy	Level 3 Sites: Vanderhoof, Smithers, Fort Nelson, Kitimat, Hazelton
Step 4 **High Complexity Pain**	Level 4 Sites: Hospital with limited specialty services	All services described in Steps 3 (a) & (b). In addition: • Advanced intravenous infusion therapy • Acute pain service (epidural, patient controlled analgesia) • Fluoroscopy-based procedures • Psychiatry • Inpatient mental health • Addictions/detox • Disease specific clinics (e.g. headache, neurology, rheumatology)	Level 4 Sites: Quesnel, Prince Rupert, Fort St. John, Dawson Creek, Terrace

Level of Care	Care Provider	Services Provided	Location
Step 5 **High Complexity Pain – Regional Pain Clinic**	Level 5 Site: Regional hospital	All services described in Step 4. In addition: • Inpatient crisis pain management • Fluoroscopy guided sympathetic nerve blocks • Advanced Pain Therapies • Cross-specialty assessments	Prince George

2. CHRONIC PAIN PREVENTION AND MANAGEMENT PROGRAM

Strategy

Create a region-wide Chronic Pain Prevention and Management program within Northern Health to oversee the development and management of coordinated and organized chronic pain services across Northern Health. The program should be co-managed by an administrative Program Manager and a Clinical Lead from the regional pain clinic. Given that chronic pain is recognized as a chronic disease, consideration should be given to whether the Chronic Pain program should be included in Northern Health's Chronic Disease portfolio, or whether it is better suited reporting to another part of the organization.

Chronic Pain Prevention and Management program responsibilities will include:

- Establishing a community of practice for chronic pain care providers across Northern Health to facilitate sharing of best practices and to promote mentor/mentee relationships.
- Providing oversight on the development and implementation of a chronic pain education strategy and program.
- Ensuring optimal access to pain services including establishing and monitoring linkages of communities to stepped care resources.
- Setting practice standards for Step 3, 4 and 5 levels of care.
- Working with chronic pain champions to ensure that patients are receiving the best care at all steps of care and that care providers get the assistance, information, and training they require.
- Promoting timely, coordinated shared learning for practice change and knowledge translation.
- Establishing relationships with key internal partners (e.g. Acute Services, Allied Health, Mental Health, Pharmacy, Residential Care, Divisions of Family Practice, GPs, etc.) and external partners (Arthritis Foundation, Ministry of Health, community-based health prevention and promotion groups, etc.).
- Leading the creation of a central repository for chronic pain information for both care providers (education, care guidelines) and for patients (prevention, health promotion, education and self-management).
- Developing a performance-based measurement and evaluation framework that describes what to monitor, expected outcomes, and that measures and evaluates outcomes against targets.

3. REGIONAL PAIN CENTRE

Strategy

Formalize the UHNBC Pain Clinic as a regional pain centre for tertiary level complex pain assessment, interventional procedures, education, mentorship and research. This strategy will involve:

- Increasing the scope of advanced pain therapies and procedures provided and/or made accessible (e.g. external consultations/resources) in order to meet the needs of the Northern Health population.
- Identifying and establishing links with other Northern Health sites that are ready to become tertiary (Step 4) centres (regional hubs) in order to promote local access and expanded capacity.
- Collaborating at each tertiary site (Steps 4 & 5) to access specialist and interdisciplinary resources and equipment to support the expanded scope of services.
- Becoming the centre of advanced knowledge and the centre for clinical innovation, quality improvement, and research.
- Becoming the Northern Health link and repository of provincial and national resources and information updates.
- Providing ongoing training and mentorship for Northern Health acute and chronic pain program to build capacity at all levels of care.
- Developing education materials and chronic pain care guidelines.
- Maintaining relationships with other programs (e.g. mental health, acute services, addictions).
- Providing and/or coordinating access to pain specialist consultations for all Northern Health communities.

4. EDUCATION FOR COMMUNITIES AND PATIENTS

Strategy

Provide support to communities and their citizens to become knowledgeable, empowered, and supported in their pain care. This strategy will involve:

- Creating a central repository of education materials and resources ("pain patient toolkit") and make them easily accessible. Materials collected will cover:
    - The management of chronic pain.
    - Differences between acute pain and chronic pain.
    - Prevention strategies to reduce the risk of chronic pain.
    - Education on developing self-management skills.
    - Education on the management of medications.
    - Online resources.

- Providing information on how to access pain resources in the community, at Northern Health, and provincially.
- Developing partnerships with local community organizations to leverage their programs and resources to support pain education and health promotion.
- Informing community, healthcare providers, and chronic pain professionals about the centralized, patient-focused material repository to enable them to navigate patients to access these resources.

5. CHRONIC PAIN EDUCATION FOR CARE PROVIDERS

Strategy

Develop and implement a chronic pain education program to ensure that Northern Health has sufficient, appropriately trained, and knowledgeable resources in order to support the provision of pain services as set out in the Chronic Pain Prevention and Management Model. This strategy will involve:

- Upskilling healthcare providers (GPs, nurses, care aides, etc.) to improve their basic understanding of chronic pain knowledge and skills using existing provincial and community education resources to increase the scope of treatment options available in primary care.
- Identifying and supporting "pain champions" – individuals with an expertise and strong interest in chronic pain across all healthcare disciplines – as local experts who will provide secondary and tertiary care.
- Upskilling the existing network of secondary and tertiary chronic pain care providers in advanced pain management techniques to expand both capacity and scope of advanced chronic pain treatment options.
- Developing an ongoing learning and education program that provides continuing education and knowledge sharing. Consider leveraging elements of the Palliative Care education program that provides regular, accessible learning opportunities for program staff.

