



## Mental Health Status

Among the Métis Population of Alberta

**EPIDEMIOLOGICAL AND HEALTH SERVICES INDICATORS 2009-2017** 

## Acknowledgment

We would like to acknowledge the work of our project partners from the University of Alberta's School of Public Health, Elizabeth Wishart, Marla Palakkamanil, and Don Voaklander. Their knowledge and skills have made this work possible, and we thank them for their contributions.

This resource was made possible through funding received from the Government of Alberta.

## Message from the President



Greetings,

Mental wellness is an essential part of every person and is necessary for us to thrive within our communities.

As the President of the Otipemisiwak Métis Government: the Government of the Métis Nation within Alberta (MNA), I am pleased to share our report, *Mental Health Status Among the Métis Population of Alberta*, to focus our efforts on strengthening our mental wellness and ensuring everyone in our community has the support they need to flourish.

This report found that a significant and disproportionate mental health burden exists in the Métis population of Alberta. This knowledge is essential in understanding the mental health needs of our Citizens and opportunities we can leverage to support mental wellness and recovery for our community.

I would like to acknowledge and thank our partners for their contribution and support in completing this report.

I wish you well as our nation strengthens and grows in our traditional homeland.

Sincerely,

Andrea Sandmaier

President, Otipemisiwak Métis Government

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## Background and Rationale

With a distinct identity, territory, language, and culture, the Métis Nation emerged as an Indigenous people in the historic North-West, in the late 1700s and early 1800s.¹ The Métis Nation Homeland covers an area now known as the Canadian provinces of Alberta, Saskatchewan, and Manitoba, as well as contiguous parts of Ontario, British Columbia, the Northwest Territories, and portions of the northern United States in Montana, North Dakota, and Minnesota.¹ In 2021, the Métis population reached 624,220 in Canada, with the largest Métis population living within Ontario (134,615) and the second largest living within Alberta (127,470).² The Métis population has increased by 6.3% from 2016.²

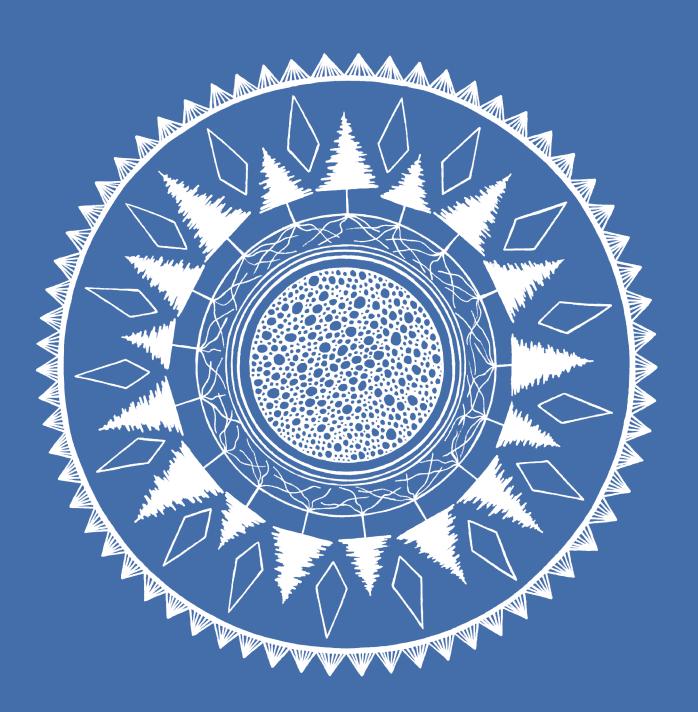
Though there is a large amount of research examining the health disparities and, specifically, the mental health status of Indigenous populations in Canada, very little of this research focuses on the Métis population.<sup>3</sup> Previous research has shown that Indigenous populations experience a greater mental health burden.<sup>4-9</sup> Critical assessment shows that research on the mental health outcomes of Indigenous populations in Canada is still needed, with the Métis population having the most significant gap in this research.<sup>7</sup> In Canada, research on the mental health outcomes of Indigenous populations has also focused heavily on self-harm-related mortality/ suicide and substance abuse, while other mental health diagnoses (e.g., anxiety, depression, schizophrenia) are understudied.<sup>7</sup>

This study addresses the lack of mental health research specific to Métis Albertans by examining the most recent 10-year data available for MNA Citizens. This study identifies the incidence and prevalence rates of the diagnoses highlighted in this report, incidence rates of psychiatric medication initiation, incidence rates of hospital treatment for self-harm and self-harm-related mortality/suicide, and incidence of health services use related to mental health.

## **Objectives**

This study examines the mental health burden among registered MNA Citizens (referred to in this report as the Métis population) compared to the non-Métis population. The specific objectives are to:

- Examine the yearly incidence of anxiety disorder, mood disorder and adjustment disorders, personality disorder, schizophrenia, substance use disorder, dementia, attention-deficit hyperactivity disorder (ADHD), emotional disorder, and conduct disorder diagnoses between fiscal years 2009/10 and 2016/17.
- Examine the yearly prevalence of anxiety disorder, mood disorder and adjustment disorder, personality disorder, schizophrenia, substance use disorder, dementia, attention-deficit hyperactivity disorder (ADHD), emotional disorder, and conduct disorder diagnoses between 2005 and 2016.
- ➤ Examine yearly psycho-pharmaceutical initiation incidence between 2010 and 2017.
- Examine the yearly prevalence of self-harm treated in hospitals between 2009 and 2016.
- Examine the yearly incidence of self-harm-related mortality/suicide between 2009 and 2017.
- Examine the yearly incidence of health service use related to the above diagnoses between 2006 and 2016.



## Overview of Research **Methods**

#### **DATA SOURCES**

Alberta Health has provided the following sources:

- Alberta Health Insurance Population Registry (linked to the MNA Citizen Registry Database)
- Canadian Institute for Health Information (CIHI) Hospital Inpatient Database

Using population-based administrative data from the sources listed above, this study compares the mental health outcomes of MNA Citizens (the Métis population) to the non-Métis population of Alberta.

#### STUDY POPULATION

This study's eligibility criteria were individuals with active registration in the Alberta Health Insurance Population Registry from 2005 to 2019. Individuals were identified in the linked MNA Citizen Registry Database to define the study cohorts. The non-Métis population cohort was identified as individuals in the health insurance registry not registered as Citizens of the MNA. Métis individuals not included in the MNA registry were considered part of the non-Métis population because there was no reliable method to identify them within the non-Métis population. All Métis individuals who met the eligibility criteria were included in the Métis cohort. For each Métis individual included in the study population we randomly selected up to seven non-Métis individuals registered during this period and living in the same Alberta region to act as controls.

#### **IDENTIFICATION OF CASES**

#### **ANXIETY DISORDER**

Anxiety disorder is an overarching term encompassing several types of anxiety, such as phobic anxiety, neurotic disorders, and obsessive-compulsive disorder.<sup>10</sup> Individuals who experience anxiety can have overwhelming feelings of fear and worry that may lead them to avoid people, places, or things or develop compulsive behaviours that help them cope with their anxiety.<sup>10</sup> This can limit their ability to function in the day-to-day activities of life. 10 In this study, anxiety disorder diagnoses were limited to individuals aged 10 or more at the time of diagnosis. Those who satisfied the age requirement and had at least two physician claims with an Identification of Cases-9 (ICD-9) code (300) in any diagnostic field with a mean of less than two years between visits were considered to have an anxiety disorder diagnosis. Individuals who satisfied the age requirement and had at least one inpatient hospitalization of an ICD-10-CA code (F40-F42) in any diagnostic field were also considered to have an anxiety disorder diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those with a recognized anxiety diagnosis from both the physician claims database and the hospital inpatient database.

#### MOOD DISORDER AND ADJUSTMENT DISORDER

Mood disorders describe how an individual's emotional states cause them to feel extreme highs and lows that are not congruent with their circumstances. Mood disorders include different types of depression, mania, and bipolar disorder. Adjustment disorders describe how individuals adjust to changing life circumstances and are diagnosed when their reactions are deemed "unhealthy or excessive."11 Mood disorder and adjustment disorder diagnoses were limited to individuals aged 10 or more at the time of diagnosis. Those who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (296, 308, 309, 311) of a mood disorder and/or adjustment disorder with a mean of less than two years between visits were considered to have a mood

disorder and/or adjustment disorder diagnosis. Individuals who satisfied the age requirement and had at least one inpatient hospitalization of an ICD-10-CA code (F31-F38, F530-F531, F43.0-F43.2) for a mood disorder and adjustment disorder were also considered to have a mood disorder and/or adjustment disorder diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those with a recognized mood disorder and/or adjustment disorder diagnosis from both the physician claims database and the hospital inpatient database.

#### **PERSONALITY DISORDER**

There are multiple types of personality disorders. Underlying all these personality disorders is the description of a deep-seated maladaptive style that is part of an individual's personality and is pervasive and longstanding from the teenage years onward.<sup>12</sup> Personality disorder diagnoses were limited to individuals aged 10 or more at the time of diagnosis. Those who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (301) of a personality disorder with a mean of less than two years between visits were considered to have a personality disorder. Individuals who satisfied the age requirement and had at least one inpatient hospitalization of an ICD-10-CA code (F60-F62, F68, F69) for a personality disorder were also considered to have a personality disorder diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those who had a recognized personality disorder diagnosis from both the physician claims database and the hospital inpatient database.

