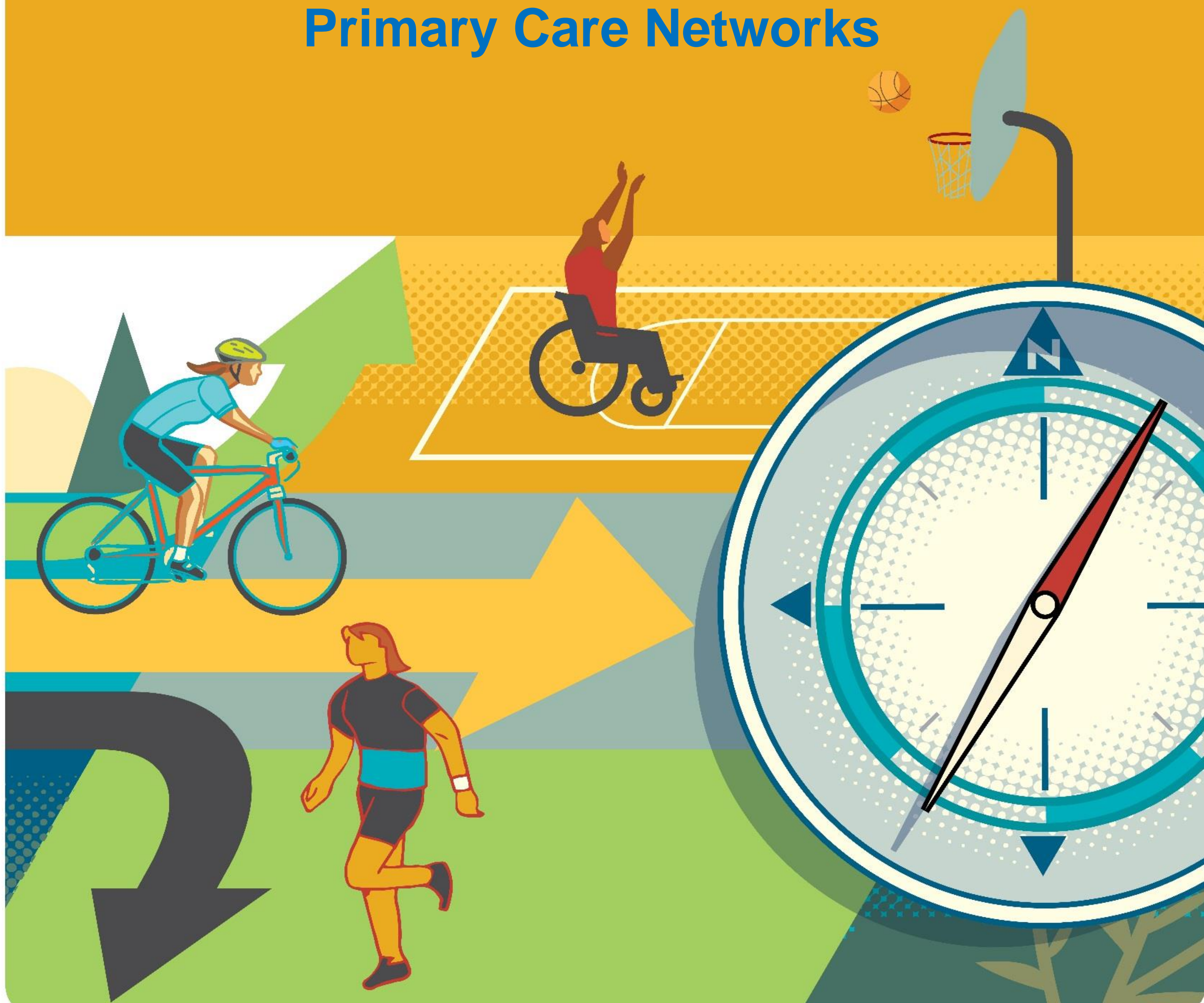
MSK Services Report

The Bone and Joint Health Strategic Clinical Network

In Partnership with the Primary Health Care Integration Network

Musculoskeletal Care in Alberta's Primary Care Networks



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Prepared by: **Sara Orenstein,** MSc (candidate)
Intern, BJH SCN
Department of Community Health Sciences
University of Calgary
E: sara.orenstein@ucalgary.ca

Ania Kania-Richmond PhD
Assistant Scientific Director
Bone & Joint Health Strategic Clinical Network
Alberta Health Services
E: anna.kania-richmond@ahs.ca

Ceara Cunningham PhD
Assistant Scientific Director
Primary Health Care Integration Network
Alberta Health Services
E: Ceara.cunningham@ahs.ca

Report Overview

- Conditions which affect bone, joints, and muscle are very prevalent in the Albertan population and are often treated in primary care.