6. SUPPORT FOR CARE PROVIDERS

Strategy

Provide supports to chronic pain care providers to enable them to be able to efficiently and effectively provide care. This strategy will involve:

- Promoting the use of standard pain management tools and guidelines for GPs, including:
    - Standardized patient assessment tools.
    - Guidelines for prescribing opioids.
    - Care guidelines and protocols for common conditions.

- Community resources.
- Pain toolkits for patients that provide education and resource information.

- Creating a central repository of pre-vetted educational materials and lists of community and provincial resources.
- Developing guidelines for specialist referrals that provide direction on which conditions are to be managed at each level of care for when referrals are required.
- Developing a mentor/mentee chronic pain network with a learning community of practice based on pairing non-chronic pain experts with chronic pain champions to support peer-to-peer learning. This network should include specialists, GPs, and allied health professionals.
- Implementing standardized patient chronic pain care planning at each level of care.
- Developing standardized discharge procedures to the community under the care of the GP that involves care planning and ongoing access to specialist consultations.

7. INTEGRATION WITH ACUTE SERVICES

Strategy

Integrate chronic pain services with Northern Health acute services to promote the early identification of pain and to prevent acute pain transitioning to chronic pain. This strategy will involve:

- Implementing "pain toolkits" for care providers that provide basic information on pain assessment, program appropriate care guidelines and standards, linkages to community resources, referral protocols and pain education for patients.
- Develop standardized toolkit for the management of chronic pain patients in Emergency Department including screening and patient pain toolkits.
- Implementing program appropriate pre-printed orders and protocols for management of pain in acute care to increase provider capacity and to improve standards on pain care within programs to prevent pain
- Identifying acute care pain champions and providing support to increase their assessment and management capacity.
- Educating perioperative staff and physicians in the screening of risk factors, in pre-op optimization to reduce pain, and in the early post-operative recognition and treatment of those at risk of developing chronic post-surgical pain.
- Complying with the Accreditation Canada standards for pain for tertiary centres (CCHSA 2003).

8. RESOURCES

Strategy

Ensure that appropriate staffing and resources are in place to support the provision of chronic pain care as set out in the Chronic Pain Prevention and Management model.

The staffing profile for chronic pain services will vary for each step of care and will be based on the nature of services provided. The following table (Table 3) provides a summary of human resource and equipment/facility needs for each step of care. Resourcing levels were identified in a pragmatic manner and take into account:

- Existing resources available in communities and in Northern Health programs and facilities that can be leveraged;
- The size of communities and anticipated demand for services;
- The current budgetary constraints currently faced by all health authorities in BC;
- Encouraging the use of online resources for patient education and navigation of resources, especially where staff is not available;
- Developing local pain champions within existing staff; and
- The variety (staff with different credentials – RN, PT, OT, etc.) of existing staff that are able to provide therapies not reliant on medications or advanced interventional procedures.

Table 3

Level of Care	Resources Needed
Step 1 **Prevention, Education & Self-Help**	• Access to existing Northern Health Population Health & Chronic Disease Management resources to identify existing education and prevention resources, to establish partners with appropriate community centers, patient leads, and workplaces to develop/provide support for patient education and self-management.
Step 2 **Low Complexity Pain**	<u>Nurse-based clinics, GP-based clinics (all are existing community/Northern Health resources)</u> Services to be provided by existing community clinical resources: • GPs, RNs, LPNs • Chronic Disease Management coaches/nurses • Practice Support Program coaches • Public health nurses, home & community care nurses, Aboriginal liaisons to provide patient toolkit and possibly deliver group programs <u>Primary Care Homes</u> A basic interdisciplinary team consisting of: • Lead: GP or NP pain champion with an advanced knowledge of pain management modalities • Movement specialist (PT, Kinesiologist, yoga and/or Pilates teacher) • Pain resource navigator (GP, nurse, social worker, Mental Health counsellor, independent living worker and/or OT with advanced pain knowledge) • Mental health resource (Mental Health liaison, RN, counsellor, OT and/or CDM nurse)