#### **SCHIZOPHRENIA**

Schizophrenia describes how one's ability to interpret reality is altered.<sup>13</sup> Schizophrenia may involve hallucinations, delusions, or both.<sup>13</sup> Diagnoses of schizophrenia were limited to individuals aged 10 or more at the time of diagnosis. Those who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (295) of schizophrenia with a mean of less than two years between visits were considered to have a schizophrenia diagnosis. Individuals who satisfied the age requirement and had at least one inpatient hospitalization of an ICD-10-CA code (F20-F21, F23.2, F25) for schizophrenia were also considered to have a schizophrenia diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those who had a recognized schizophrenia diagnosis from both the physician claims database and the hospital inpatient database.

#### SUBSTANCE USE DISORDER

Substance use disorder describes a disease that affects a person's brain and behaviour and leads to an inability to control the use of a legal or illegal drug, medication, or alcohol. Usubstance use disorder diagnoses were limited to individuals aged 10 or more at the time of diagnosis. Those who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (291, 292, 303-305) of a substance use disorder with a mean of less than two years between visits were considered to have a substance use disorder diagnosis. Individuals who satisfied the age requirement and had at least one inpatient hospitalization for substance use disorder were also considered to have a substance use disorder diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those who had a recognized substance use disorder diagnosis from both the physician claims database and the hospital inpatient database.

#### DEMENTIA

Dementia is an overarching term that relates to impaired memory. <sup>15</sup> Dementia includes diseases such as Alzheimer's (ICD-9). Diagnoses of dementia were limited to adults aged 55 or older at the time of diagnosis. Those who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (290, 294, 331, 797) of dementia with a mean of less than two years between visits were considered to have a dementia diagnosis. Individuals who satisfied the age requirement and had at least one inpatient hospitalization for dementia were also considered to have a dementia diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those who had a recognized dementia diagnosis from both the physician claims database and the hospital inpatient database.

#### **ADHD**

Attention-deficit hyperactivity disorder (ADHD) describes a childhood neurobehavioural disorder that impacts the child's ability to focus.<sup>16</sup> Children with an ADHD diagnosis can also be hyperactive and impulsive. <sup>16</sup> ADHD diagnoses were limited to children aged 5 to 15 at the time of diagnosis. Children who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (314) of ADHD with a mean of less than two years between visits were considered to have an ADHD diagnosis. Children who satisfied the age requirement and had at least one inpatient hospitalization of an ICD-10-CA code (F90) for ADHD were also considered to have an ADHD diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those who had a recognized ADHD diagnosis from both the physician claims database and the hospital inpatient database.

#### **EMOTIONAL DISORDER**

Emotional disorder describes a childhood disorder identified by "sustained low mood or persistent excessive fearfulness". Emotional disorder diagnoses were limited to children aged 5 to 15 at the time of diagnosis. Children who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (313) of an emotional disorder with a mean of less than two years between visits were considered to have an emotional disorder diagnosis. Children who satisfied the age requirement and had at least one inpatient hospitalization of an ICD-10-CA code (F93) for an emotional disorder were also considered to have an emotional disorder diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those who had a recognized emotional disorder diagnosis from both the physician claims database and the hospital inpatient database.

#### **CONDUCT DISORDER**

Conduct disorder describes a childhood disorder distinguished by antisocial, combative, or defiant behaviour beyond what would be considered ordinary or mischievous. Conduct disorder diagnoses were limited to children aged 5 to 15 at the time of diagnosis. Children who satisfied the age requirement and had at least two physician claims diagnoses with an ICD-9 code (312) of conduct disorder with a mean of less than two years between visits were considered to have a conduct disorder diagnosis. Children who satisfied the age requirement and had at least one inpatient hospitalization of an ICD-10-CA code (F91-F92) for conduct disorder were also considered to have a conduct disorder diagnosis for this study. The date of diagnosis was identified by the earliest filed claim date or the earliest date of hospitalization, or whichever came first for those who had a recognized conduct disorder diagnosis from both the physician claims database and the hospital inpatient database.

#### **SELF-HARM**

Self-harm describes the act of intentionally inflicting harm on oneself through self-poisoning or self-injuring.<sup>19</sup> Self-harm analysis was limited to individuals aged 10 and older. Individuals who satisfied the age requirement and had at least one inpatient hospitalization or recorded Emergency Department (ED) visit of an ICD-10 code (X60-X84) were considered to have engaged in self-harm for this study. The earliest recorded date of self-harm for each fiscal year from either the ambulatory care database or the hospital inpatient database was identified for each patient and used to calculate the age-sex standardized incidence rate for each fiscal year.

#### SELF-HARM-RELATED MORTALITY/SUICIDE

Self-harm-related mortality/suicide describes the act of intentionally causing one's own death.<sup>20</sup> For this study, the identification of self-harm-related mortality/ suicide was restricted to individuals aged 10 and older. Individuals who satisfied the age requirement and whose primary cause of death (U-cause) was listed in the vital statistics database as ICD-10 code (X60-X84) were considered to have died by suicide.

# Statistical Analysis and Outcomes Reported

#### INCIDENCE OF DIAGNOSES

Incidence measures the frequency with which new cases, illness, injury, or other health conditions occurs.<sup>21</sup> The annual incidence for the diagnoses identified in this report were calculated for the 2009/10 fiscal year through to and including the 2016/17 fiscal year. Incidence rates were expressed per 100,000 person-years. Rates were adjusted by age and sex using the direct standardization method. The 2016 Canadian Census population was used as the reference population.

#### PREVALENCE OF DIAGNOSES

Prevalence measures the number of cases among a given population.<sup>21</sup> The annual prevalence for the diagnoses identified in this report were calculated from 2005 through to and including 2016. Prevalence rates were expressed per 100,000 person-years. Rates were adjusted by age and sex using the direct standardization method. The 2016 Canadian Census population was used as the reference population.

## INCIDENCE OF PSYCHOPHARMACEUTICAL USE (DRUG INITIATION THERAPY)

Psychopharmaceuticals are medications which have a therapeutic effect on the central nervous system.<sup>22</sup> They are used as the treatment for individuals experiencing mental disorders.<sup>22</sup> The initiation of psychopharmaceutical use for each of the diagnoses identified in this report was calculated from 2009 through to and including 2016. Psychopharmaceutical initiation therapy was determined as the number of incident drug dispensations per the number of incident disorder diagnoses during each fiscal year and expressed as a percentage. Drug initiation therapy was calculated for each psychopharmaceutical, each diagnosis, and each fiscal year and was compared between the Métis and non-Métis populations. The following

psychopharmaceuticals were assessed: anti-depressants, anti-epileptics, anxiolytics, mood stabilizers, anti-psychotics, psychostimulants, opioids, and addiction treatment.

#### **INCIDENCE OF SELF-HARM**

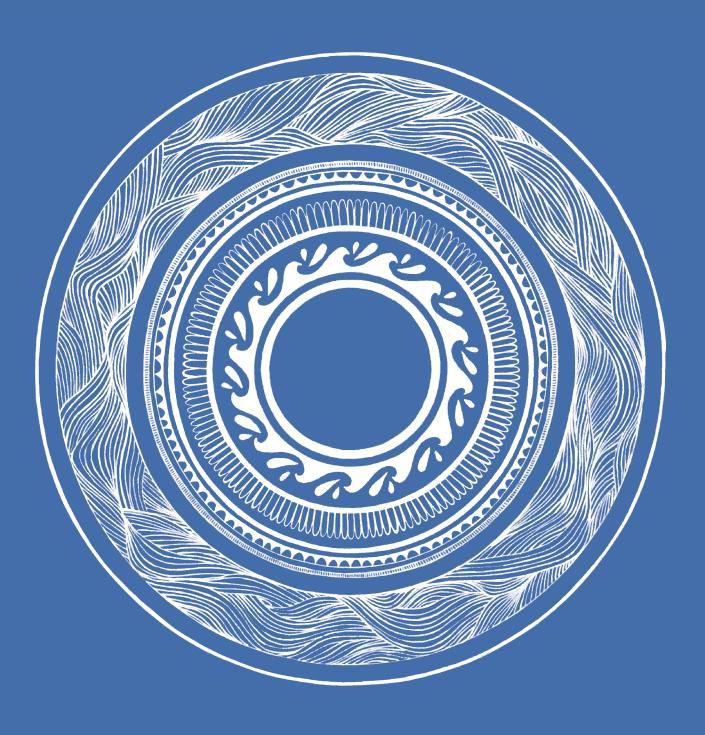
The annual incidence of self-harm was calculated from 2009 through to and including 2016. Incidence rates were expressed per 100,000 person-years. Rates were adjusted by age and sex using the direct standardization method. The 2016 Canadian Census population was used as the reference population.

#### INCIDENCE OF SELF-HARM-RELATED MORTALITY/SUICIDE

The annual age-sex-standardized incidence of self-harm-related mortality/suicide was calculated from 2009 through to and including 2017. Self-harm-related mortality/ suicide incidence rates were expressed per 100,000 person-years, and rates were adjusted by age and sex using the direct standardization method. The 2016 Canadian Census population was used as the reference population.

