# **Alberta Health Primary Care Network Profiles**

# **Provost Primary Care Network**

4th edition, March 2023



# **Table of Contents**

| ntroduction  | 1  | i   |
|--------------|--|-----|
| Primary Car  | e Network Information  | . 1 |
| Provincial N | lap of General Practitioner (GP) Services for the PCN  | . 2 |
| Local Focus  | sed Map of Select General Practitioner (GP) Services for the PCN   | . 3 |
| Demographi   | ics  | . 4 |
| Table 1.1    | Distribution of PCN Panel Population by Age and Gender as at March 31, 2021  | . 4 |
| Figure 1.1   | Percentage Distribution of the PCN Panel versus All Alberta PCNs Population by Age Groups as at March 31, 2021   | . 4 |
| Figure 1.2   | PCN Panel Population as at End of Fiscal Years 2017 – 2021   | . 5 |
| Social Deter | minants of Health Indicators   | 6   |
| Table 2.1    | Population Percentage of First Nations with Treaty Status and Inuit as at March 31, 2021.  | 6   |
| Chronic Dise | ease Prevalence  | . 7 |
| Figure 3.1   | PCN Panel Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2016/2017 – 2020/2021 (Chronic Obstructive Pulmonary Disease, Diabetes, Hypertension, Ischemic Heart Disease)  | .7  |
| Figure 3.2   | PCN Panel versus Alberta PCNs Age-Standardized Chronic Disease<br>Prevalence Rates (per 100 population), 2021/2022 (Chronic Obstructive Pulmonary<br>Disease, Diabetes, Hypertension, Ischemic Heart Disease)  | .8  |
| Maternal and | d Child Health   | 9   |
| Table 4.1    | PCN Panel Maternal and Child Health Indicators for Three-Year Period (Number of Births, Percent of Low/High Birth Weight, Birth Rate, Fertility Rate, Teen Birth Rate, Percent Maternal Prenatal Smoking)  | . 9 |
| Inpatient Se | rvice Utilization  | 10  |
| Table 5.1    | Inpatient Separation Rates (per 1,000 population) for the PCN Panel versus Alberta PCNs Panel, Fiscal Years 2016/2017 – 2020/2021  | 10  |
| Figure 5.1   | PCN Panel Age-Standardized Inpatient Separation (IP Sep) Rates (per 100,000 population) for Selected Conditions, 2016/2017 – 2020/2021 (Asthma, Diabetes, Influenza, Ischemic Heart Diseases, Mental and Behavioural Disorders due to Psychoactive Substance Use, Pneumonia, Pulmonary Heart and Pulmonary Circulation Diseases) | 10  |
| Figure 5.2   | PCN Panel versus Alberta PCNs Age-Standardized IP Sep Rates (per 100,000 population), for Selected Conditions, 2020/2021 (Asthma, Diabetes, Influenza, Ischemic Heart Diseases, Mental and Behavioural Disorders due to Psychoactive Substance Use, Pneumonia, Pulmonary Heart and Pulmonary Circulation Diseases)               | 11  |

| Appendix A – Definitions                                     | . 12 |
|--|------|
| Appendix B – PCN Panel Distribution by Municipality (Top 30) | . 16 |

#### Note:

Qualifiers such as 'higher than', 'much lower than', 'similar to' etc. are used throughout the PCN profile to compare Primary Care Network (PCN) indicator values to the provincial PCN panel average. Note that the qualifiers 'similar' and 'comparable' are chosen to describe situations in which the PCN indicator value is either identical or very close to the provincial PCN average. For further details on these qualifiers please refer to Appendix A.

#### INTRODUCTION

The Government of Alberta is working to improve primary health care in the province through its investment in Primary Care Networks (PCNs) to support the delivery of team-based primary care. PCNs are partnerships between a group of family physicians (who form a non-profit corporation) and Alberta health Services (AHS) to provide interdisciplinary programming and services such as chronic disease management and prevention, mental health, geriatric care, rehabilitative care, palliative care, family planning, and obstetrical care. They aim to provide comprehensive, collaborative primary health services to the local communities they serve.

In Alberta, there are a total of 40 PCNs with over 4,300 primary care providers and the full-time equivalent of 1,248 other health care providers (such as nurses, dietitians, psychologists, mental health therapists, pharmacists and midwives) serving over 3.8 million Albertans (approximately 85% of the population). Each PCN is governed by an autonomous Governance Committee or Board and has the flexibility to develop programs and provide services in a way that meets their specific population health needs. Allocation of funding is a PCN Board decision based on many different factors including, but not limited to, population-based data. PCNs are divided into five zonal groups that align with the five AHS Zones to help ensure the integration of services in the various areas of the province.

PCNs were originally established under the 2003-2011 Trilateral Master Agreement between Alberta Health, the Alberta Medical Association (AMA) and the regional health authorities (now AHS). The first PCN opened in 2005.

Alberta Health updates the "PCN Profile" reports (Profiles) every two years to assist PCNs with primary health care planning by providing a broad range of demographic, socio-economic and population health statistics considered relevant to primary health care for communities across the province. The Profiles provide information for each PCN and highlight areas of need for relevant information to support the consistent and sustainable planning of primary health care services. Each Profile offers an overview of the current health status of paneled patients in the PCN, indicators of the PCN's current and future health needs, and evidence as to which quality services are needed on a timely and efficient basis to address the PCN's and its patients' needs.