Level of Care	Resources Needed
	• Quarterly teleconference with pain specialists
Step 3 **Medium Complexity Pain**	• All Allied Health resources required for Step 2 care • Collaboration with Step 2 care <u>Additional Resources:</u> • Lead: GPAs/GPs/NPs trained in advanced pain assessment and management (preferably a minimum of one-two days/month for consultation and comprehensive pain management plan) • Skilled GPs in ultrasound guided technique and access to an ultrasound guided technology for advanced pain procedures (preferably a minimum of one-two days/month for procedures/infusions) • Access to ambulatory infusion beds or post-anesthesia recovery room beds for infusion therapies if pharmacy support available for preparing infusion medications • 0.5 FTE RN or Mental Health worker in small hospital hubs to participate in inpatient discharge planning, help prepare patient pain management plans, act as a pain educator and link with UHNBC hub/mentor/mentee networks and PainBC as a pain champion, lead group programs and participate in some program development via liaison with RNs in Level 3/4 facilities who are delivering pain care and assist with basic infusion therapy (if an RN)
Step 4 **High Complexity Pain**	• Collaboration with Steps 2 and 3 care <u>Additional Resources :</u> • Lead: GPAs/GPs/NPs trained in advanced pain assessment and management (preferably a minimum of one day/week for consultation and comprehensive pain management plan) • Skilled GPs in ultrasound guided technique and access to a ultrasound guided technology for advanced pain procedures (preferably a minimum of one day/week for procedures/infusions) • Pharmacy support required for preparing infusion medications • Access to existing fluoroscopy or ultrasound guided technology in radiology, dedicated outpatient clinic pain procedure rooms or the OR • 1.0 FTE advanced practice nurse (NP or CNS) per region NE/NI/NW for discharge planning, preparing patient pain management plans, act as pain champion educator, assist GPA with procedures, support or directly provide clinical services for acute pain and chronic pain consultations, to coordinate physician recommendations for allied health and community services. <u>Daily Acute Pain Service:</u> • APS leads include existing anesthesiologist, GPA, or RN with pain training for patient controlled analgesia (PCA) and continuous epidural and/or nerve block analgesia • Pharmacy support for medication admixtures <u>Administration Support:</u> • Support from existing surgical service manager <u>Allied Health:</u> • Access to 0.2 OT FTE & 0.2 PT FTE to provide inpatient services for complex pain patients, acute on chronic, post trauma rehabilitation and, where possible, consultative services with mental health liaison for complex outpatient pain patients

Level of Care	Resources Needed
	• Access to 0.2 FTE Pharmacy for medication reviews
Step 5 **High Complexity Pain – Regional Pain Centre**	• Collaboration with Steps 2, 3 and 4 care <u>Daily Acute Pain Service:</u> • APS leads include existing anesthesiologist, GPA, or RN with pain training for patient controlled analgesia (PCA) and continuous epidural and/or nerve block analgesia • Pharmacy support for medication admixtures • Depending on volume, may need a dedicated RN/advanced practice nurse (see role under Regional Pain Centre resources) <u>Regional Pain Centre</u> • Develop interdisciplinary pain team co-located or virtually collocated with inpatient staff • 2.0 FTE Anesthesiologist/GPA/GP or NP with a special interest in pain (Service scope per 1 FTE = 1 day education/Northern Health support via mentor mentee, program development, administrative, 2 days/week chronic pain clinic consultation/assessments, 2 days/week procedures appropriate to skill level) • As key lead: attract fellowship-trained pain specialist. Other physician leads include anesthesiologists with pain training, GPA, GP with special interest and focused pain practice. • Identify and support existing Northern Health physician pain champions (Anesthesiologist, GPA, GPO, NP, GP with special interest) for mentor/mentee network to build clinical, academic and research capacity across Northern Health, host quarterly teleconference meetings, develop and host Northern Health education rounds • 1.0 FTE advanced practice nurses (NP or CNS) to provide staff nurse education, pain program development, clinical research, quality improvement work, consultative link between acute and chronic pain services, key link and phone/tele-health support for community pain champions • 1.0 FTE Clinic nurse to run group programs, provide motivational interviewing, screening/triage, patient pain toolkit, counselling, and social resources • Access to procedure room in radiology for fluoroscopy guided procedures, access to ultrasound technology for procedures not requiring fluoroscopy • Access to and integration with ambulatory services for infusion therapy, for post sedation recovery, for consultative allied health services (0.2 FTE OT, 0.4 FTE PT, 0.5 FTE Mental Health liaison) • Administrative Support: Support of existing Ambulatory care manager for clinical integration and technology, workflows, messaging, procedure /assessment information, website oversight • 0.2 FTE Pharmacy for medication review • 1.0 FTE Clerical staff (minimum) • Dedicated clinic work space • EMR integration with the hospital information system • Where possible, shared care with other chronic disease services for dietician, social work. e.g. arthritis clinic, diabetes clinic or multiple sclerosis clinics • Access to UHNBC Pharmacy tracking system to identify high risk pain inpatients and support Acute Pain Service

Many of the required resources to deliver chronic pain services exist in Northern Health today. Raising awareness of these resources will build resource capacity. Northern Health should also look at ways to realign existing staff and resources to create additional service capacity for the Chronic Pain Prevention and Management program. Opportunities include:

- Realigning/leveraging existing resources within each community to support chronic pain services (e.g. GP Anesthesia and radiologist to expand interventional procedure skills in hospitals; partner with hospital-based programs to expand scope of services provided in smaller communities; leverage community pharmacists perform medication reviews; leverage allied staff in ambulatory, inpatient and private practice settings). The need to re-align resources is a larger issue in smaller communities with little or no access to allied health.
- Leveraging telehealth to access specialist, GP, Allied Health, and education services in communities.
- Leveraging community relationships and networks through existing CDM nurses, PSP coaches, and various Northern Health Divisions of Family practice.
- Establishing partnerships with pain specialists that are external to Northern Health in order to provide both clinical care support where capacity/knowledge gaps exist and to promote learning through mentor/mentee relationships.
- Mapping current resources by community and establishing links to access each step of care in a hub and spoke model.
- Continuing to support Primary Care Homes in communities and investing in key resources required to support the Chronic Pain Prevention and Management program.
- Mobilizing the extensive network of mental health liaisons with pain knowledge and toolkit for assessment and patient education.