#### INCIDENCE OF HEALTH SERVICE USE

The age-sex standardized rate of mental health-related service use was calculated and compared for each year from 2006 through to and including 2016. Mental health service use was calculated separately for the physician claims database, ambulatory care database, and hospital inpatient database. For the ambulatory care database, only mental health-related ED presentations were analyzed. For each database, a mental health service was identified as being when the primary diagnostic field was coded for self-harm or one of the other diagnoses in this report (anxiety disorders, mood disorders and/or adjustment disorders, personality disorders, schizophrenia, substance use disorders, dementia, ADHD, emotional disorders or conduct disorders). Mental health-related physician claims service use rates, mental healthrelated inpatient service use rates, and mental health-related ED service use rates were expressed per 100,00 person-years and were adjusted by age and sex using the direct standardization method.



## Results

#### INCIDENCE OF DIAGNOSES

#### **ANXIETY DISORDER**

The age-sex standardized incidence rate of anxiety disorders was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.1, Table 1.1). The mean age-sex standardized rate of anxiety disorder diagnoses among the Métis population for all years analyzed was 1,815/100,000 person-years. The mean age-sex standardized rate of anxiety disorder diagnoses among the non-Métis population for all years analyzed was 1,466/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, 1.24 times more likely to have been diagnosed with an anxiety disorder from 2009/10 to 2016/17.

#### MOOD DISORDER AND ADJUSTMENT DISORDER

The age-sex standardized incidence rate of mood disorder and adjustment disorder diagnoses was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.2, Table 1.2). The mean age-sex standardized rate of mood disorder and adjustment disorder diagnoses among the Métis population for all years analyzed was 1,802/100,000 person-years. The mean age-sex standardized rate of mood disorder and adjustment disorder diagnoses among the non-Métis population for all years analyzed was 1,415/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, 1.24 times more likely to have been diagnosed with mood disorders and/or adjustment disorders from 2009/10 to 2016/17.

#### PERSONALITY DISORDER

The age-sex standardized incidence rate of personality disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.3, Table 1.3). The mean age-sex standardized rate of personality disorder diagnosis among the Métis population for all years analyzed was 169/100,000 person-years. The mean age-sex standardized rate of personality disorder diagnosis among the non-Métis population for all years analyzed was 104/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, 1.63 times more likely to have been diagnosed with personality disorders from 2009/10 to 2016/17.

#### **SCHIZOPHRENIA**

The age-sex standardized incidence rate of schizophrenia diagnosis was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.4, Table 1.4). The mean age-sex standardized rate of schizophrenia diagnosis among the Métis population for all years analyzed was 87/100,000 person-years. The mean age-sex standardized rate of schizophrenia diagnosis among the non-Métis population for all years analyzed was 69/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, 1.26 times more likely to have been diagnosed with schizophrenia from 2009/10 to 2016/17.

#### SUBSTANCE USE DISORDER

The age-sex standardized incidence rate of substance use disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.5, Table 1.5). The mean age-sex standardized substance use disorder diagnosis rate among the Métis population for all years analyzed was 1,081/100,000 person-years. The mean age-sex standardized substance use disorder diagnosis rate among the non-Métis population for all years analyzed was 751/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, 1.4 times more likely to have been diagnosed with substance use disorders from 2009/10 to 2016/17.

#### DEMENTIA

The age-sex standardized incidence rate of dementia diagnosis was consistently higher in the non-Métis population than the Métis population for all fiscal years analyzed (Figure 1.6. Table 1.6). The mean age-sex standardized rate of dementia diagnosis among the non-Métis population for all years analyzed was 944/100,000 person-years. The mean age-sex standardized rate of dementia diagnosis in the Métis population for all years analyzed was 518/100,000 personyears. Compared to the Métis population, individuals in the non-Métis population were, on average, 1.8 times more likely to have been diagnosed with dementia from 2009/10 to 2016/17.

#### **ADHD**

The age-sex standardized incidence rate of ADHD diagnosis was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.7, Table 1.7). The mean age-sex standardized rate of ADHD diagnosis among the Métis population for all years analyzed was 812/100,000 person-years. The mean age-sex standardized rate of ADHD diagnosis among the non-Métis population for all years analyzed was 697/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, 1.16 times more likely to have been diagnosed with ADHD from 2009/10 to 2016/17.

#### **EMOTIONAL DISORDER**

The age-sex standardized incidence rate of emotional disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.8, Table 1.8). The mean age-sex standardized rate of emotional disorder diagnosis among the Métis population for all the years analyzed was 267/100,000 person-years. The mean age-sex standardized rate of emotional disorder diagnosis among the non-Métis population for all years analyzed was 203/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, 1.32 times more likely to have been diagnosed with emotional disorders from 2009/10 to 2016/17.

#### CONDUCT DISORDER

The age-sex standardized incidence rate of conduct disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all fiscal years analyzed (Figure 1.9, Table 1.9). The mean age-sex standardized rate of conduct disorder diagnosis among the Métis population for all years analyzed was 317/100,000 person-years. The mean age-sex standardized rate of conduct disorder diagnosis among the non-Métis population for all years analyzed was 249/100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, approximately 1.27 times more likely to have been diagnosed with conduct disorders from 2009/10 to 2016/17.

#### PREVALENCE OF DIAGNOSES

#### **ANXIETY DISORDER**

The age-sex standardized prevalence of anxiety disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all years analyzed (Figure 2.1, Table 2.1). There was also a trending increase in the gap in prevalence between both populations. Compared to the non-Métis population, individuals in the Métis population were between 1.04-1.22 times more likely to have an anxiety disorder diagnosis from 2005 to 2016.

#### MOOD DISORDER AND ADJUSTMENT DISORDER

The age-sex standardized prevalence of mood disorder and adjustment disorder diagnoses was consistently higher in the Métis population than the non-Métis population for all years analyzed (Figure 2.2, Table 2.2). The gap in prevalence between both populations followed an increasing trend. Compared to the non-Métis population, individuals in the Métis population were between 1.05-1.25 times more likely to have mood disorder and/or adjustment disorder diagnoses from 2005 to 2016.

#### PERSONALITY DISORDER

The age-sex standardized prevalence of personality disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all years analyzed (Figure 2.3, Table 2.3). There was a trending increase in the prevalence gap between the populations. Compared to the non-Métis population, individuals in the Métis population were between 1.32-1.55 times more likely to have a personality disorder diagnosis from 2005 to 2016.

#### **SCHIZOPHRENIA**

The age-sex standardized prevalence of schizophrenia diagnosis was higher in the Métis population than the non-Métis population for nearly all years analyzed, except for 2005, where the age-sex standardized prevalence of schizophrenia was marginally higher in the non-Métis population (Figure 2.4, Table 2.4). From 2006 to 2016, individuals in the Métis population were between 1.02-1.19 times more likely to have a schizophrenia diagnosis than individuals in the non-Métis population.

#### SUBSTANCE USE DISORDER

The age-sex standardized prevalence of substance use disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all years analyzed (Figure 2.5, Table 2.5). From 2005 to 2016, individuals in the Métis population were, on average, 1.4 times more likely to have a substance use disorder diagnosis than individuals in the non-Métis population.

#### DEMENTIA

The age-sex standardized prevalence of dementia diagnosis was consistently higher in the non-Métis population than the Métis population for all years analyzed (Figure 2.6, Table 2.6). In 2005, individuals in the non-Métis population were 3.1 times more likely to have a dementia diagnosis than individuals in the Métis population. However, by 2016, individuals in the non-Métis population were only 1.8 times more likely to have a dementia diagnosis compared to the Métis population.

#### **ADHD**

The age-sex standardized prevalence of ADHD diagnosis was consistently higher in the Métis population than the non-Métis population for all years analyzed (Figure 2.7, Table 2.7). From 2005 to 2016, individuals in the Métis population were, on average, 1.28 times more likely to have an ADHD diagnosis than individuals in the non-Métis population.

#### **EMOTIONAL DISORDER**

The age-sex standardized prevalence of emotional disorder diagnosis was consistently higher in the Métis population than the non-Métis population for all years analyzed (Figure 2.8, Table 2.8). There was a trending increase in the prevalence gap between the populations. Compared to the non-Métis population, individuals in the Métis population were between 1.25-1.57 times more likely to have an emotional disorder diagnosis from 2005 to 2016.

#### CONDUCT DISORDER

The age-sex standardized prevalence of conduct disorder diagnosis was consistently higher in the Métis population than the non-Métis population for nearly all years analyzed, except for 2006, where the age-sex standardized prevalence of conduct disorder diagnosis was marginally higher in the non-Métis population (Figure 2.9, Table 2.9). However, there was a trending increase in the prevalence gap between the populations. Compared to the non-Métis population, Métis individuals were between 1.00-1.43 times more likely to have a conduct disorder diagnosis from 2005 to 2016.