Each report includes sections that present panel-level information. The Profiles also include Appendices with definitions and the PCN panel patients' geographic distribution by municipality.

For more information, contact Alberta Health's PCN Operations Unit at PCNOps@gov.ab.ca.

#### Note:

Various data sources are used to compile the PCN Profiles. The Profiles are developed through the collaboration of Alberta Health's divisions: Health Standards, Quality and Performance and Health Workforce Planning and Accountability with Alberta Health Services.

#### **Contributors:**

David Onyschuk - Analytics and Performance Reporting, Alberta Health Mengzhe Wang - Analytics and Performance Reporting, Alberta Health Jennifer Bian - Analytics and Performance Reporting, Alberta Health Gary Gilham - Analytics and Performance Reporting, Alberta Health Guofeng (Kevin) Wu - Analytics and Performance Reporting, Alberta Health

**Ajay Khara** - Primary Care Network (PCN) Operations, Alberta Health **Sam Oppong** - Primary Care Network (PCN) Operations, Alberta Health **Hector Villarroel-Ocando** - Primary Care Network (PCN) Operations, Alberta Health

# **Suggested Citation:**

Alberta Health Primary Health Care – Primary Care Network (PCN) Profiles: Provost Primary Care Network, 4th Edition, March 2023

# **Primary Care Network Information**

This section contains demographics, First Nations/Inuit population proportion, maternal and child health rates, chronic disease prevalence, and inpatient service utilization presented for both the individual Primary Care Network (PCN) Panel and the Provincial PCN Panel. Currently, there are 40 active PCNs in Alberta. The panel totals for these PCNs vary from small (~4k) to large (~360k).

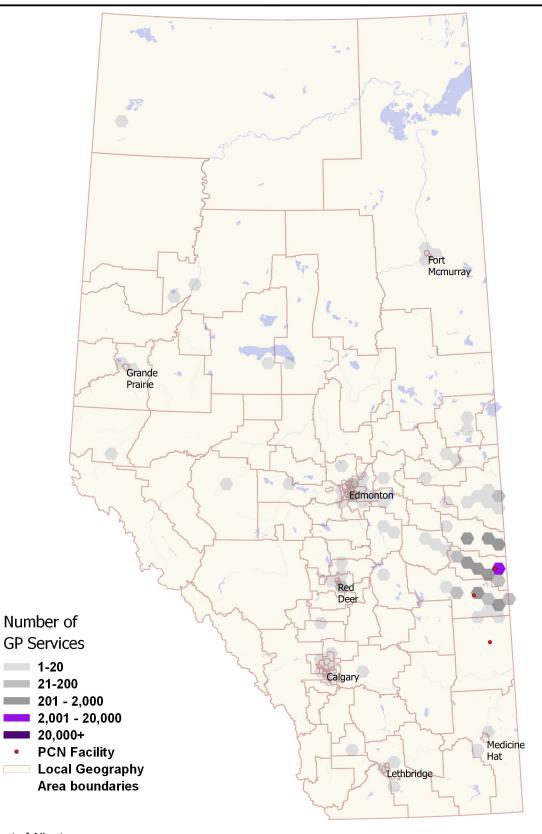
# Map Descriptions:

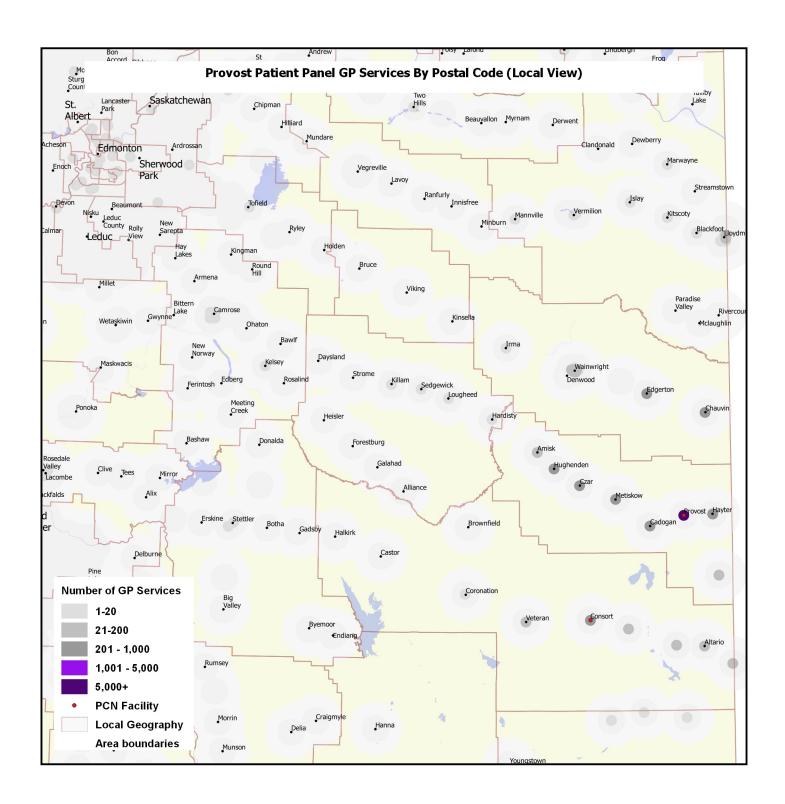
**The provincial view map** depicts the distribution of PCN panel General Practitioner (GP) services by postal code at the level of the whole province. The hexagons capture GP services to panel patients residing at all postal codes within the hexagon area.