- Primary care networks (PCNs) utilize a primary health care approach with a team of various health-related providers. They provide support and services to over 3.6 million Albertans.

- In order to aid Albertans in maximizing their musculoskeletal (MSK) health, it is of great value to understand the MSK care being provided in primary health care.

- In partnership with the Primary Health Care Integration Network (PHCIN), a multi-document review of publicly available documents was conducted to identify both direct and indirect MSK care offered to patients across Alberta's PCNs.

Highlights

- Overall, less than a quarter (24.4%; n=10) of the PCNs provide MSK-specific services identified in the document review.
- The most concentrated MSK-specific care is offered in the Edmonton Zone
- Over two-thirds of the PCNs offer services/education which indirectly supports MSK health (i.e. Weight management, exercise, nutrition)
- More broadly defined categories of care, including chronic disease management and chronic pain support, were more frequently offered in PCNs than MSK-specific care.
- A limited number of total PCNs (22%; n=9) provided external direct MSK resources for at least one type of care category.
- The amount of information provided in these documents and on the websites vary greatly across the PCNs and zones
- Though 3800 physicians in the province work within the PCN structure, there are also 1770 who work outside PCNs. It may be of value in the future to examine MSK care among this large group of community physicians

Definitions/Key Concepts

a) Care: support provided for patients. 'Care' is then further divided into specific types of care: services, programs, education, clinics, and other

b) Direct MSK Care: an item of care which provides direct support for any named condition which affects bones, joints, and/muscles (e.g., Osteoporosis, Arthritis, Back Pain)

c) **Indirect MSK Care:** an item of care which indirectly supports MSK health. This includes, but is not limited to: exercise, weight management, mental health, and nutrition.

d) **Service:** Any item of care explicitly named "service", or "one-on-one", or "consultation"

e) Program: Any item of care explicitly referred to as a "program"

f) Education: Includes but is not limited to classes, workshops, teaching sessions, education, education sessions, or tips

g) Other (Care Type): Any type of care which is not a service, program, education, or clinic

h) Other (Category of Care provided): Any type of care (whether it be a service, program, clinic, education, or other) that provides support to patients outside of one of the listed categories in Tables 1 and 2. 'Other' primarily consists of footcare and women's health

i) In-House: items of care provided by the specific PCN

j) External Resources: Resources or links to other organization or programs not conducted at the PCN

k) Seniors Health: Any type of care which explicitly supports seniors (e.g., Mobility and fall prevention)

l) Healthy Living: Any type of care which supports patients using a combination of activity and nutrition, not specifically separating one or the other

Background

Services Which Address Bone, Joint and/or Muscle Health Issues

Conditions and injuries that affect bones, joints and/or muscles have a negative impact on Albertans and have a significant burden on Alberta's the healthcare system. They are also very prevalent in the population and often treated by range of health care professionals, from rehabilitation providers to orthopedic surgeons to providers working in primary care settings.

A key strategic focus of the Bone & Joint Health Strategic Clinical Network (BJH SCN) is to effectively support Albertans to maximize their MSK health, mitigate MSK issues and mend from MSK injuries or conditions. Enabling access to effective non-surgical, or first line interventions, and self management resources is a key area of focus for the SCN.

The BJH SCN recognizes the important role that primary care – family physicians and primary care networks – has in effectively supporting Albertans living with MSK conditions. However, to date, we have limited information about how MSK conditions are addressed in the primary care space. To that end, and to specifically support our engagement within primary care, our goal through this project was to understand what MSK services are provided within Alberta's PCNs.

Alberta's Primary Care Networks

Primary care networks (PCNs) utilize a primary health care approach, delivering a variety of services and programs best suited to each community's needs. In Alberta, PCNs were created to improve access to primary health care and to better coordinate these services within the province. There are currently 41 PCNs (now 40, as of March 2021) organized across five zones. They are made up of approximately 3800 family physicians and 1400 other health practitioners, providing care to approximately 3.6 million Albertans.