9. QUALITY IMPROVEMENT

Strategy

Establish a performance-based quality improvement and evaluation framework to support the development of standards, setting targets, measuring outcomes, evaluating results, and providing improvement feedback. This strategy will involve:

- Monitoring the effectiveness of care guidelines including safe opioid prescribing guidelines.
- Improving care providers' awareness of evidence-based non-prescription treatments.
- Measuring the outcomes of interventional procedures.
- Ensuring there is equity in access to pain services across Northern Health.
- Identifying education and learning opportunities to address any gaps in skills or knowledge.
- Improving and measuring standards for pain services in other Northern Health programs (residential care, acute services, etc.).
- Evaluating the overall effectiveness of the Chronic Pain Prevention and Management program.
- Utilizing the patient voice to optimize quality improvement work

Key outcome indicators to be measured must include patient and family/caregiver satisfaction, decreased pain and improved function (physical, psycho and social), and decreased health service utilization including primary care visits, medication use, ER visits, hospital admissions, and LOS.

Early Implementation Ideas

Northern Health will need to improve chronic pain knowledge in order to increase its capacity to provide effective pain care. This capacity should be built for both patients and care providers. The table below provides a list of high impact, low cost initiatives that leverage existing resources that can be undertaken in the next 18 months. These initiatives will make a significant impact on Northern Health's capacity in the short term and enable it to better implement the recommendations made in this report.

Table 4

	Existing Resources	Northern Health Action
PATIENT NEEDS		

Increase pain knowledge & navigation skills	• PainBC (website: patient resource page adults & children, pain toolbox, webinars, Pain Wave Radio, Facebook & Twitter) www.painbc.ca/chronic-pain
	• PainBC Basics of Health Program: Support provided on a one-to-one basis addressing/assisting with social determinants of health www.painbc.ca/chronic-pain/basics-for-health
	• Arthritis Society:
	  ○ In-person workshops throughout BC for people in chronic pain
	  ○ 2-hour course on Chronic Pain available www.arthritis.ca
		Promotion of early patient access of resources through:
		• Links for patients on Northern Health website
		• Divisions of Family Practice
		• Primary Care Homes
		• NA/AA groups, Aboriginal liaisons, assisted living workers, chiropractors, massage, PT, OT
		• Unattached clinics
		• Community centres, libraries
		• ER departments& pharmacies

Develop & increase self-management kills	• Self-management British Columbia – Chronic Pain programs www.selfmanagementbc.ca/SelfManagement • Support Groups – PainBC Facebook virtual support community (5000+ members) • People in Pain Networks www.pipain.com • Canadian Pain Coalition www.canadianpaincoalition.ca	Work with Chronic Disease programs to promote awareness of available self-management programs; facilitate set up of Chronic Pain self-management workshops

	Existing Resources	Northern Health Action
Involve patients & families in resource development	• Patients as Partners Network www.patientsaspartners.ca/network • Impact BC www.impactbc.ca/services	Connect with Patients as Partners and/or Impact BC for assistance with patient volunteers to assist with program development
HEALTH CARE PROVIDER NEEDS		
Increase pain management knowledge and skills Support & develop pain champions	Physician & nurse practitioner pain education: • Pain Management PSP – to be rolled out early spring 2015 www.gpscbc.ca/psp-learning/module-overview/pain-management Pharmacist education: • PainBC – Chronic Pain 101 Continuing Education for Pharmacist. 8-hours accredited in-person course through partnership with PainBC & College of Pharmacists throughout BC Physiotherapist education: • Chronic Pain Masterclass for Physiotherapists. 8-hour accredited in-person course through partnership with PainBC and Physiotherapist Association of BC (exercises, diagnostic, goal setting) Additional chronic pain education will be available for occupational therapists, nurses and mental health workers via PainBC partnerships in 2015-2016	Support and promote early adapters of PSP programs and PainBC accredited courses for allied health Hold a pain education day (videotaped) Develop central repository of resources for providers: • Resources for patients • Practice assessment tools, care guidelines, safe opioid prescribing • Actively promote repository through Northern Health website and communication channels
NORTHERN HEALTH SYSTEM NEEDS		
Improve access to pain management expertise	Northern RACE hotline Mentor-Mentee Program (ECHO Project) (Katzman 2014) Telehealth capabilities in most communities St Paul's Hospital monthly chronic pain rounds Webinars by PainBC Canadian Institute for Relief of Pain & Disability	Utilize Northern Partners in Care Shared Care initiative to increase access to pain expertise Explore videoconferencing opportunities with interdisciplinary and specific providers Utilize existing pain management on-line resources

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Appendix 1: External Review Panel Members

Dr. Brenda Lau	MD, FRCPC, FFPMANZCA, MM (Pain Management), CGIMS, FRCPC Founder (Pain Medicine)
Brenda Poulton	RN, MN, NP, CPE
Dr. Elizabeth Bastian	GPO, Northern Health
Doug Zabkar	Project Management/Strategy Development Western Management Consultants

Footnote:

Dr. Elizabeth Bastian was an External Review Panel member that actively supported the review process. She was unable to participate in writing or reviewing the content of this report. As such, she has not been included as an author but her contributions to the Panel were invaluable.