The local view map depicts the distribution of PCN panel GP services by postal code for the core service area near PCN facilities. The local view maps are calculated by drawing a 2 km radius around every postal code and aggregating the data for all postal codes that fall within each circle. In rural areas, the population of postal codes is aggregated to towns with post offices and therefore the circles represent the town and surrounding rural population together. Additionally, concentric 5 and 10 km buffers surround the 2 km circles, or clusters of 2 km circles. The PCN postal codes do not actually fall within these light grey buffer areas, as the core PCN population, or their post office locations, are located within 2 km of the circle centers.

In both maps, PCN facilities (only those where GP services from panel patients were reported during the report timeframe) are represented through red dots. The number of panel GP services is captured though shades of grey or purple, where intensity of services increases from light grey (lowest) and dark grey, to lighter purple and darker purple (highest). Local geographic area boundaries (132 Alberta subdivisions identical to the ones used in the Community Profiles: <a href="http://www.health.alberta.ca/services/PHC-community-profiles.html">http://www.health.alberta.ca/services/PHC-community-profiles.html</a>) depicted with lines, municipality names (black text) and lakes (light blue) are also provided as reference features.

## Provost PCN Patient Panel GP Services by Postal Code (Provincial View)





#### **DEMOGRAPHICS**

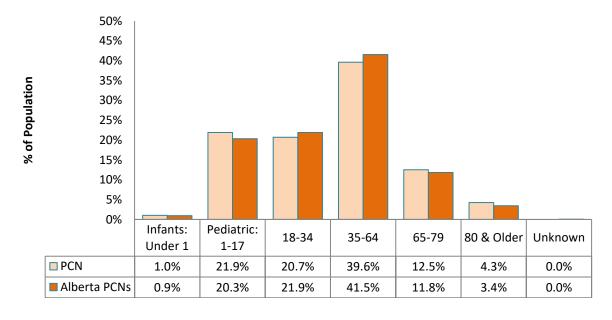
Table 1.1 shows the population distribution of the PCN patient panel broken down by age group and gender, for the most recent fiscal year available. Specific age groups have been identified. Children under the age of one year were defined as infants, while the pediatric age group includes all minors excluding infants. People with no age information available were categorized as unknown.

TABLE 1.1 Distribution of PCN Panel Population by Age and Gender, as at March 31, 2021

| Primary Care Network Population |        |       |       |  |  |  |
|---------------------------------|--------|-------|-------|--|--|--|
| Age Group                       | Female | Male  | Total |  |  |  |
| Infants: Under 1                | 21     | 23    | 44    |  |  |  |
| Pediatric: 1-17                 | 467    | 480   | 947   |  |  |  |
| 18-34                           | 455    | 440   | 895   |  |  |  |
| 35-64                           | 849    | 865   | 1,714 |  |  |  |
| 65-79                           | 259    | 283   | 542   |  |  |  |
| 80 & Older                      | 103    | 81    | 184   |  |  |  |
| Unknown                         | 0      | 0     | 0     |  |  |  |
| Total                           | 2,154  | 2,172 | 4,326 |  |  |  |

Figure 1.1 profiles the panel population distribution by age group for both the PCN panel and all PCNs in Alberta, for the most recent fiscal year available<sup>2</sup>.

FIGURE 1.1 Percentage Distribution of the PCN Panel Versus All Alberta PCNs Population By Age Group as at March 31,2021



4,100

The population counts for each year between 2016/2017 and the most recent fiscal year are provided in Figure 1.2.

4,700
4,600
4,500
4,500
4,400
4,300
4,300
4,317
4,326

FIGURE 1.2 PCN Panel Population<sup>3</sup> Covered as at End (March 31) of 2016/2017 - 2020/2021

The population of Provost Primary Care Network decreased by 7.1% between 2016/2017 and 2020/2021. A low of 4,317 individuals was reported in 2019/2020 and a peak of 4,659 people was reported in 2016/2017.

2018/2019

**Fiscal Year** 

2019/2020

2020/2021

#### Sources:

Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health Primary Care Network (PCN) Patient Panel File, Alberta Health

2017/2018

#### Notes:

<sup>1</sup> Patient panel derived based on four-cut methodology.

2016/2017

- <sup>2</sup> Since only one digit is displayed for the decimal, the percentage in Figure 1.1 may not add up to 100%.
- <sup>3</sup> Population might be missing during early years due to some PCNs being established later on. See Appendix A for details.

#### **SOCIAL DETERMINANTS OF HEALTH**

Table 2.1 present information regarding First Nations and Inuit populations for both the PCN panel<sup>1</sup> as well as all PCNs in Alberta. This information is presented as percentages.