PCNs utilize a team of health professionals-, including, but not limited to, physicians, nurses, social workers, and dieticians. In addition, health care services and programs, these networks also offer health education to individuals and communities to promote population health.

With the implementation of team-based care models such as PCNs, it has been observed to have positive impacts such as improved quality of life, patient self-advocacy, and improved continuity of care. This central role PCNs play in promoting a primary health care approach make them an important component of the health care system which aims to improve the health of Alberta's population.

Primary Care vs Primary Healthcare

Primary Care and Primary Health Care are two terms often used interchangeably; however, they indicate two unique concepts.

Primary care refers to the “first-line” clinical services offered to individual patients by physicians. PC is provider-driven and emphasizes service provision.

The primary health care approach indicates a need for a more holistic, society-level approach to health. As a level of care, primary health care is a set of high-quality health-related services which are universally accessible to both individuals and communities. Primary health care services utilize a diverse team of providers and adapts to the needs of the population being served. Given this definition, primary care could be considered an element of the larger-scale concept of primary health care, providing these front-line doctor-patient type services.

For the purposes of this report, primary health care is the referenced context.

Project Purpose

The purpose of this project was to develop a better understanding of MSK care provided in or through PCNs in order to support how the BJH SCN engages with PCNs. The specific objectives were:

1. To assess available information from PCNs of bone, joint, and muscle health and/or condition care offered by PCNs and compare across zones.
   a. This document review will be used to inform the development of a survey for phase two of the project
2. Compare the level or degree or type of bone/joint/MSK care across PCNs

Methods

A document review was conducted to address the objectives. Three types of documents were included: PCN websites, annual reports, and supplementary documents accessed by PHCIN. The process for access to (including required permissions) and review of each document type is described below.

Publicly accessible **PCN websites** were examined for MSK direct and indirect care offered to patients. For these purposes, care is defined as support offered to patients, direct MSK care includes items of care which provide direct support for any named condition which affects bones, joints, and/muscles, and indirect MSK care consists of items of care which indirectly support MSK health (e.g., mental health care). An initial scan was conducted (by BJH SCN intern – SO, Sara Orenstein) by searching programs, services, education, and resources whose explicit purpose was to support patients with MSK health issues. During the second iteration of the search, each website was examined for MSK-specific terms being used in patient care offering descriptions (e.g. chronic pain programs mentioning musculoskeletal pain in their

description of the program). Thirdly, indirect care which supports MSK health (pre-determined in collaboration with project managers from the ABJHI) was examined. This included, but was not limited to, mental health, exercise, nutrition, pharmacy/medication, and weight management care.

Data was initially organized into three categories: Services and Programs, Workshops and Education, and External Resources. The way in which the data was organized was based on how each type of care was labeled by the PCN itself and sorted accordingly.

Publicly accessible **PCN annual reports** were reviewed for direct and indirect MSK care. Additional **supplementary information** available to the Primary Health Care Integration Network (PHCIN) Scientific Office were reviewed, working closely with a PCN liaison. The PHCIN research intern (AD - Adrijana D'Silva) completed data extraction from supplementary documents specific to MSK services based on a pre-determined list of topics provided by our team. No data on financial or cost information was extracted. The type of care offered was organized according to the categories indicated above.

The information extracted from the websites was compared and cross-referenced with the information obtained from the annual reports and PHCIN intern's data extraction from supplementary documents. The document source for each item of care was noted, including any overlap across sources.

This document review occurred between January and April 2021. The initial website search was conducted between January 25th and February 18th, 2021. The annual reports were obtained February 8th, and with supplementary documents, reviewed by the PHCIN intern (AD) between February 12th and March 8th, 2021. Data extraction was provided to intern (SO) on March 8th, 2021.

Website data was available for 41 PCNs. Annual reports were reviewed for 41 PCNs, which varied in their publication dates, ranging from 2008-2018. Information available in supplementary documents also ranged from 2008-2018.

Upon completion of the initial review of the documents by both SO and AD, patient care was further categorized into Internal or 'In-House' (offered at the PCN) and External (resources offered outside of the PCN), and then sub-divided into 5 different types of care: program, service, education, clinic, or other.

Summary of Findings

Over the course of this document review, Edmonton Zone reduced their number of PCNs to eight from nine, merging the Alberta Heartland PCN into the existing Sherwood Park Strathcona County PCN. Given that the documents and websites were examined prior to this change, we will be reporting the total number of PCNs as 41, and Edmonton Zone as having nine total PCNs.