#### PHARMACEUTICAL INITIATION THERAPY (INCIDENCE)

#### **ANTI-DEPRESSANTS**

Anti-depressants are a category of drugs used for the treatment of depression.<sup>22</sup> The Métis and non-Métis populations had similar average anti-depressant initiation incidence rates over the eight years analyzed (Figure 3.1). For most diagnoses in this report, the Métis population averaged a higher initiation incidence of anti-depressants. Anti-depressant initiation incidence was highest among individuals with anxiety and mood disorder diagnoses, and children with emotional disorder diagnoses. For individuals in both populations with these diagnoses, the average anti-depressant initiation incidence was over 30% for the eight years analyzed.

#### **ANTI-EPILEPTICS**

Anti-epileptics are a category of drug used to prevent and decrease the number, severity, and/or duration of seizures.<sup>23</sup> The Métis and non-Métis populations had similar average anti-epileptic initiation incidence rates over the eight years analyzed (Figure 3.2). Anti-epileptic initiation incidence was highest among individuals with personality disorder and schizophrenia diagnoses. The average anti-epileptic initiation incidence for individuals with these diagnoses was approximately 20% or greater across the eight years assessed. The average anti-epileptic initiation incidence for these diagnoses was slightly higher among the Métis population.

#### **ANXIOLYTICS**

Anxiolytics are a category of drugs used to treat the symptoms of anxiety.<sup>24</sup> The Métis and non-Métis populations had similar average anxiolytic initiation incidence rates over the eight years analyzed (Figure 3.3). Except for dementia, the Métis population averaged a higher initiation incidence of anxiolytics for the diagnoses in this report. The average anxiolytic initiation incidence was highest among Métis and non-Métis individuals with anxiety, mood disorder, and schizophrenia diagnoses.

#### **MOOD STABILIZER**

Mood-stabilizers are a category of drug used in the treatment and management of bipolar disorder.<sup>25</sup> The average mood stabilizer initiation incidence across the eight years analyzed was similar among the Métis and non-Métis populations (Figure 3.4). Mood stabilizers had a low initiation incidence, with both populations having an average initiation incidence of mood stabilizers less than 5% for the diagnoses in this report, excluding personality disorder and schizophrenia diagnoses. For Métis individuals with personality disorder and schizophrenia diagnoses, the average mood stabilizer initiation incidence rate was 13% and 12.5%, respectively. For non-Métis individuals with personality disorder and schizophrenia diagnoses, the average mood stabilizer initiation incidence rate was 12% and 14%, respectively.

#### **ANTI-PSYCHOTIC**

Anti-psychotics are a category of drug used to reduce or relieve symptoms of psychosis, such as delusions and hallucinations.<sup>26</sup> The average anti-psychotic initiation incidence over the eight years analyzed was similar among the Métis and non-Métis populations (Figure 3.5). Initiation incidence of anti-psychotics was higher in the Métis population except for children with conduct disorder diagnoses. The average initiation incidence of anti-psychotics was slightly higher among non-Métis children than among Métis children with this diagnosis (26% and 23%, respectively). Anti-psychotic initiation incidence was highest in Métis and non-Métis individuals with schizophrenia diagnoses, with an average initiation incidence of 34% and 31%, respectively.

#### **PSYCHOSTIMULANT**

Psychostimulants are a category of drug that influence cognitive and affective functioning and behaviors, and have been widely used to treat ADHD.<sup>27</sup> The average psychostimulant initiation incidence over the eight years analyzed was similar among the Métis and non-Métis populations (Figure 3.6). Initiation incidence of psychostimulants was higher among the Métis population, except for children with conduct and emotional disorder diagnoses. The average initiation incidence of psychostimulants was slightly higher among non-Métis children than Métis children with these diagnoses. Psychostimulant initiation

incidence was highest in Métis and non-Métis children, with an average initiation incidence of 52% for both populations.

#### **OPIOID**

Opioids are a category of drug that work in the brain to produce a variety of effects, including pain relief.<sup>28</sup> The average opioid initiation incidence over the eight years analyzed was somewhat similar among the Métis and non-Métis populations (Figure 3.7). There was a consistently higher initiation incidence of opioids among the Métis population with childhood disorder diagnoses (ADHD, conduct disorder, and emotional disorder). An average of 22% of Métis children with emotional disorder diagnoses were prescribed opioids. In comparison, only an average of 16% of non-Métis children with emotional disorder diagnoses were prescribed opioids over the eight years examined. An average of 19% of Métis children with conduct disorder diagnoses were prescribed opioids, while only 13% of non-Métis children with conduct disorder diagnoses were prescribed opioids over the eight years examined. In this study, opioids were most often prescribed for anxiety, mood disorder, and substance use disorder diagnoses. This was consistent across both Métis and non-Métis populations with these diagnoses. For these three diagnoses, the average opioid initiation incidence was approximately 25% for both populations.

#### ADDICTION TREATMENT

There is no "one-size-fits-all" approach to addictions treatment and it includes self-help, self-help groups, peer support, harm reduction, counseling, alcohol and other drug education, medications, withdrawal management, and others.<sup>29</sup> The average addiction treatment (AT) initiation incidence was similar among the Métis and non-Métis populations over the eight years analyzed (Figure 3.8). The average AT initiation incidence was low for both populations (<10%) for all the diagnoses in this report across the eight years analyzed, excluding personality disorder, schizophrenia, and substance use disorder diagnoses. Métis and non-Métis individuals with substance use disorder diagnoses averaged the highest initiation incidence of AT across the eight years analyzed, at 20% and 18%, respectively.

#### **INCIDENCE OF SELF-HARM**

The age-sex standardized incidence rate of self-harm was consistently higher in the Métis population for all years analyzed (Figure 4.1, Table 4.1). The mean age-sex standardized rate of self-harm among the Métis population for all years analyzed was 322 per 100,000 person-years. The mean age-sex standardized rate of self-harm among the non-Métis population for all years analyzed was 164 per 100,000 person-years. Compared to the non-Métis population, individuals in the Métis population were, on average, almost twice as likely to engage in selfharm from 2009 to 2016.

#### INCIDENCE OF SELF-HARM-RELATED **MORTALITY/SUICIDE**

The age-sex standardized incidence rate of self-harm-related mortality/ suicide was consistently higher in the Métis population compared to the non-Métis population (Figure 5.1, Table 5.1). The self-harm-related mortality/suicide incidence remained relatively consistent across the period analyzed in the non-Métis population with an average age-sex standardized incidence rate of 2,550 self-harm-related/suicide deaths per 100,000 person-years. In the Métis population, the self-harm-related mortality/suicide incidence rates fluctuated from 2009 to 2012. From 2013 to 2017, the self-harm-related mortality/suicide rate was an average of two times higher in the Métis population compared to the non-Métis population.

#### INCIDENCE OF HEALTH SERVICE USE

#### PHYSICIAN CLAIM SERVICE USE

The age-sex standardized rate of physician claims service use related to mental health was consistently slightly higher among the Métis population as compared to the non-Métis population except in 2008 (Table 6.1, Figure 6.1). Physician claims service use was similar between both populations across the 11 years analyzed, but the service use gap increased throughout the study period. In 2006, the age-sex standardized rate of physician claims service use was almost identical between both populations, with the Métis population having a rate of

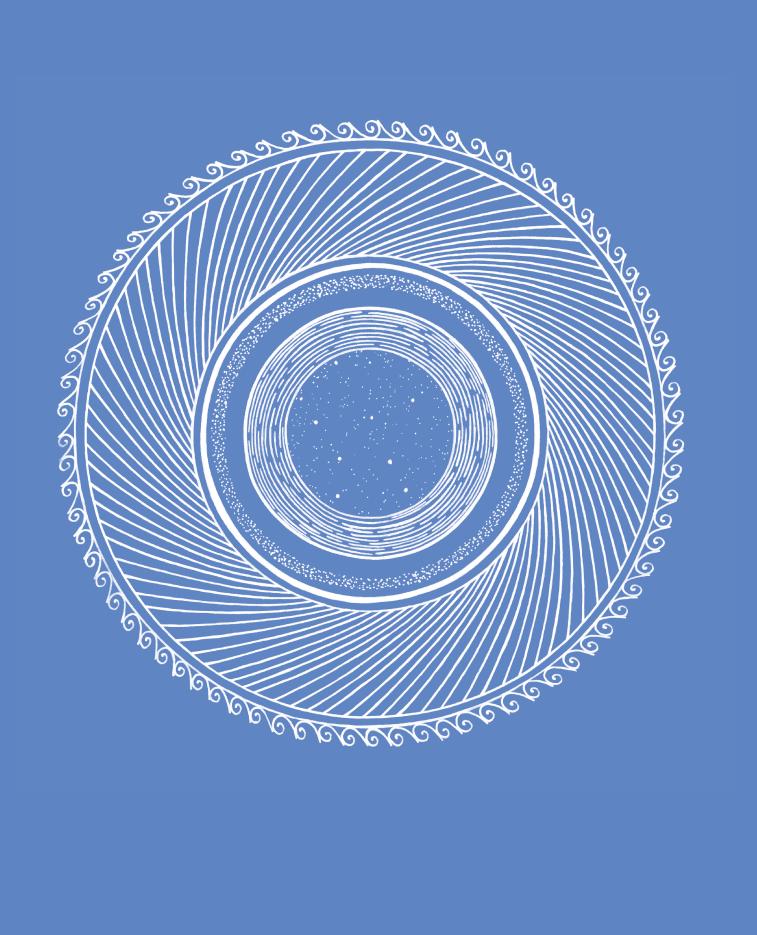
use 1.02 times higher than the non-Métis population. In the last year of analysis (2016), physician claims service use was 1.2 times higher in the Métis population than in the non-Métis population. Overall, physician claims service use related to mental health increased more among the Métis population than the non-Métis population over the period analyzed.