TABLE 2.1 Population Percentage of First Nations with Treaty Status<sup>2</sup> and Inuit as at March 31, 2021

| Indigenous   |                                 |              |  |  |
|--|---------------------------------|--------------|--|--|
|  | Provost Primary Care<br>Network | Alberta PCNs |  |  |
| Percent of Population that is First Nations or Inuit | 0.5%                            | 2.4%         |  |  |

#### Sources:

Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry Files, Alberta Health Primary Care Network (PCN) Patient Panel File, Alberta Health

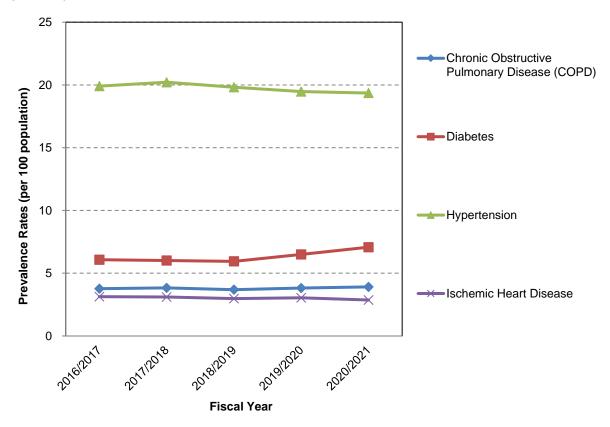
#### Notes:

- 1 Patient panel derived based on four-cut methodology. See Appendix A for details.
- <sup>2</sup> See Appendix A for details.

#### **CHRONIC DISEASE PREVALENCE**

Figure 3.1 displays the rates per 100 population of select chronic diseases in the PCN patient panel. The prevalence rates refer to the number of diagnosed individuals at a given time and have been standardized by age.

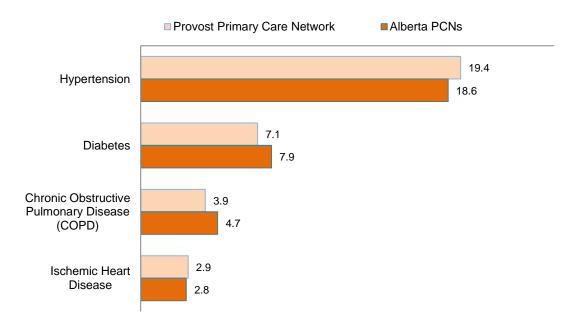
FIGURE 3.1 PCN Panel Age-Standardized Chronic Disease Prevalence Rates<sup>1 2 3</sup> (per 100 population), 2016/2017 - 2020/2021



On average, the condition with the highest chronic disease prevalence rate reported for Provost Primary Care Network during 2016/2017 to 2020/2021 was hypertension. In terms of highest rates, in 2020/2021, Provost Primary Care Network ranked number 20 in hypertension, number 32 in diabetes, number 26 in ischemic heart disease and number 34 in COPD among prevalence rates reported for the 40 PCNs.

Figure 3.2 depicts the 2020/2021 age-standardized prevalence rate for select major chronic diseases per 100 population for both the PCN panel and Alberta PCNs.

FIGURE 3.2 PCN Panel versus Alberta PCNs Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2020/2021



Age-Standardized Prevalence Rates (per 100 population)

In 2020/2021, the Provost Primary Care Network population prevalence rate for hypertension per 100 population was similar to the corresponding rate reported for the provincial PCNs (19.4 vs. 18.6 AB PCNs). In addition, Provost Primary Care Network showed prevalence rates higher than the provincial PCN rates for two of the four chronic diseases included above.

#### Sources:

Alberta Health Care Insurance Plan (AHCIP) Physician Claims Data, Alberta Health
Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health
Alberta Hospital Discharge Abstract Database (DAD), Alberta Health
Primary Care Network (PCN) Patient Panel File, Alberta Health
Census 2011 Population Data, Statistics Canada

#### Notes:

<sup>1</sup> Age-standardized prevalence rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 2011 census population.

<sup>&</sup>lt;sup>2</sup> Patient panel derived based on four-cut methodology. See Appendix A for details.

<sup>&</sup>lt;sup>3</sup> Population might be missing during early years due to some PCNs being established later on. See Appendix A for details.

#### MATERNAL AND CHILD HEALTH

Table 4.1 highlights maternal and child health indicators such as birth weight, fertility rate, teen birth rate and prenatal smoking for the PCN panel and Alberta PCNs. The indicator information is presented as rates, percentages or raw numbers, depending on the indicator.