Overall MSK services, either direct or indirect, were identified at all 41 PCNs across Alberta. The following outlines the findings relevant to direct MSK care and indirect care in Alberta's PCNs.

Direct MSK Care

(As noted above, direct care refers to an item of care which provides direct support for any named condition which affects bones, joints, and/muscles (e.g., Osteoporosis, Arthritis, Back Pain)

- Overall, ten PCNs (24.4%) offer at least one type of direct MSK care in-house. As noted above in the glossary, "care" refers to any mechanism of support offered to patients (e.g. program, workshop, one-on-one service). This identified type of care is primarily provided for (osteo)arthritis, osteoporosis, and low back pain.
    - Of these ten PCNs which provide in-house direct MSK care, there is an average of 1.6 care types offered (95% CI: 0.909-2.291), ranging from 1 to 4 types of care. For example, Bow Valley PCN offers four types of MSK patient care: an osteoarthritis **clinic**, orthopedics specialist **services**, several MSK **classes**, and the BACKtivity **program** for back pain.

- As displayed in the map figures (see Figures 1 and 2), the distribution of identified direct MSK care was inconsistent, with the majority being concentrated in the Edmonton Zone.

- Unique to the Edmonton zone is that each PCN provides information and links to one another's classes and workshops, which is not observed in the other four zones.

- Three PCNs were identified having direct MSK **clinics**. These clinics are spread across three zones: Edmonton, Central and Calgary.
    - Leduc Beaumont Devon PCN
    - Kalyna County PCN
    - Bow Valley PCN

- Direct MSK **programs** were primarily concentrated in the Edmonton Zone. The two provincial direct MSK programs included GLA:D and the Bow Valley PCN's BACKtivity program.
    - The most common direct MSK program identified in this zone was the GLA:D program for osteoarthritis. Mention of this particular program was available only across the PCN websites and was not identified in either the annual reports or supplementary documents.

- The explicit labelling of MSK was infrequently used across the PCNs, and was instead often described in broader categories, such as chronic disease management.
    - In the majority of the PCNs, there appeared to be a larger focus on the overarching term of "chronic disease management".

    - 56% of the PCNs offer some type of patient care focussed on chronic disease management, however only three of those explicitly mention MSK conditions such as arthritis, osteoporosis, or bone pain in their description of the patients they provide support for.
  - Bone density and osteoporosis measurements were mentioned infrequently in the descriptions for women specific care offered by individual PCNs.
    - Of the six PCNs with a women's health program, service, or clinic, only three (50%) mentioned bone density/OP measurement and screening.
  - The explicit labelling of musculoskeletal pain in chronic pain care descriptions was often not used and was rather described in more general terms.