Appendix 2: Northern Health Staff Consultation Participants

Region	Name	Location
NE	Kristine Atherton, Site Manager patient care services	Chetwynd
NE	Rachel Jordan, RN	Chetwynd
NE	Yvonne Tupper, Aboriginal Patient Liaison	Chetwynd
NE	Nicole Dahlen, NH Palliative Care Pharmacist Lead	Dawson Creek
NE	Jennifer Dunn, Mgr, Community Care SP	Dawson Creek
NE	Julie Lee, Nurse, Residential care	Dawson Creek
NE	Rhonda Novitsky, Pharmacy Mgr - NE	Dawson Creek
NE	Lynn Fertuck, MH&A Lead, Fort Nelson Hospital	Fort Nelson
NE	Ibolya Agoston, Primary HealthCare Lead	Fort St. John
NE	Dr. Charles Badenhorst, GP, Methadone Clinic	Fort St. John
NE	David Callahan, Peace Villa Manager	Fort St. John
NE	Sherry Sawka, H&CC Manager	Fort St. John
NE	Jennifer Ondrich, Community Palliation	Fort St. John
NE	Connie Cunningham, Mgr, NE Rural MHAS	Fort St. John
NE	Lexie Gordon, NE Quality Lead	Fort St. John
NE	Elaine Hodson, Res Care Nurse, Peace Villa	Fort St. John
NE	Dr. Ramesh Kamath, GP Unattached Patient Clinic	Fort St. John
NE	Dr. Charles Lawson	Fort St. John
NE	Annie Leong, Palliative Care RN	Fort St. John
NE	Dr. Scott MacCoach, Family Practice Resident	Fort St. John
NE	Dr. Paul Mackay, GPA	Fort St. John
NE	Dr. Kehinde Oluyede, Psychiatrist	Fort St. John
NE	Kathy Peters, Director of Care FSJH	Fort St. John
NE	Linda Silverthorne, Peace Villa Nurse	Fort St. John
NE	Dr. Becky Temple, GPO, Medical Director of NE	Fort St. John
NE	Dr. Mark Thomons, GP, Chief Of Staff	Fort St. John
NE	Lana Thompson, Pallitive Care Nurse	Fort St. John
NE	Dr. Clint Warkentin, community chiropractor	Fort St. John
NE	Dr. Mike Wright GP internist	Fort St. John
NE	Dr. Hubner, GP	Hudson Hope
NE	Dr. Charles Helm, GP	Tumbler Ridge
NE	Barb Schuerkamp, Nurse Manager, Emergency Dept.	Tumbler Ridge

Region	Name	Location
NI	Dale Finch, RN, Head of Burns Lake Nursing/Inpatient/ER	Burns Lake
NI	Marie Hunter, Clinical Nurse Manger	Burns Lake
NI	Richard Van Erp, Physiotherapist	Fort St James
NI	Dr. Marile Van Zyl, FP	Fort St. James
NI	Dr. Robert Alan, GP	Fraser Lake
NI	Dr. Janet Douglas, GP	Fraser Lake
NI	Dr. Gerry McFedrick, GP	Fraser Lake
NI	Teresa Smith, NP	Fraser Lake
NI	Shelley Barwise, Nurse	Mackenzie
NI	Dr. James Card, GP	Mackenzie
NI	Barb Crook, HAS	Mackenzie
NI	Mildred, Pharmacist, Regional director	Prince George
NI	Dr. Sandra Allison, CMO, public health GP	Prince George
NI	Dr. Phil Aswuith, GP	Prince George
NI	Helen Borque, NP, community	Prince George
NI	Suzanne Campbell, RN, H&CC Director	Prince George
NI	Anne Chisholm, HSA	Prince George
NI	Dana Cole, Regional Director, Pharmacy Services	Prince George
NI	Dr. Cathy Dexter, GP	Prince George
NI	Kim Ewen, Director Perioperative and Ambulatory Care	Prince George
NI	Tracey Feeney, RN, PGRH Pain clinic	Prince George
NI	Jennifer Ferguson, Hospice Palliative Nurse Consultant	Prince George
NI	Olive Godwin, Exec. Dir., Division of Family Practice	Prince George
NI	Dr. Tricia Goodman, GP	Prince George
NI	Kathleen Hutchinson, Home Care Nurse	Prince George
NI	Jason Jaswal, Residential Care Manager	Prince George
NI	Heidi Johns, Manager Diagnostic & Ambulatory Care	Prince George
NI	Dr. Rob Johnson, GPA, PGRH Pain Clinic	Prince George
NI	Dr. Barb Kane, Dept Head, Psychiatry	Prince George
NI	Marilyn King, RN, PGRH Pain Clinic	Prince George
NI	Dr. Richard Kraima, Anesthesiologist, PGRH Pain Clinic	Prince George
NI	Michael McMillan, COO, NI	Prince George
NI	Dr. Nazar Morat, Head of Anesthesia	Prince George
NI	Dr. Tony Preston, GP, Chief of Staff	Prince George
NI	Dr. Dick Raymond, NI Med Dir.	Prince George
NI	Dr. Devan Reddy, GP, Bluepine	Prince George
NI	Lisa Richard, Unit Clerk PGRH Pain Clinic	Prince George
NI	Angela Rocca, Head of Physiotherapy	Prince George