TABLE 4.1 PCN Panel<sup>2</sup> Maternal and Child Health Indicators<sup>3</sup> for Three-Year Period

| Maternal and Child Health<br>Indicators   | Period                | Provost Primary Care<br>Network | Alberta PCNs |
|---|-----------------------|---------------------------------|--------------|
| Number of Births  |                       | 150                             | 138,972      |
| Percent Low Birth Weights (of Live<br>Births) <sup>1</sup> , less than 2500 gm  |                       | 6.0%                            | 7.1%         |
| Percent High Birth Weights (of Live Births) <sup>1</sup> , greater than 4000 gm |                       | 9.3%                            | 8.2%         |
| Birth Rate (per 1,000 population) <sup>1</sup>                                  | 2018/2019 - 2020/2021 | 23.1                            | 23.5         |
| Fertility Rate (per 1,000 Women 15 to 49 Years) <sup>1</sup>                    |                       | 50.6                            | 48.4         |
| Teen Birth Rate (per 1,000 Women 15 to 19 Years)                                |                       | 4.2                             | 7.3          |
| Percent of Deliveries with Maternal<br>Prenatal Smoking                         |                       | 8.3%                            | 9.2%         |

During 2018/2019 to 2020/2021, Provost Primary Care Network's birth rate of 23.1 per 1,000 women was similar to the provincial PCN rate based on qualifier method, and the teen birth rate of 4.2 per 1,000 was lower than Alberta's PCN teen birth rate. In addition, a similar proportion of prenatal smoking cases were reported compared to the province (8.3% vs. 9.2% AB PCNs).

#### Sources:

Alberta Hospital Discharge Abstract Database (DAD), Alberta Health Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health Alberta Vital Statistics Births File

Primary Care Network (PCN) Patient Panel File, Alberta Health

#### Notes:

<sup>&</sup>lt;sup>1</sup> See Appendix A for definition.

<sup>&</sup>lt;sup>2</sup> Patient panel derived based on four-cut methodology. See Appendix A for details.

<sup>&</sup>lt;sup>3</sup> Some PCNs do not have indicator values for this section due to the PCN being established after 2011/2012. See Appendix A for details.

#### INPATIENT SERVICE UTILIZATION

Table 5.1 describes inpatient separation<sup>1</sup> rates per 1,000 population for the PCN and Alberta PCNs patients accessing health facilities across all of Alberta. The rate of inpatient separations (IP Sep) is the ratio between the total number of separations and the total panel population for each year.

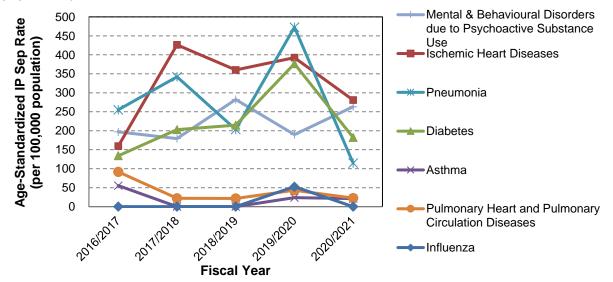
TABLE 5.1 Inpatient Separation Rates (per 1,000 population) for the PCN Panel<sup>2</sup> vs. Alberta PCNs Panel 2018/2019 - 2020/2021

| Inpatient Separation Rates (per 1,000 population) <sup>3</sup> |                                 |              |  |  |
|--|---------------------------------|--------------|--|--|
| Fiscal Years   | Provost Primary Care<br>Network | Alberta PCNs |  |  |
| 2018/2019  | 112.4                           | 84.6         |  |  |
| 2019/2020  | 132.0                           | 83.4         |  |  |
| 2020/2021  | 99.6                            | 74.1         |  |  |

Provost Primary Care Network's inpatient separation rate for panel patients in this PCN varied between 99.6 in 2020/2021 and 132.0 in 2019/2020. In addition, in 2020/2021, the inpatient separation rate for patients in the Provost Primary Care Network panel was 1.3 times higher than the provincial PCN rate (99.6 vs. 74.1 AB PCNs).

Figure 5.1 presents inpatient separation PCN panel rates for select health conditions (per 100,000 population), for the fiscal years 2016/2017 through 2020/2021. The rates have been standardized by age.

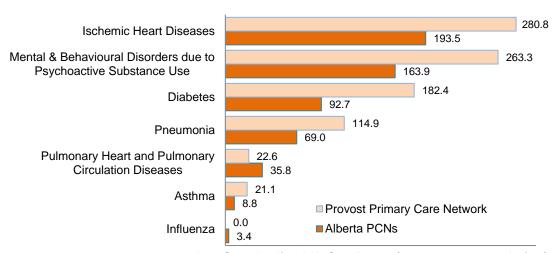
FIGURE 5.1 PCN Panel Age-Standardized<sup>3</sup> Inpatient Separation (IP Sep) Rates (per 100,000 population), for Selected Conditions, 2016/2017 - 2020/2021



On average, the highest inpatient separation rates among select health conditions reported in Provost Primary Care Network during 2016/2017 to 2020/2021 were due to ischemic heart diseases. These rates reached a high of 426.3 per 100,000 population in 2017/2018 and a low of 159.5 per 100,000 population in 2016/2017.

Figure 5.2 presents inpatient separation rates per 100,000 population for panel patients in the PCN, compared to provincial PCN rates, for the most recent fiscal year and select health conditions.

FIGURE 5.2 PCN Panel Versus Total Alberta PCNs Age-Standardized IP Sep Rates (per 100,000 population), For Select Conditions, 2020/2021



Age-Standardized IP Sep Rates (per 100,000 population)

In 2020/2021, the three highest IP Sep rates were reported for ischemic heart diseases, mental & behavioural disorders due to psychoactive substance use and diabetes. The most common reason for inpatient separations in Provost Primary Care Network was ischemic heart diseases, which had a higher rate compared to the provincial PCN rate (280.8 vs. 193.5 AB PCNs). Additionally, Provost Primary Care Network's inpatient separation rates were higher than the provincial rates for five of the seven diagnoses.