Figure 1: MSK Care Provided by PCNs Across Alberta

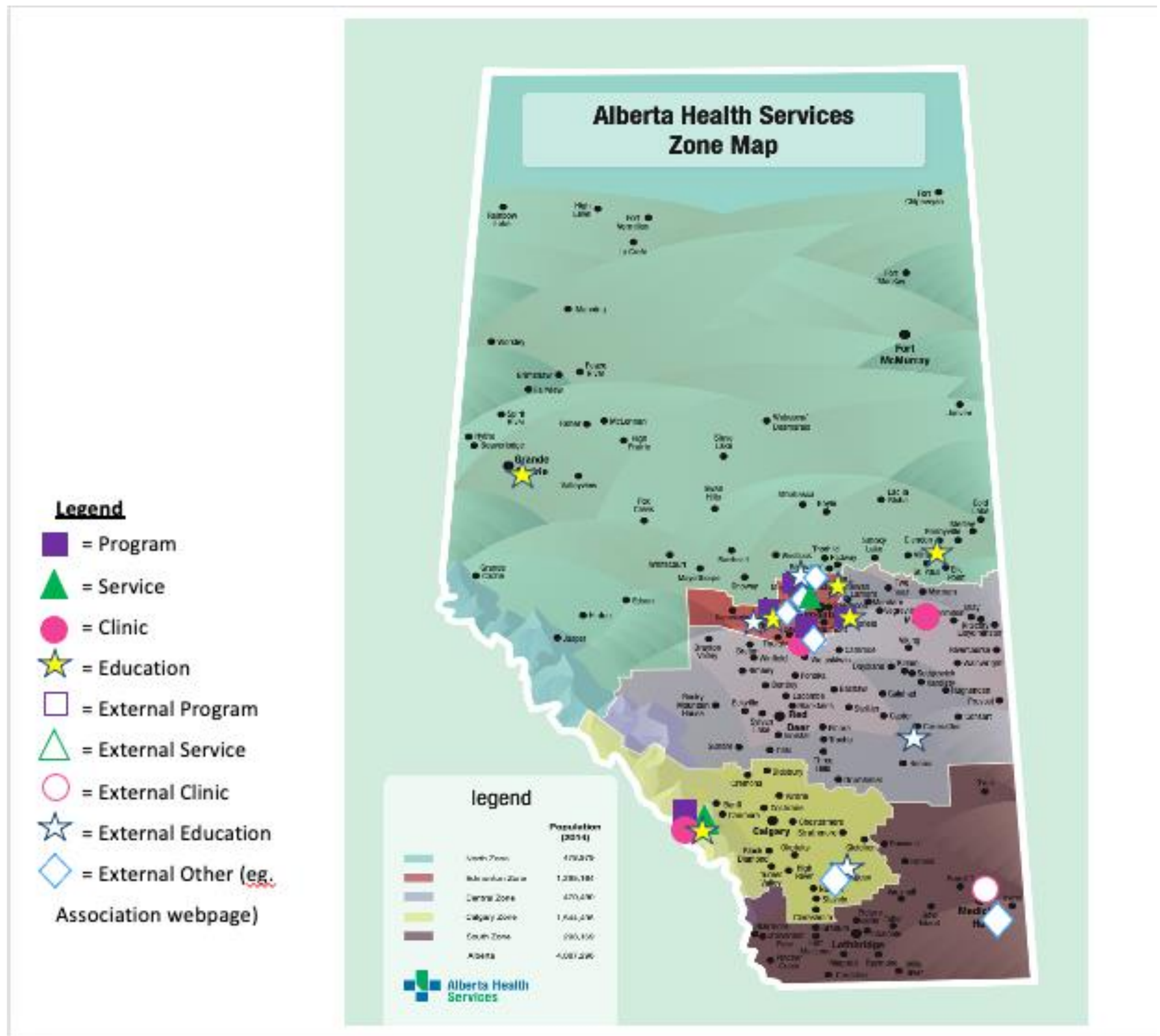
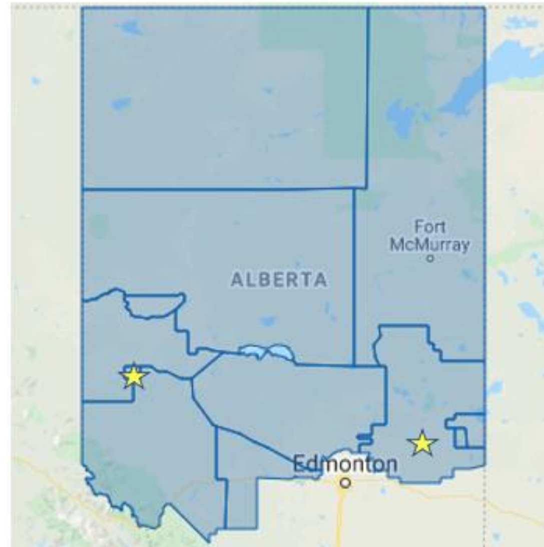


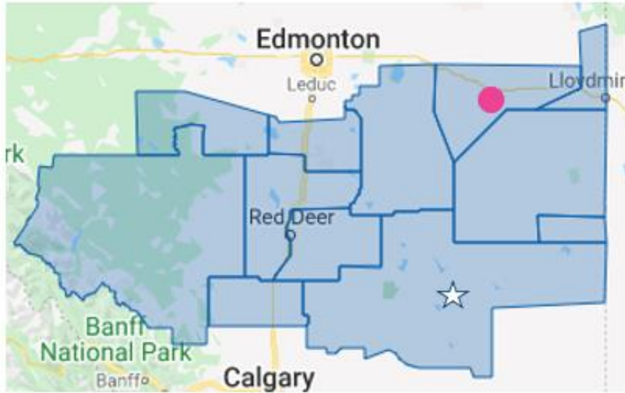
Figure 2: MSK Care Offered in Each PCN Across Alberta's Five Health Zones