#### INPATIENT SERVICE USE

The age-sex standardized rate of inpatient service use related to mental health was consistently higher among the Métis population than the non-Métis population (Table 6.2, Figure 6.2). Over the 11 years analyzed, inpatient service use generally increased for both populations. However, the gap in inpatient service use increased throughout the study period as well. In 2006, the age-sex standardized rate of inpatient service use related to mental health was 1.2 times higher in the Métis population compared to the non-Métis population. By 2017, the age-sex standardized rate of inpatient service use was 1.6 times higher in the Métis population than in the non-Métis population. Overall, inpatient service use related to mental health increased more among the Métis population than the non-Métis population for the period analyzed.

#### **EMERGENCY DEPARTMENT SERVICE USE**

The age-sex standardized rate of ED service use related to mental health was consistently higher among the Métis population than the non-Métis population (Table 6.3, Figure 6.3). Over the 11 years analyzed, ED service use trended upward for both populations and the service gap widened. In 2006, the agesex standardized rate of ED service use related to mental health was 1.4 times greater in the Métis population as compared to the non-Métis population. By 2017, the age-sex standardized rate of ED service use was 1.7 times higher in the Métis population than in the non-Métis population. The largest gap was in 2015 when ED service use was 1.8 times higher among the Métis population as compared to the non-Métis population. Overall, ED service use related to mental health increased more among the Métis population than the non-Métis population for the period analyzed.



## Discussion

#### INCIDENCE AND PREVALENCE OF DIAGNOSES

A previous study examining the mental health status of the Métis population of Alberta looked at a similar list of diagnoses.8 This previous study found that the Métis population had a higher prevalence of substance use disorder, mood disorder, and neurotic disorder diagnoses and a lower prevalence of dementia and schizophrenia diagnoses than the non-Métis population. This study found the incidence and prevalence of all diagnoses, except dementia, to be higher among the Métis population. The lower incidence and prevalence rate of dementia could be due to better health in the Métis population or could be due to lower life expectancy among the Métis,<sup>30</sup> as dementia occurs in geriatric populations.

The higher rates of other diagnoses (anxiety, mood disorders, personality disorders, schizophrenia, substance use disorders, conduct disorders, emotional disorders, and ADHD) found in the Métis population suggests that the Métis population in Alberta generally experiences a greater mental health burden than the non-Métis population.

#### **PSYCHOPHARMACEUTICAL** INITIATION INCIDENCE

Although similar, the average psychopharmaceutical initiation incidence tended to be higher for the Métis population than the non-Métis population for all drugs and diagnoses analyzed. This suggests that once diagnosed, Métis individuals are, on average, more likely to be dispensed a medication of interest than non-Métis individuals. The psychopharmaceutical information network (PIN) only records dispensations, not prescriptions. However, one can reasonably conclude that if dispensations are higher among the Métis population, so are prescriptions. This may be because Métis individuals are more likely to live in rural areas, which tend to be underserved in terms of specialized mental health and addiction services.<sup>31</sup> Where access to specialized mental health and addiction services is limited in rural parts of Alberta, a primary health care provider may be more willing to prescribe their patient pharmaceutical therapy to make up for the lack of access to other

specialized treatment options. Pharmacies are more widely accessible in rural areas than specialty mental health and addiction services. 32,33 However, with the increase in virtual health care services available, such as counselling, due to the COVID-19 pandemic, this barrier to access may be reduced. Financial considerations will likely continue to be a barrier to access. Financial coverage for medications is usually more comprehensive than coverage for counselling services, meaning mental health care is more fiscally attainable through pharmaceuticals than therapists.<sup>34</sup> It is also important to note that the Métis are not eligible for the Government of Canada's Non-Insured Health Benefits program, while First Nations individuals registered under the Indian Act and Inuk recognized by Inuit land claims are. 35 Additionally, in Alberta, the Métis population has a lower total income than the non-Indigenous population. According to results from the 2016 Canadian census, the median income for Métis individuals is \$36,761, as compared to \$43,486 for non-Indigenous individuals.<sup>36</sup>

Drug initiation incidence also trended upward over eight years analyzed for both populations (Métis and non-Métis). For example, antidepressant initiation incidence for Métis individuals with ADHD diagnoses jumped from 4.1% in 2010 to 37.9% in 2017 and from 9.7% to 29.1% for non-Métis individuals over the same period. This increase in drug initiation incidence could be due to more prescriptions from primary care providers, more follow-through from patients having their prescriptions filled, or a combination of both. Recent research regarding psychopharmaceutical prescriptions trends have reported an increase in prescriptions and long-term prescriptions, notably by primary care providers and especially as new drugs are released.<sup>37</sup> This research is consistent with this study's findings.

This study identifies an increase in psychostimulant dispensation for treatment of the diagnoses identified in this study among both the Métis and non-Métis in Alberta.

#### **INCIDENCE OF SELF-HARM**

Self-harm incidence was higher among the Métis population than the non-Métis population. Little research has been done specifically relating to the incidence of self-harm in Indigenous populations as most research focuses on suicide. 38,39 However, a previous report commissioned by the MNA found that self-harm-related hospitalizations and ED presentations were higher among the Métis population than the non-Indigenous population in Alberta in 2009.8 The results of this report suggest that self-harm rates continue to be higher among the Métis population than the non-Métis population.

#### **INCIDENCE OF SELF-HARM-RELATED MORTALITY/SUICIDE**

Self-harm-related mortality/suicide was higher in the Métis population than the non-Métis population. This finding is consistent with other literature examining self-harmrelated mortality/suicide in Indigenous populations in Canada.<sup>38</sup> The report published by Kumar and Tiepkema found self-harm-related mortality/suicide rates to be twice as high among the Métis population compared to the non-Indigenous population using Canadian data from 2011 to 2016.39 The identical results of this study using Albertaspecific data from a similar period confirms the need to address this issue.

#### INCIDENCE OF HEALTH SERVICE USE

Mental health-related service use was higher in the Métis population than the non-Métis population for all health services analyzed. The difference in health service use was most pronounced in the ED, where the age-sex standardized rate of the Métis population's mental health-related service use was up to 1.8 times greater than the non-Métis population. The difference in health service use was least pronounced for physician claims services relating to mental health. The age-sex standardized rate of physician claims service use was nearly identical for both the Métis and non-Métis populations. However, for all three distinct forms of health service analyzed, the gap between the two populations relating to mental health service use increased across the 11-year study period (2006 to 2016). This is consistent with other studies examining Indigenous mental health service use in Canada. A previous report commissioned by the MNA found that the Métis population in Alberta had higher contact with physicians, higher inpatient hospitalization, and higher ED presentations than the non-Indigenous population in 2009.8 This previous report did not specifically identify mental health service use. However, higher healthcare service utilization is trending for the Métis population in Alberta.

## Conclusion

Little prior research has been done to examine the mental health status of the Métis population in Canada.<sup>39</sup> However, available found that the Métis population has a higher prevalence and incidence of mental health disorder diagnoses and higher incidences of self-harm, self-harm-related mortality/suicide, and health service use than individuals in the non-Indigenous population. The findings in this report provide clear evidence to support the results of prior research.

Research into the mental health status of Indigenous populations in Canada tends to focus most broadly on First Nations and Inuit populations. Like these populations, the Métis continue to experience a greater mental health burden, much of which can be attributed to the lasting impact of intergenerational trauma stemming from colonization, land loss, the residential school system, and cultural genocide that First Nations, Métis, and Inuit communities face in Canada.<sup>38</sup>

The Métis continue to meet other unique challenges that stem from their Western and First Nations heritage. This includes experiences of exclusion from both Western and First Nations communities, being forced to choose between Treaty status and Métis citizenship, the oppression, regulation, and erasure of Métis identity by colonial forces, and continuing systemic discrimination and racism towards the Métis.<sup>40</sup> This can be a difficult path to navigate, as many organizations and systems fail to understand the unique history, needs, and identity of the Métis.