#### Sources:

Alberta Hospital Discharge Abstract Database (DAD), Alberta Health Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health Primary Care Network (PCN) Patient Panel File, Alberta Health

Census 2011 Population Data, Statistics Canada

**Notes:** <sup>1</sup> See Appendix A for definition.

<sup>&</sup>lt;sup>2</sup> Patient panel derived based on four-cut methodology. See Appendix A for details.

<sup>&</sup>lt;sup>3</sup> Population might be missing during early years due to some PCNs being established later on. See Appendix A for details.

<sup>&</sup>lt;sup>4</sup> Age-standardized rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 2011 census population.

**Appendix A** 

#### **Definitions**

#### **Age Standardization**

Age standardization is a technique applied to make rates comparable across groups with different age distributions. A simple rate is defined as the number of people with a particular condition divided by the whole population. An age-standardized rate is defined as the number of people with a condition divided by the population within each age group. Standardizing (adjusting) the rate across age groups allows a more accurate comparison between populations that have different age structures. Age standardization is typically done when comparing rates across time periods, different geographic areas, and/or population sub-groups (e.g. ethnic group).

#### **Birth Rate**

Birth rate is the number of live births of a given geographic area in a given year per 1,000 population of the same geographic area in the same year. (Statistics Canada)

#### **Chronic Obstructive Pulmonary Disease**

The population aged 35 and over who reported being diagnosed by a health professional with chronic bronchitis, emphysema or COPD. (Statistics Canada, Canadian Community Health Survey)

COPD is a progressive disease that makes it hard to breathe. It can cause coughing that produces large amounts of mucus, wheezing, shortness of breath, chest tightness, and other symptoms. Cigarette smoking is the leading cause of COPD. Most people who have COPD smoke or used to smoke. Long-term exposure to other lung irritants (such as air pollution, chemical fumes or dust) also may contribute to COPD.

#### **Fertility Rate**

The fertility rate is the number of live births per 1,000 women of reproductive age (15 - 49 years) in a population per year. This is a more standardized way to measure fertility in a population than birth rate because it accounts for the percentage of women of reproductive age. (Statistics Canada)

#### **Status First Nations**

A status First Nation person refers to the legal status of a person who is registered under the *Indian Act*. Under the *Indian Act*, status First Nations persons, also known as a registered First Nation person, may be eligible for a range of benefits, programs and services offered by the federal and provincial/territorial governments. (Government of Canada (2020) "What is [First Nation] Status?" <a href="https://www.sac-isc.gc.ca/eng/1100100032463/1572459644986">https://www.sac-isc.gc.ca/eng/1100100032463/1572459644986</a> Retrieved October 15, 2020)

#### **Four Cut Methodology**

The Four Cut Funding Methodology is a way of assigning patients to one Primary Health Care Provider (PHCP) in the province. All PCN patients who have visited a family physician (or pediatrician or nurse practitioner in select circumstances) are assigned to a patient list for that PHCP. These patients are called enrollees. The application of the Four Cut Funding Methodology only permits patients or enrollees to be counted once even if they have seen multiple PHCPs.

A patient is added to the PHCP list in the following manner:

- 1. Single PHCP A patient visiting a single PHCP is assigned to that PHCP.
- 2. Most Visited PHCP The remaining patients who have seen more than one PHCP are assigned to the PHCP they visited most frequently.
- 3. Physical Exam If the remaining patients have seen two PHCPs the same number of times, then they are assigned to the PHCP who completed the last physical exam.
- 4. Last PHCP If the remaining patients have seen two PHCPs the same number of times and have not received a physical exam, then they are assigned to the PHCP who saw them last.

These patient enrollee lists are calculated twice a year (April 1 and October 1) and payments based on the calculations are sent to each PCN. Each PCN also receives a report twice a year after the calculation and data runs are completed, providing specific information on the PCN's population.

#### **High Birth Weight**

Birth weight is the body weight of a baby at its birth. High birth weight is defined as live births with a weight of 10 pounds or 4,500 grams or more, expressed as a percentage of all live births with known weight (Statistics Canada, Vital Statistics, Birth Database)

#### **Hospitalization Rate**

The hospitalization rate is the age-standardized rate of acute care hospitalization per 100,000 population. (Canadian Institute for Health Information)

#### Inpatient

An inpatient is an individual who has been officially admitted to a hospital for the purpose of receiving one or more health services. (Canadian Institute for Health Information: MIS Standards 2011)

#### **Inpatient Separations (IP Sep)**

A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, sign-out against medical advice or transfer. The number of separations is the most commonly used measure of the utilization of hospital services. Separations, rather than

admissions, are used because hospital abstracts for inpatient care are based on information gathered at the time of discharge.