Region	Name	Location
NI	Linda VanPelt, Nurse Practitioner	Prince George
NI	Cameron Zaremba, Manager Pharmacy	Prince George
NI	Audra Achen, Res Care Nurse	Quesnel
NI	Wendy Burris, RN H&CC	Quesnel
NI	Dr. Jon Fine, GP	Quesnel
NI	Dr. Dietrich Furstenburg, Clinical Lead	Quesnel
NI	Stacey Gibbs, Res Care Manager	Quesnel
NI	Margaret Gilbert, Palliative Care RN, educator	Quesnel
NI	Gina Predan, MH & A Team lead	Quesnel
NI	Dr. Helene Smith, Chief of Staff, GPA	Quesnel
NI	Deb Strang, HSA	Quesnel
NI	Margie Wiebe, PSP coach	Quesnel
NI	Dr. Ray Markham, GP, Chief of Staff	Valemont
NI	Dr. Suzanne Campbell, GPO	Vanderhoof
NI	Cindy Chipchase, Raiki/Yoga	Vanderhoof
NI	April Hughes, HSA	Vanderhoof
NI	Raquel Miles, RN, Lead Community Programs Integration	Vanderhoof
NI	Valerie Pagdin, OT	Vanderhoof
NI	Stacy Joyce, Coordinator	
NI	Maggie, Practice Support Coach	
NW	Delores Gerder, remote certified nurse	Atlin
NW	Donna Hall, remote certified nurse	Atlin
NW	Sue Hotson, RN, Facility Manager	Dease Lake
NW	Dr. Sherry Fheresta, GP	Hazelton
NW	Dr. Jenny Lee, GP	Hazelton
NW	Sue Livingstone, Director of Care	Hazelton
NW	Dr. Peter Newbery, Chief of Staff	Hazelton
NW	Mike MacCallum, Physiotherapist	Houston
NW	Jenny Rodway, RN health centre	Houston
NW	Sally Sullivan, Facility Manager, Houston health centre	Houston
NW	Jenny Veenstra-Rodway, Nurse	Houston
NW	Dr. Sandy Vestvik, Chief of Staff	Houston
NW	Jonathan Cooper, NP, ER	Kitimat
NW	Linda Ductin, Nursing Coordinator	Kitimat
NW	Cecille Harder, Inpatient coordinator	Kitimat
NW	Ken Max, Manager X-ray	Kitimat

Region	Name	Location
NW	Lisa Froese, Nurse Manager	Masset
NW	Jane, Haida Gwaii ER nurse manager	Prince Rupert
NW	Shelley Mobil, Manager, Residential Care	Prince Rupert
NW	Nancy Smith, Practice Support Coach	Prince Rupert
NW	Dr. Daphne Hart, GPO, Chief of Staff	Smithers
NW	Dr. Darren Jakubec, GPA/Chronic Pain	Smithers
NW	Lea Smith, Pharmacist	Smithers
NW	Ray, Team Leader	Terrace
NW	Penny Anguish, COO, NW HSDA	Terrace
NW	Dr. Appleton, GP, Chief of Staff	Terrace
NW	Barb Caldwell, Nurse ER/ICU/Oncology	Terrace
NW	Claire Cooper, MH&A Team Lead	Terrace
NW	Dr. Janni Du Plessis, Pediatrics	Terrace
NW	Dr. Charlie Eckfelt, Anesthesiologist	Terrace
NW	Dr. Greg Linton, GP, GP Division Lead	Terrace
NW	Michael Melia, NW Director for MH&A	Terrace
NW	Shirley Nichol, RN, Director of Care	Terrace
NW	Ciro Panessa, Regional Director, Chronic Disease	Terrace
NW	Michael Prevost, H&CC	Terrace
NW	Nick Rempell, MH&A	Terrace
NW	Lillian Rosenfeld RN, Chronic Disease Lead	Terrace
NW	Chris Simms, Health Services Administrator	Terrace
NW	Dr. David Van Renesberg, OB & Gyn	Terrace
NW	Dr. Ehi Yahai, GP	Terrace

** Apologies are extended for any misspellings or omissions of information.*

Appendix 3: Detailed Summary of Current State Findings

Community Care

- There is little in the way of education, self-management materials, or chronic pain support programs available for patients or their families.
- Pharmacists are underutilized for helping with patient education, medication reviews, safe opioid monitoring, and direct-observed therapy.

Primary Care

- There are pockets of innovation in pain care across Northern Health but these improvements tend not to be shared across regions and/or the Health Authority.
- Several individuals and/or teams were identified as having a strong interest in expanding their communities' pain services. These potential "pain champions" have recently attended the Practice Support Program Chronic Pain test modules and have begun to implement practice improvements.
- Most GPs feel comfortable in managing patients' pain if they are palliative or suffer from less complex issues.
- However, MSP-funded GPs face time pressures in managing the complexity of opioid and non-opioid medications and issues related to chronic pain, sleep, and mood adequately. GPs often feel unsupported and shy away from treating complex pain.
- Most GPs have to rely on medications to manage pain due to lack of knowledge or availability of alternate treatments in the community that are affordable.
- Practices are trending away from prescribing opioids due to lack of effectiveness in many chronic pain conditions and difficulties in keeping opioid use safe.
- When opioids are deemed appropriate, additional infrastructure has been identified as needed by the GPs to adhere with the safe prescribing practices as outlined according to the National Opioid Use Guidelines Group and College of Physicians of Surgeons of British Columbia. Hence compliance is suboptimal.
- Methadone prescribing and providing the maintenance program is particularly challenging in communities outside of Prince George. The Prince George methadone/addictions/community detox clinic risks being overburdened by the needs of the whole region.
- There is a stigma attached to prescribing methadone. Few providers exist and mostly prescribe for addictions. There is a lack of infrastructure to support their prescribing practices and their practices are usually not set up to manage pain patients.
- There is potential to improve safe prescribing practices through collaboration with pharmacists with monitoring or medication reviews.
- In communities without GPs, pain management is further challenged due to lack of access to medication management where needed.