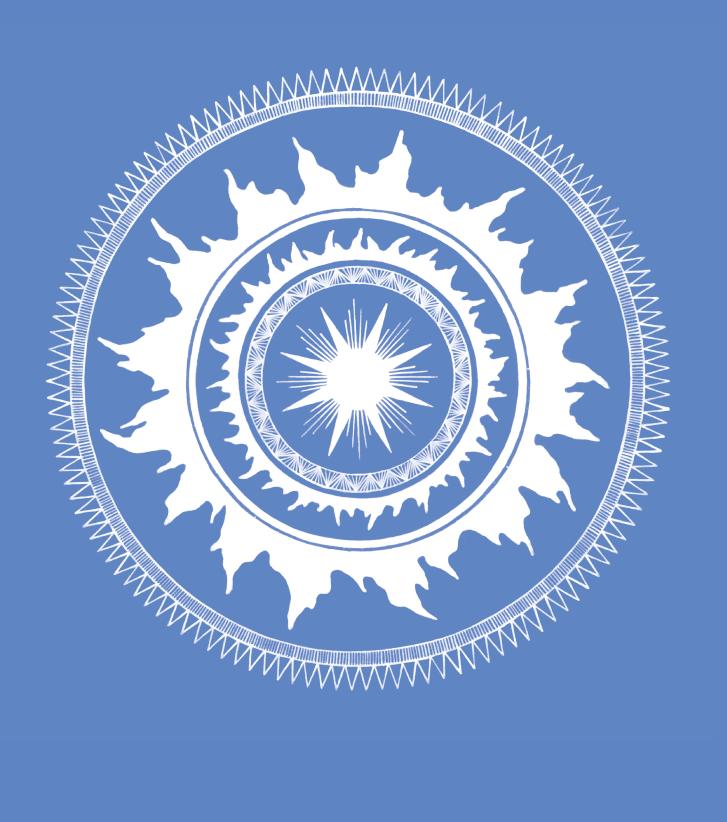
This report examined different measures of mental health status among the Métis population across an extended period and has demonstrated a significant, prolonged, and disproportionate mental health burden for the Métis in Alberta. This evidence signifies the need to develop meaningful programming to improve mental health outcomes of Métis people in Alberta.

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## Tables and Figures

TABLE 1.1 ANXIETY DISORDER AGE-SEX STANDARDIZED INCIDENCE

Fiscal Vage	Age-Sex Standardized Rate	
Fiscal Year	Métis	Non-Métis
2009/10	1,854	1661
2010/11	1,766	1489
2011/12	1,710	1460
2012/13	1,781	1452
2013/14	1,813	1429
2014/15	1,825	1458
2015/16	1,914	1490
2016/17	2,183	1501

FIGURE 1.1 ANXIETY DISORDER AGE-SEX STANDARDIZED INCIDENCE



TABLE 1.2 MOOD DISORDER AND ADJUSTMENT DISORDER AGE-SEX STANDARDIZED INCIDENCE

Figure Vegy	Age-Sex Standardized Rate	
Fiscal Year	Métis	Non-Métis
2009/10	2,084.61	1,670.74
2010/11	1,809.48	1,526.11
2011/12	1,810.08	1,423.8
2012/13	1,732.95	1,421.72
2013/14	1,753.25	1,342.67
2014/15	1,672.17	1,288.4
2015/16	1,713.25	1,306.87
2016/17	1,837.95	1,338.05

FIGURE 1.2 MOOD DISORDER AND ADJUSTMENT DISORDER AGE-SEX STANDARDIZED INCIDENCE



TABLE 1.3 PERSONALITY DISORDER AGE-SEX STANDARDIZED INCIDENCE

Figure Vege	Age-Sex Standardized Rate	
Fiscal Year	Métis	Non-Métis
2009/10	154.34	116.25
2010/11	182.37	102.4
2011/12	133.4	96.92
2012/13	163.01	97.24
2013/14	159.38	93.7
2014/15	174.98	99.66
2015/16	203.07	110.79
2016/17	178.06	113.93

FIGURE 1.3 PERSONALITY DISORDER AGE-SEX STANDARDIZED INCIDENCE



TABLE 1.4 SCHIZOPHRENIA AGE-SEX STANDARDIZED INCIDENCE

Fiscal Year	Age-Sex Standardized Rate	
riscai teai	Métis	Non-Métis
2009/10	105.71	78.27
2010/11	73.75	72.72
2011/12	83.58	69.82
2012/13	83.42	64.06
2013/14	88.86	66.45
2014/15	85.16	65.1
2015/16	87.23	72.03
2016/17	87.61	63.35

FIGURE 1.4 SCHIZOPHRENIA AGE-SEX STANDARDIZED INCIDENCE

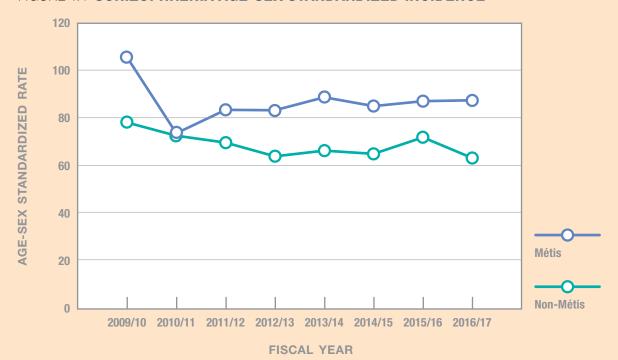


TABLE 1.5 SUBSTANCE USE DISORDER AGE-SEX STANDARDIZED INCIDENCE

Fiscal Year	Age-Sex Standardized Rate	
risuai teai	Métis	Non-Métis
2009/10	1,181.84	858.77
2010/11	1,094.05	760.86
2011/12	990.87	715.52
2012/13	1,027.75	729.32
2013/14	1,121.08	726.69
2014/15	1,094.86	775.95
2015/16	1,125.37	767.32
2016/17	1,010.93	674.32

FIGURE 1.5 SUBSTANCE USE DISORDER AGE-SEX STANDARDIZED INCIDENCE



TABLE 1.6 DEMENTIA AGE-SEX STANDARDIZED INCIDENCE

Fiscal Year	Age-Sex Standardized Rate	
riscai teai	Métis	Non-Métis
2009/10	359.09	896.41
2010/11	475.37	944.97
2011/12	490.93	937.85
2012/13	630.2	952.75
2013/14	535.02	965.94
2014/15	529.17	926.57
2015/16	465.74	964.67
2016/17	657.69	961.36

FIGURE 1.6 DEMENTIA AGE-SEX STANDARDIZED INCIDENCE



TABLE 1.7 ADHD AGE-SEX STANDARDIZED INCIDENCE

Figure Very	Age-Sex Standardized Rate	
Fiscal Year	Métis	Non-Métis
2009/10	743.47	684.67
2010/11	766.32	629.23
2011/12	744.48	637.35
2012/13	786.26	659.64
2013/14	847.57	671.47
2014/15	889.7	732.99
2015/16	814.49	763.51
2016/17	903.17	796.56

FIGURE 1.7 ADHD AGE-SEX STANDARDIZED INCIDENCE



TABLE 1.8 EMOTIONAL DISORDER AGE-SEX STANDARDIZED INCIDENCE

Fiscal Year	Age-Sex Standardized Rate	
riscai teai	Métis	Non-Métis
2009/10	324.01	232.97
2010/11	267.97	235.42
2011/12	251.58	169.49
2012/13	229.87	191.84
2013/14	337.64	251.05
2014/15	273	200.27
2015/16	199.9	192.76
2016/17	253.41	148.77

FIGURE 1.8 EMOTIONAL DISORDER AGE-SEX STANDARDIZED INCIDENCE



TABLE 1.9 CONDUCT DISORDER AGE-SEX STANDARDIZED INCIDENCE

Fiscal Year	Age-Sex Standardized Rate	
riscai teai	Métis	Non-Métis
2009/10	381.96	296.63
2010/11	309.43	282.05
2011/12	342.37	249.05
2012/13	360.74	248.58
2013/14	318.16	265.53
2014/15	222.66	189.58
2015/16	286.73	234.59
2016/17	312.85	229.13

FIGURE 1.9 CONDUCT DISORDER AGE-SEX STANDARDIZED INCIDENCE



FISCAL YEAR

TABLE 2.1 ANXIETY DISORDER AGE-SEX STANDARDIZED PREVALENCE

Year	Age-Sex Standardized Rate	
	Métis	Non-Métis
2005	4,064	3,912
2006	7,115	6,718
2007	9,281	8,490
2008	10,892	9,824
2009	12,197	10,933
2010	13,555	11,968
2011	14,721	12,910
2012	16,003	13,842
2013	17,254	14,703
2014	18,527	15,588
2015	19,916	16,548
2016	21,444	17,541

FIGURE 2.1 ANXIETY DISORDER AGE-SEX STANDARDIZED PREVALENCE

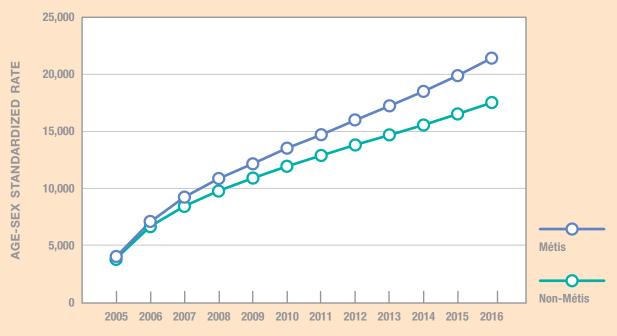


TABLE 2.2 MOOD DISORDER AND ADJUSTMENT DISORDER AGE-SEX STANDARDIZED PREVALENCE

Year	Age-Sex Standardized Rate	
	Métis	Non-Métis
2005	7,582	7,229
2006	8,280	7,805
2007	9,952	9,244
2008	11,442	10,401
2009	12,907	11,391
2010	14,108	12,322
2011	15,295	13,195
2012	16,413	14,021
2013	17,575	14,730
2014	18,687	15,423
2015	19,855	16,193
2016	21,161	17,024