#### Inuit

Inuit are the Aboriginal people of Arctic Canada. As of 2016, it is estimated that over 65,000 Inuit live in 51 communities in: Nunatsiavut (Northern Labrador); Nunavik (Northern Quebec); Nunavut; and the Inuvialuit Settlement Region of the Northwest Territories. Each of these four Inuit groups have settled land claims. These Inuit regions cover one-third of Canada's land mass. Please note that small numbers of Inuit people can be found in various other regions of Canada other than the four regions listed above. There are 2,500 Inuit people residing in Alberta. (Source: Statistics Canada, 2016 and Inuit Statistical Profile 2018)

The word "Inuit" means "the people" in the Inuktitut language, and is the term by which Inuit refer to themselves. (Aboriginal Affairs and Northern Development Canada)

#### **Low Birth Weight**

Birth weight is the body weight of a baby at its birth. Live births less than 5.5 pounds or 2500 grams at birth are considered as babies with low birth weight. Low birth weight is a key determinant of infant survival, health and development. (Statistics Canada, Vital Statistics, Birth Database)

#### **Prevalence Rate**

Prevalence is a measure of disease that allows us to determine a person's likelihood of having a disease. Therefore, the number of prevalent cases is the total number of cases of disease existing in a population. A prevalence rate is the total number of cases of a disease existing in a population divided by the total population. (<a href="http://www.health.ny.gov/diseases/chronic/basicstat.htm">http://www.health.ny.gov/diseases/chronic/basicstat.htm</a>)

#### **Primary Care**

Primary care is the first point of contact that people have with the health care system for medical needs requiring treatment and referral to other services as needed and is usually provided by a family physician or other PHCP. (https://albertapcns.ca/pcn)

#### Qualifier (comparisons between indicator values)

In comparing indicators of a PCN compared to all Alberta (AB) PCNs, this report uses qualifiers such as 'higher than', 'lower than', 'similar to', etc. These statements are based on a simple statistical comparison that determines how far apart the indicator values are on the full scale of values for the indicator. For each indicator, the standard deviation (SD) was used as the measuring stick for whether the values are "close" or "far apart". For each indicator, the distance between the PCN value and the provincial (AB) PCN value was measured as the number of SDs and the direction of the difference (plus or minus). For example, if the PCN value is two SDs above the AB PCN value, then the PCN value is said to be 'much higher' than the provincial value.

The complete set of comparison criteria is given below.

| Qualifier          | Distance between values     |
|--------------------|-----------------------------|
| Much Lower         | below -1.5 SD               |
| Lower              | −1.5 SD <i>to</i> −0.25 SD  |
| Similar/Comparable | −0.25 SD <i>to</i> +0.25 SD |
| Higher             | +0.25 SD to +1.5 SD         |
| Much Higher        | +1.5 SD and higher          |

#### **Separation Rate**

A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, sign-out against medical advice or transfer. The separation rate is the total number of inpatient separations divided by the total population.

#### **Teen Birth Rate**

The teenage live birth rate is the number of live births per 1,000 women aged 15 to 19. (E-STAT, Statistics Canada)

# **Appendix B**

# **Provost Primary Care Network Panel Patient Distribution by Municipality**

The following listing shows the distribution of the Provost Primary Care Network panel population by municipality top 30 municipalities for the most recently available five fiscal years. The population counts might be missing during early fiscal years due to some PCNs established later on in the five fiscal year period examined.

|  | 2016/2017 | 2017/2018     | 2018/2019     | 2019/2020     | 2020/2021     |
|--|-----------|---------------|---------------|---------------|---------------|
| PROVOST                                | 2,440     | 2,343         | 2,365         | 2,253         | 2,266         |
|  | (52.4%)   | (51.7%)       | (52.1%)       | (52.2%)       | (52.4%)       |
| CHAUVIN                                | 346       | 345           | 338           | 316           | 298           |
|  | (7.4%)    | (7.6%)        | (7.4%)        | (7.3%)        | (6.9%)        |
| EDGERTON                               | (5.0%)    | 249<br>(5.5%) | 266<br>(5.9%) | 264<br>(6.1%) | 257<br>(5.9%) |
|  | 165       | 161           | 188           | 180           | 214           |
| CONSORT                                | (3.5%)    | (3.6%)        | (4.1%)        | (4.2%)        | (4.9%)        |
|  | 190       | 179           | 176           | 173           | 181           |
| CADOGAN                                | (4.1%)    | (4.0%)        | (3.9%)        | (4.0%)        | (4.2%)        |
|  | 170       | 184           | 172           | 160           | 160           |
| CZAR                                   | (3.6%)    | (4.1%)        | (3.8%)        | (3.7%)        | (3.7%)        |
|  | 143       | 129           | 121           | 124           | 129           |
| HAYTER                                 | (3.1%)    | (2.8%)        | (2.7%)        | (2.9%)        | (3.0%)        |
| LUCUENDEN                              | 100       | 97            | 100           | 93            | 102           |
| HUGHENDEN                              | (2.1%)    | (2.1%)        | (2.2%)        | (2.2%)        | (2.4%)        |
| METICKOW                               | 106       | 99            | 96            | 96            | 101           |
| METISKOW                               | (2.3%)    | (2.2%)        | (2.1%)        | (2.2%)        | (2.3%)        |
| ALTARIO                                | 67        | 78            | 83            | 73            | 74            |
| ALTAKIO                                | (1.4%)    | (1.7%)        | (1.8%)        | (1.7%)        | (1.7%)        |
| WAINWRIGHT                             | 56        | 69            | 67            | 66            | 64            |
| ************************************** | (1.2%)    | (1.5%)        | (1.5%)        | (1.5%)        | (1.5%)        |
| BODO                                   | 48        | 53            | 52            | 47            | 40            |
|  | (1.0%)    | (1.2%)        | (1.1%)        | (1.1%)        | (0.9%)        |
| EDMONTON                               | 66        | 62            | 53            | 52            | 36            |
|  | (1.4%)    | (1.4%)        | (1.2%)        | (1.2%)        | (0.8%)        |
| KIRRIEMUIR                             | 22        | 23            | 25            | 24            | 33            |
|  | (0.5%)    | (0.5%)        | (0.6%)        | (0.6%)        | (0.8%)        |
| LLOYDMINSTER                           | 33        | 33            | 32            | 29            | 25            |
|  | (0.7%)    | (0.7%)        | (0.7%)        | (0.7%)        | (0.6%)        |
| AMISK                                  | 37        | 29            | 22            | (0.5%)        | 24            |
|  | (0.8%)    | (0.6%)        | (0.5%)        | (0.5%)<br>25  | (0.6%)        |
| COMPEER                                | (0.6%)    | (0.6%)        | (0.6%)        | (0.6%)        | (0.6%)        |
|  | 32        | 31            | 31            | 20            | 17            |
| CALGARY                                | (0.7%)    | (0.7%)        | (0.7%)        | (0.5%)        | (0.4%)        |
|  | 16        | 22            | 19            | 17            | 13            |
| RED DEER                               | (0.3%)    | (0.5%)        | (0.4%)        | (0.4%)        | (0.3%)        |