South Zone

North Zone



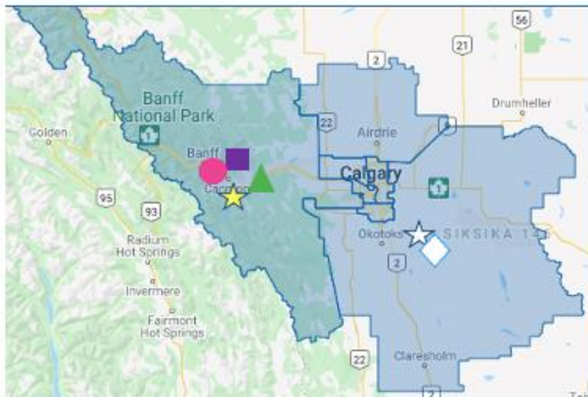
Central Zone



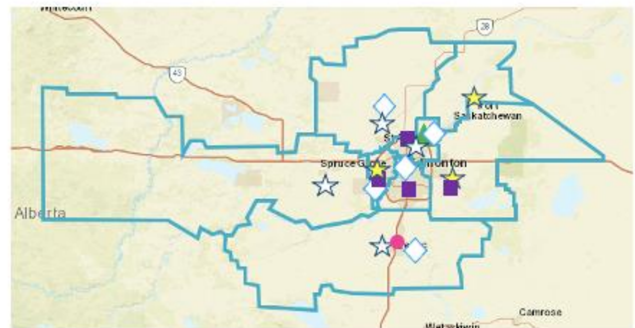
Legend

- ■ = Program
- ▲ = Service
- ● = Clinic
- ★ = Education
- □ = External Program
- △ = External Service
- ○ = External Clinic
- ☆ = External Education
- ◇ = External Other (eg. Association webpage)

Calgary Zone



Edmonton Zone



Indirect MSK Care

(As noted above, indirect care refers to an item of care which indirectly supports MSK health. This includes, but is not limited to exercise, weight management, mental health, and nutrition.)

- The PCNs across the province appear to provide a large variety of care which indirectly supports MSK health (see Table 1)

- General nutrition services, classes, and workshops are offered at over 60% of the PCNs.

- Exercise (68.3% of PCNs), weight management (73.2% of PCNs), and mental health (71% of PCNs) were identified as other areas of priority for supporting patients' health.
    - Although most of these PCNs do not offer all 3 categories of care to support physical and mental health, approximately 83% of the PCNs offer care for at least two of exercise, weight management, and/or mental health categories of care.

- Chronic pain care was provided at over 30% of PCNs across the province. This category of care was defined by the explicit purpose of the care provided being focussed on chronic pain but often not condition, disease, or body part specific.

- When examining the differences in identified care offered by geographic location type (see Table 2), there appeared to be some patterns for chronic *disease management* and chronic *pain care*.
    - There seems to be a larger proportion of rural PCNs which offer support for chronic disease management (75%) compared to the small urban centers (40%) and large metropolitan centers of Edmonton and Calgary (37.5%).
    - An opposite pattern was observed for chronic pain care, with larger proportions of metropolitan center (50%) and small urban center (60%) PCNs providing specific chronic pain care when compared with rural PCNs (15%).

Table 1: In-house Care* (Direct and Indirect) Provided by PCNs According to Care Category by Health Zone

Care*Category	In-House Care provided by PCNs according to Health Zone, n (%)					
	North Zone (n=11 PCNs)	Edmonton Zone (n=9 PCNs)	Central Zone (n=12 PCNs)	Calgary Zone (n=7 PCNs)	South Zone (n=2 PCNs)	Total (n=41 PCNs)
MSK-specific	2 (18.2%)	6 (66.7%)	1 (8.3%)	1 (14.3%)	0	10 (24.4%)
Chronic Disease Management	6 (54.5%)	4 (44.4%)	9 (75%)	2 (28.6%)	2 (100%)	23 (56.1%)
Chronic Pain	2 (18.2%)	3 (33.3%)	4 (33.3%)	5 (71.4%)	0	14 (34.1%)
Nutrition	4 (36.4%)	7 (77.8%)	10 (83.3%)	5 (71.4%)	0	26 (63.4%)
Exercise	7 (63.6%)	8 (88.9%)	8 (66.7%)	5 (71.4%)	0	28 (68.3%
Weight Management	8 (72.7%)	8 (88.9%)	9 (75%)	4 (57.1%)	1 (50%)	30 (73.2%)
Mental Health	6 (54.5%)	7 (77.8%)	10 (83.3%)	6 (85.7%)	0	29 (71.0%)
Healthy Living	1 (9.1%)	3 (33.3%)	2 (16.7%)	3 (42.9%)	1 (50%)	10 (24.4%)
Seniors Health	2 (18.2%	4 (44.4%)	6 (50%)	2 (28.6%)	0	14 (34.1%)
Medication Support	1 (9.1%)	6 (66.7%)	3 (25%)	2 (28.6%)	0	12 (29.3%)
Other (i.e., Foot Care, Women's Health, etc.)	7 (63.6%)	6 (66.7%)	9 (75%)	3 (42.9%)	0	26 (63.4%)