FIGURE 2.2 MOOD DISORDER AND ADJUSTMENT DISORDER AGE-SEX STANDARDIZED PREVALENCE

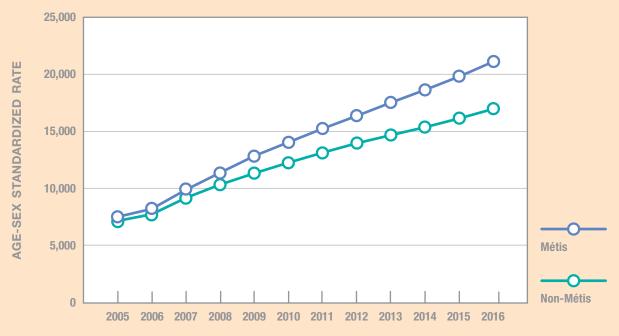


TABLE 2.3 PERSONALITY DISORDER AGE-SEX STANDARDIZED PREVALENCE

Voor	Age-Sex Standardized Rate	
Year	Métis	Non-Métis
2005	258	195
2006	414	306
2007	566	407
2008	655	497
2009	772	580
2010	910	652
2011	1,003	723
2012	1,121	789
2013	1,241	848
2014	1,360	914
2015	1,518	992
2016	1,660	1,073

FIGURE 2.3 PERSONALITY DISORDER AGE-SEX STANDARDIZED PREVALENCE

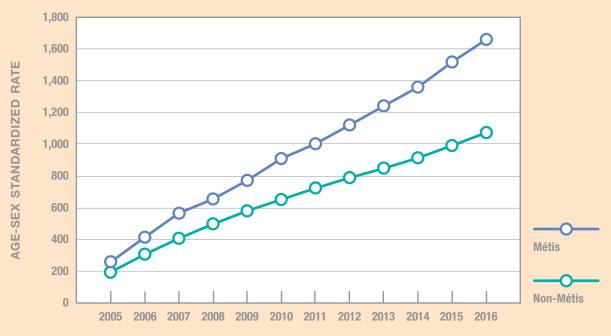


TABLE 2.4 SCHIZOPHRENIA AGE-SEX STANDARDIZED PREVALENCE

Vern	Age-Sex Standardized Rate	
Year	Métis	Non-Métis
2005	310	332
2006	429	422
2007	484	468
2008	513	506
2009	584	540
2010	623	576
2011	668	611
2012	715	644
2013	780	676
2014	829	713
2015	887	758
2016	940	792

FIGURE 2.4 SCHIZOPHRENIA AGE-SEX STANDARDIZED PREVALENCE

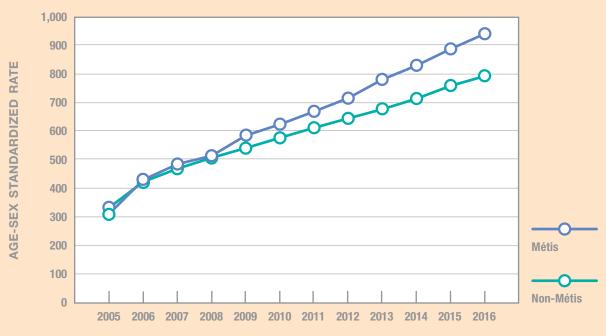


TABLE 2.5 SUBSTANCE USE DISORDER AGE-SEX STANDARDIZED PREVALENCE

Vacu	Age-Sex Standardized Rate	
Year	Métis	Non-Métis
2005	1,147	779
2006	1,971	1,354
2007	2,714	1,902
2008	3,342	2,419
2009	4,302	3,085
2010	5,138	3,672
2011	5,851	4,218
2012	6,629	4,750
2013	7,496	5,259
2014	9,176	6,354
2015	9,242	6,794
2016	9,923	6,801

FIGURE 2.5 SUBSTANCE USE DISORDER AGE-SEX STANDARDIZED PREVALENCE



TABLE 2.6 DEMENTIA AGE-SEX STANDARDIZED PREVALENCE

Vern	Age-Sex Standardized Rate	
Year	Métis	Non-Métis
2005	272	853
2006	333	1413
2007	516	1905
2008	786	2424
2009	1010	2966
2010	1322	3520
2011	1566	3960
2012	2013	4354
2013	2287	4682
2014	2495	4691
2015	2695	5171
2016	2997	5361

FIGURE 2.6 DEMENTIA AGE-SEX STANDARDIZED PREVALENCE



TABLE 2.7 ADHD AGE-SEX STANDARDIZED PREVALENCE

Vern	Age-Sex Standardized Rate	
Year	Métis	Non-Métis
2005	2,382	1,945
2006	3,196	2,728
2007	3,825	3,244
2008	4,567	3,800
2009	5,349	4,372
2010	6,153	4,925
2011	6,977	5,458
2012	7,877	6,022
2013	8,820	6,528
2014	9,848	7,116
2015	10,871	7,793
2016	12,027	8,560

FIGURE 2.7 ADHD AGE-SEX STANDARDIZED PREVALENCE

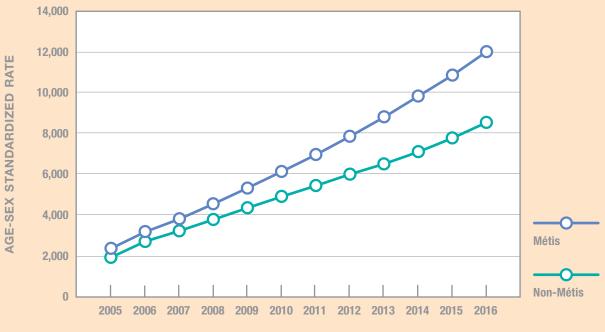


TABLE 2.8 EMOTIONAL DISORDER AGE-SEX STANDARDIZED PREVALENCE

	Age-Sex Standardized Rate	
Year	Métis	Non-Métis
2005	618	493
2006	986	772
2007	1,306	994
2008	1,584	1,236
2009	1,931	1,444
2010	2,227	1,659
2011	2,519	1,803
2012	2,793	1,968
2013	3,178	2,170
2014	3,483	2,325
2015	3,751	2,489
2016	4,129	2,632

FIGURE 2.8 EMOTIONAL DISORDER AGE-SEX STANDARDIZED PREVALENCE

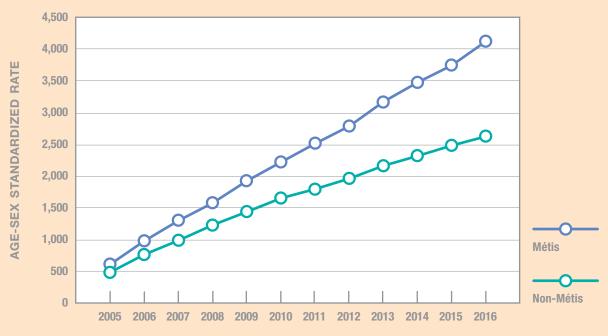


TABLE 2.9 CONDUCT DISORDER AGE-SEX STANDARDIZED PREVALENCE

v	Age-Sex Standardized Rate	
Year	Métis	Non-Métis
2005	639	637
2006	980	990
2007	1,351	1,246
2008	1,630	1,533
2009	2,006	1,779
2010	2,322	2,028
2011	2,701	2,228
2012	3,105	2,438
2013	3,470	2,637
2014	3,727	2,764
2015	4,087	2,957
2016	4,525	3,169

FIGURE 2.9 CONDUCT DISORDER AGE-SEX STANDARDIZED PREVALENCE



TABLE 3.1 ANTIDEPRESSANT INITIATION INCIDENCE

Diografou	Donulation				Yea	r (%)				Mean
Disorder	Population	2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	4.1	8.1	17.0	15.8	22.7	19.5	23.9	37.9	18.6
АИПИ	Non-Métis	9.7	11.4	14.3	15.6	14.8	19.4	27.5	29.1	17.7
American	Métis	19.2	26.7	33.3	31.8	37.1	41.8	42.0	39.9	34.0
Anxiety	Non-Métis	18.8	23.8	27.5	29.8	31.9	35.2	37.2	37.2	30.2
Conduct	Métis	6.7	15.0	29.2	20.9	31.0	42.5	36.0	32.1	26.7
Conduct	Non-Métis	20.3	17.9	29.5	31.7	20.8	34.8	29.9	39.8	28.1
Dementia	Métis	18.8	8.7	7.7	13.9	27.3	28.6	30.3	26.0	20.1
Dementia	Non-Métis	14.9	17.9	18.5	20.2	19.6	22.4	21.7	24.2	19.9
Emotional	Métis	10.9	34.6	31.3	51.2	32.3	30.6	60.0	41.9	36.6
EIIIUUUIIAI	Non-Métis	19.2	14.5	37.5	33.3	25.8	32.9	37.6	56.7	32.2
Mood	Métis	26.2	32.7	31.1	34.3	38.0	39.4	37.7	38.7	34.8
IVIUUU	Non-Métis	24.4	30.3	31.2	30.2	31.2	35.6	35.0	34.0	31.5
Personality	Métis	13.7	9.0	19.4	10.7	25.0	19.1	9.0	21.2	15.9
r 51 SUIIdIILY	Non-Métis	11.9	12.4	17.6	12.3	17.1	16.0	15.7	12.7	14.5
Schizophrenia	Métis	12.0	16.7	33.3	20.9	27.7	30.4	29.2	18.4	23.6
Schizophileilla	Non-Métis	15.6	16.6	20.3	21.1	29.2	18.4	19.8	16.9	19.7
Substance	Métis	13.1	17.6	18.9	26.6	24.0	30.5	28.8	30.9	23.8
Substance	Non-Métis	11.7	16.6	18.8	20.2	23.2	23.6	26.7	28.5	21.1