| MUNICIPALITY             | 2016/2017 | 2017/2018 | 2018/2019 | 2019/2020 | 2020/2021 |
|--------------------------|-----------|-----------|-----------|-----------|-----------|
| STETTLER                 | 6         | 3         | 5         | 7         | 12        |
|                          | (0.1%)    | (0.1%)    | (0.1%)    | (0.2%)    | (0.3%)    |
| GRANDE PRAIRIE           | 5         | 6         | 14        | 16        | 10        |
|                          | (0.1%)    | (0.1%)    | (0.3%)    | (0.4%)    | (0.2%)    |
| HARDISTY                 | 5         | 4         | 9         | 9         | 10        |
| HANDISTI                 | (0.1%)    | (0.1%)    | (0.2%)    | (0.2%)    | (0.2%)    |
| MEDICINE HAT             | 11        | 12        | 10        | 8         | 10        |
| WEDICINE HAT             | (0.2%)    | (0.3%)    | (0.2%)    | (0.2%)    | (0.2%)    |
| VETERAN                  | 17        | 16        | 6         | 8         | 10        |
| VETERAN                  | (0.4%)    | (0.4%)    | (0.1%)    | (0.2%)    | (0.2%)    |
| CAMROSE                  | 8         | 6         | 8         | 10        | 9         |
| CAIVIRUSE                | (0.2%)    | (0.1%)    | (0.2%)    | (0.2%)    | (0.2%)    |
| LACOMPE                  | 7         | 9         | 10        | 11        | 9         |
| LACOMBE                  | (0.2%)    | (0.2%)    | (0.2%)    | (0.3%)    | (0.2%)    |
| CORONATION               | 15        | 12        | 6         | 8         | 8         |
| CORONATION               | (0.3%)    | (0.3%)    | (0.1%)    | (0.2%)    | (0.2%)    |
| VERMILION                | 3         | 9         | 9         | 8         | 8         |
| VERIVILION               | (0.1%)    | (0.2%)    | (0.2%)    | (0.2%)    | (0.2%)    |
| MONITOR                  | 9         | 6         | 5         | 4         | 7         |
| MONITOR                  | (0.2%)    | (0.1%)    | (0.1%)    | (0.1%)    | (0.2%)    |
| AIRDRIE                  | 2         | 3         | 6         | 6         | 6         |
| AIRDRIE                  | (0.0%)    | (0.1%)    | (0.1%)    | (0.1%)    | (0.1%)    |
| ALL OTHER MUNICIPALITIES | 274       | 232       | 217       | 188       | 169       |
| ALL OTHER MUNICIPALITIES | (5.9%)    | (5.1%)    | (4.8%)    | (4.4%)    | (3.9%)    |
| TOTAL DON DODUL ATION    | 4,659     | 4,530     | 4,538     | 4,317     | 4,326     |
| TOTAL PCN POPULATION     | (100.0%)  | (100.0%)  | (100.0%)  | (100.0%)  | (100.0%)  |

#### Sources:

Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health Primary Care Network (PCN) Patient Panel File, Alberta Health

#### Notes:

- Due to some missed and/or invalid PCN Patients' Postal Codes and gender information, the TOTAL PCN POPULATION in the table above may be slightly different from TABLE 1.1.
- Some of the figures in the above table may show a significant change in distribution between years. This may be due to an increase in new providers moving into the region and joining a PCN, providers joining a PCN and bringing their patients with them, or patients transferring to a new PCN.