- In some communities, unattached patients are accessing their pain care through the ER. Unattached patients tend to have more complex chronic pain, mental health, and addictions issues. However, the unattached patient clinic initiatives of Fort St. John and Prince George have begun to address these issues.

Advanced Pain Care

- Complex pain treatment within Northern Health, excluding the Pain Clinic in UHNBC, is generally confined to a limited scope of interventional procedures performed by GPAs and/or radiologists in hospital sites and on a limited basis.
- GPAs are not well connected within sites & across communities, and are under-resourced to provide less complex pain procedures.
- Often patients are referred to specialty pain clinics, including the Northern Health Pain Clinic at UHNBC, and clinics in Vancouver, Victoria, Kelowna and Edmonton.
- Some GPs were not aware that there was a pain clinic at UHNBC.
- Northern Health does not have an interdisciplinary pain clinic to deliver tertiary pain care. The Pain Clinic at UHNBC provides a narrow scope of interventional procedures.
- Many GPs were not clear on the types of procedures offered at UHNBC and criteria for patient acceptance. Many referrals are being turned down.
- Most patients are discharged from the Pain Clinic without care plans (e.g. specific recommendations to manage the medications, psychosocial, or rehabilitative strategies).
- There is a perception by some referring physicians that patients return from Lower Mainland pain clinic services on even more medications and/or with treatment plans that cannot be implemented due to the limitations in community resources.
- Many communities utilize visiting specialists (in person or videoconferencing) for various services. This model is currently not being used for chronic pain, with one exception: the community of Vanderhoof has recently contracted with a pain specialist, psychologist, and physiotherapist from Vancouver to provide remote consultations. This program is being funded by Northern Partners in Care.

Palliative Care

- Palliative care has an advanced model of care with guidelines and standards, including those for pain assessment, preprinted orders, treatment reference guide, etc.
- Educational material and infrastructure are in place (weekly webinars, patient consultations).
- Hotline support is available across the region and the province.
- Home Symptom management kits are made available to patients/caregivers on a limited basis.
- There are many demands on the time of GPs and, as a result, are not always responsive in providing support to palliative patients (who often have complex needs).
- Pain treatment for palliative care is generally limited to medications.

Mental Health and Substance Use Disorders

- The Northern Health Mental Health program staff are aware of the overlap between substance abuse, mental health issues, and undertreated pain. They have enthusiastically expressed a strong desire to play a role in assessment, navigation of resources, and management but currently lack the tools, education, and system structure to connect patients to chronic pain care.
- There are some early pilots of shared assessments between clinicians and mental health liaisons to remove stigma associated with mental health issues, e.g. in Vanderhoof , there is a mandatory screening assessment with mental health counselor and physiotherapist before seeing the physician.
- The main psychiatry resources reside in large centres making access difficult to most communities. Capacity could be optimized through the use of telehealth.
- There are some small centres utilizing social workers to navigate to mental health resources.
- Among those patients with substance abuse issues, prescription drug abuse is one of the most prevalent.
- There is no screening for pain in mental health/addictions clinics; no non-opioid alternatives are offered for those with pain.
- Mental health and substance use issues cause challenging underlying complications in other clinical/physical problems, preventing or significantly impeding successful treatment and management.
- There is a lack of detox and treatment centres for inpatient or outpatient programs in many communities.
- Methadone is prescribed in mental health/addiction clinics mainly for addiction and not for pain across Northern Health.

Aboriginal Population Care

- Aboriginal liaisons have the ability to expand capacity of chronic pain care as it pertains to the Aboriginal population using their philosophies and approaches to health.
- This population tends to be more stoic and private which makes group programs challenging to implement.
- Many reserve health units have limited access to telehealth.
- Staff servicing the on-reserve health units are under-resourced to provide culturally appropriate pain care.
- There is a high level of substance abuse and chronic disease co-morbidities within the Aboriginal population.

Residential Care

- Most centres try to utilize the intake pain assessments such as RAI or Edmonton Symptom but system barriers for consistent use exist.
- The majority of direct care is provided by care aides who could develop basic pain assessment skills and be empowered to link patients to higher levels of care.
- Stakeholders have identified the need for standardized assessment tools used with the elderly and non-verbal patients.
- Staff often feel overwhelmed with the complex issues related to elder care and pain is not necessarily a high priority.

Acute Care and Emergency Departments

Emergency Departments

- Patients often utilize Emergency Departments to obtain opioid prescriptions which risk multiple prescribers, access to multiple prescriptions, and opioid misuse including diversion.
- The lack of alternate options to manage chronic pain without opioids was identified.
- Urine drug screening tests are not routinely performed and are underutilized in high risk patients as part of safe prescribing practices.
- Unattached or transient patient populations are problematic due to the lack of reliable medical histories.
- The Emergency Department identifies certain patients as 'friendly faces' who are usually on opioids. Staff are reluctant to manage these patients and subsequently, some Emergency Departments refuse to provide any opioids for pain management.
- Patient satisfaction surveys have reported dissatisfaction with the pain treatment in Emergency Departments due to perceived negative staff attitudes and under-treatment of pain.