**Patient Care indicates any type of program, service, education, clinic, or other support provided to patients*

Table 2: In-house Patient Care Provided by PCNs According to Care Category, by Geographic Location*

Patient Care*Category	Patient Care provided by PCNs according to Geographic Location Type, n (%)		
	Metropolitan Centers: Edmonton and Calgary (n=16 PCNs)	**Urban Centers: Red Deer, Grande Prairie, Fort McMurray, Medicine Hat, and Lethbridge (n=5 PCNs)**	**Rural Area (n= 20 PCNs)**
MSK-specific	7 (43.8%)	1 (20%)	2 (10%)
Chronic Disease Management	6 (37.5%)	2 (40%)	15 (75%)
Chronic Pain	8 (50%)	3 (60%)	3 (15%)
Nutrition	12 (75%)	1 (20%)	13 (65%)
Exercise	13 (81.3%)	1 (20%)	14 (70%)
Weight Management	12 (75%)	3 (60%)	15 (75%)
Mental Health	13 (81.3%)	3 (60%)	14 (70%)
Healthy Living	6 (37.5%)	1 (20%)	3 (15%)
Seniors Health	6 (37.5%)	1 (20%)	7 (35%)
Medication Support	8 (50%)	1 (20%)	3 (15%)
Other (i.e., Foot Care, Women's Health, etc.)	9 (56.3%)	1 (20%)	15 (75%)

*Geographic categories used are those created and used by Alberta Health Services. **Source:** https://open.alberta.ca/dataset/a14b50c9-94b2-4024-8ee5-c13fb70abb4a/resource/70fd0f2c-5a7c-45a3-bdaa-e1b4f4c5d9a4/download/Official-Standard-Geographic-Area-Document.pdf

External Resources

(As noted above external resources indicate resources or links to other organization or programs not conducted at the PCN.)

- External resources were found solely through the PCN websites.

- 22% of total PCNs provided external direct MSK resources for at least one type of care category.
  - 20% (8 out of 41) PCNs provided links to explicitly labelled MSK organizations such as Osteoporosis Canada, information regarding the GLA:D program, or anecdotes of patients living with an MSK condition.

- 12% (5 out of 41) offered information for external direct MSK education, 80% of those being other PCN's classes offered across the Edmonton Zone.

- The Palliser PCN in the South Zone provided information regarding a hip and knee clinic offered outside of their PCN.

Conclusion

- The findings of the document review indicate that there is an opportunity for the BJH SCN to support PCNs across the province in providing quality care (first-line treatment/conservative management) to Albertans living with bone, joint and muscle conditions.
- There is an opportunity to expand the direct MSK care (services, programs, clinics) provided in PCNs across the province, particularly within the Calgary, South, Central and North zones
- Indirect services relevant, though not explicit, to MSK conditions are more commonly offered in PCNs across the province. However, none of these were linked to BJH SCN.
- Effective communication with PCNs will be dependent on recognizing the approach to categorizing MSK related care in PCNs.
  - Most PCNs do not list MSK care (direct or indirect) relation to a specific conditions or diseases (e.g. Osteoarthritis, rheumatoid arthritis, osteoporosis etc.).
  - Most MSK conditions are subsumed within broader frameworks of chronic disease management, chronic pain management, weight management, and so on.
- Not explicitly labelling direct MSK care within broader chronic disease care is observed across the PCNs. For example, arthritis is listed as an applicable condition to receive chronic disease management services for a few PCNs, but across the majority it is not listed with other chronic conditions such as obesity or hypertension in chronic disease management care. Alignment of language and labelling relevant to MSK is recommended to support better communication.