Acute Care

- Some physicians provide limited modality pain interventions in some hospitals, e.g. epidural steroids or facet joint blocks only.
- GPAs, Anesthesiologists who potentially could provide acute pain services and/or interventional pain services are not fully engaged due to lack of system support. Radiologists could supplement interventional pain services.
- There is a need for pain education for staff and the development of standard protocols across Northern Health for the evidence-based peri-operative pain management.
- There are limited allied health and crisis pain management resources in hospitals.
- Pain education for patients and linkages to community resources are needed.
- There is a need to raise awareness within the hospitals to improve the use of all existing resources to support patient discharge planning and pain care within the community.

- There is capacity with palliative care liaisons to increase pain knowledge and skills of hospital staff.

Education for Care Providers

- Pain education, including assessment and current management practices, are minimal throughout community, residential, primary & acute care. The exception is the palliative care which has previously been detailed.
- Ongoing pain courses and training were also identified as needed to expand skills, build capacity and networking of providers interested in advancing pain knowledge and practice.
- Northern Health is at risk of losing key employees with pain management knowledge to retirement; these people tend to be the “go-to” people for patient assessments and are “pain champions”. Strategies to mentor staff into these positions are needed.
- A repository of educational resources for staff related to acute and chronic management is identified as a need by interviewees
- Minimal pain quality improvement and audits were incorporated into practice in community, primary and acute care.

Appendix 4: Other BC Patient Surveys

PainBC Survey

PainBC's Facebook (5,000+ followers) post in November 2014 echoed the findings of the Northern Health Patient Surveys – "If you had to propose one improvement to Canada's health care system with regards to pain management/treatment, what would it be?"

The responses and common themes that emerged by repeated content posts:

- Improve health care providers knowledge and skills in chronic pain.
- Improved access to complementary and alternate treatments such as: physiotherapy, massage, acupuncture, naturopaths & chiropractors.
- Decrease wait times for pain specialists and pain clinics.
- Improve access and decrease costs of pain medication.
- Include an interdisciplinary approach to chronic pain management.

Interior Health Authority Survey

Interior Health's Chronic Pain Strategy (2012) patients' participation identified the following themes:

- The need for more information and list of resources available to patients with chronic pain.
- The important role of the GP in accessing information and referral to other health professionals.
- The need for interdisciplinary assessment & treatment.
- A desire to have a holistic approach to pain management that addresses the mental health and well-being of the patient, as well as the physical aspects of their pain.

Vancouver Coastal Health Authority Survey

Vancouver Coastal Health Community Engagement Report in regards to a Regional Pain Strategy (2007): The recommendations that emerged were:

- Change the way that clients receive care:
    - Improve communications between healthcare providers and clients.
    - Support education that has a focus on dignity, empathy, respect & compassion.
    - Address stigmas that negatively impact the health of those living with pain.
    - Address barriers to access and ways to minimize the navigation of the system.

- Foster and support holistic approach to care:

    - Increase the understanding of GPs and specialists around pain as it impacts all aspects of the individual's life.
    - Focus more attention on the emotional and psychological support.
    - Provide an integrated care team approach.
    - Provide options of care that include access to alternative care practitioners.

- Enhance access to a wide range of services and supports:

    - Increase access to alternative therapies and approaches.
    - Increase access to medications that work for an individual.
    - Timely access to pain services.
    - Address societal stigmas related to living with disabilities.
    - Improve communication re available resources.
    - Expand the number of pain clinics available,

- Provide adequate and appropriate information:

    - Timely and improved diagnosis process.
    - Improve communication between various health care providers.
    - Provide adequate time for health care provider and patient encounters.
    - Educate health care providers re chronic pain.
    - Educate employers and promote support of the needs of people living in pain.

- Enhance a variety of supports for people living in pain:

    - Develop self-management and education programs.
    - Fund support groups for people in pain.
    - Provide support for caregivers.
    - Provide funding for assistive devices.
    - Enhance financial assistance (Long Term Disability & Welfare).

Appendix 5: Northern Health Service Distribution Model

Community Profile	Communities	Level of Care
Urban	Prince George	**Level 5** Regional Hospital
Rural Centre Large Referral Base	Quesnel, Prince Rupert, Fort St. John, Dawson Creek, Terrace	**Level 4** Hospital With Limited Specialty Services
Rural Centre Smaller Referral Base	Vanderhoof, Smithers, Fort Nelson, Kitimat, Hazelton	**Level 3** Small Community Hospital
Small Rural Centre	Mackenzie, Fort St. James, McBride, Chetwynd, Massett, Queen Charlotte City, Burns Lake	**Level 2** Small Hospital With Capacity for Stable Patients
Rural Community: Less Isolated	Fraser Lake, Hudson Hope, Houston	**Level 1** Community Health Centre
More Isolated	Stewart, Dease Lake, Granisle, Atlin, Southside, Valemount, Tumbler Ridge	
Catchment Community		Communities with insufficient critical mass to sustain base services locally. Needs are addressed through natural "consumer" flow patterns and transportation

** Northern Health Service Distribution Model – Discussion Document (June 2013)*