FIGURE 3.1 ANTIDEPRESSANT INITIATION INCIDENCE - MEAN

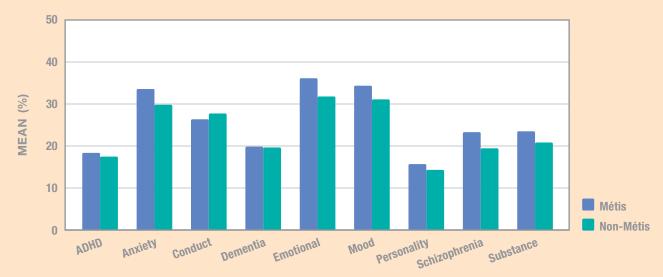


TABLE 3.2 ANTI-EPILEPTIC INITIATION INCIDENCE

Disorder	Population				Yea	r (%)				Mean
Districer	Population	2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	0.7	1.4	3.5	4.8	3.9	5.0	4.9	5.9	3.8
АПП	Non-Métis	2.4	2.6	3.7	4.3	2.3	4.2	3.4	4.6	3.4
Anviotu	Métis	8.0	10.1	13.4	17.8	21.4	20.5	21.6	21.3	16.7
Anxiety	Non-Métis	6.8	11.5	13.8	16.0	18.2	19.0	20.9	21.3	16.0
Conduct	Métis	1.3	3.3	4.6	4.5	6.9	25.0	14.0	9.4	8.6
Conduct	Non-Métis	3.4	10.3	9.5	14.9	9.0	13.7	9.5	10.7	10.1
Dementia	Métis	6.3	4.3	15.4	8.3	15.2	28.6	27.3	12.0	14.7
Dementia	Non-Métis	6.1	7.0	9.1	9.8	13.0	12.4	12.4	11.5	10.2
Emotional	Métis	1.6	7.7	8.3	11.6	4.8	14.3	25.7	11.6	10.7
Emotional	Non-Métis	4.4	4.8	11.0	9.6	10.5	10.0	9.1	16.5	9.5
Mood	Métis	8.0	10.5	14.3	16.9	20.9	24.9	23.6	25.4	18.1
Wood	Non-Métis	7.4	12.4	14.8	16.8	18.4	20.5	22.8	21.9	16.9
Personality	Métis	11.0	10.1	19.4	21.4	31.0	34.0	30.6	29.3	23.4
reisoliality	Non-Métis	11.9	14.1	20.4	18.6	23.5	23.9	24.7	20.0	19.6
Schizophrenia	Métis	16.0	30.6	33.3	25.6	25.5	21.7	52.1	26.5	28.9
Somzopinenia	Non-Métis	13.4	18.9	25.8	21.5	22.7	26.4	26.6	23.0	22.3
Substance	Métis	8.2	10.5	17.1	19.2	19.1	23.7	23.0	30.0	18.9
Sunstaile	Non-Métis	7.3	9.8	13.1	15.2	18.8	19.6	22.1	23.2	16.2

FIGURE 3.2 ANTIEPILEPTIC INITIATION INCIDENCE - MEAN

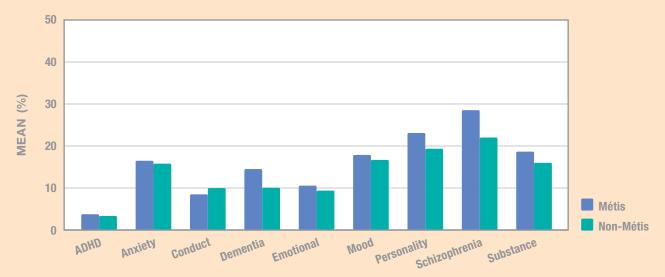


TABLE 3.3 ANXIOLYTIC INITIATION INCIDENCE

Discussor	Danulation				Yea	r (%)				Mean
Disorder	Population	2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	3.4	2.7	6.4	5.5	11.7	10.1	21.8	17.0	9.8
AUIIU	Non-Métis	2.2	4.6	5.9	6.7	10.0	10.6	9.8	10.3	7.5
A	Métis	15.5	20.6	24.9	28.5	36.2	34.8	33.9	24.8	27.4
Anxiety	Non-Métis	15.0	20.2	22.0	25.8	29.4	30.8	27.7	25.7	24.6
Conduct	Métis	1.3	6.7	10.8	23.9	29.3	37.5	24.0	24.5	19.7
Conduct	Non-Métis	4.7	10.3	11.0	17.8	18.1	23.6	20.9	24.0	16.3
Dementia	Métis	6.3	0.0	15.4	2.8	15.2	28.6	21.2	6.0	11.9
Dementia	Non-Métis	10.7	12.8	14.8	14.6	12.2	16.8	13.9	12.9	13.6
Emotional	Métis	4.7	5.8	14.6	18.6	16.1	22.4	17.1	32.6	16.5
Emotional	Non-Métis	5.5	8.1	14.0	21.2	10.5	26.5	17.6	18.9	15.3
Mood	Métis	13.6	21.4	22.1	26.7	34.5	33.7	33.5	28.7	26.8
Mood	Non-Métis	13.3	19.0	21.8	24.3	26.7	30.0	28.1	24.0	23.4
Personality	Métis	15.1	11.2	25.4	23.8	23.8	36.2	30.6	23.2	23.7
reisonanty	Non-Métis	12.6	16.3	15.6	17.8	24.0	23.4	17.3	13.6	17.6
Schizophrenia	Métis	14.0	13.9	19.0	30.2	31.9	39.1	39.6	20.4	26.0
Schizophrenia	Non-Métis	13.8	21.2	22.3	24.0	33.5	29.9	23.5	25.3	24.2
Substance	Métis	12.0	17.4	21.5	25.3	25.7	28.6	28.2	25.2	23.0
Substance	Non-Métis	10.2	16.0	17.9	20.3	22.6	24.1	24.6	22.0	19.7

FIGURE 3.3 ANXIOLYTIC INITIATION INCIDENCE - MEAN

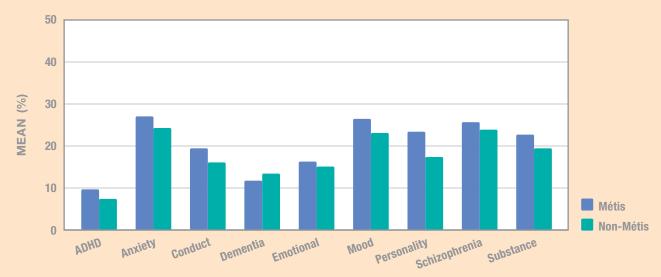


TABLE 3.4 MOOD STABILIZER INITIATION INCIDENCE

Disardar	Danulation				Yea	r (%)				Mean
Disorder	Population	2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	0.7	0.7	2.1	1.4	1.9	1.9	2.1	2.0	1.6
АПП	Non-Métis	2.1	1.2	1.2	2.8	0.9	2.1	1.2	2.3	1.7
Amelaka	Métis	1.4	1.7	2.6	3.2	3.1	5.2	4.2	3.8	3.1
Anxiety Non-Métis	Non-Métis	1.6	2.2	2.7	2.5	2.6	3.1	3.7	4.2	2.8
Conduct	Métis	1.3	1.7	3.1	4.5	3.4	10.0	2.0	1.9	3.5
Conduct	Non-Métis	4.3	5.8	4.5	6.4	3.2	8.1	3.0	4.1	4.9
Dementia	Métis	6.3	0.0	3.8	2.8	0.0	11.4	6.1	4.0	4.3
Demenua	Non-Métis	1.4	1.8	2.1	2.0	2.1	2.5	3.2	3.1	2.3
Emotional	Métis	0.0	3.8	2.1	4.7	1.6	4.1	5.7	2.3	3.0
Emotional	Non-Métis	4.4	1.1	5.1	3.8	2.9	5.3	3.0	8.7	4.3
Mood	Métis	2.4	2.7	4.5	4.1	3.8	6.5	6.2	5.7	4.5
WOOU	Non-Métis	2.0	3.3	3.7	3.7	4.3	4.2	4.9	5.3	3.9
Doroonality	Métis	11.0	9.0	17.9	9.5	7.1	20.2	18.0	12.1	13.1
Personality	Non-Métis	9.6	7.7	9.9	8.8	13.0	14.2	17.5	14.9	12.0
Cohizonhronio	Métis	6.0	11.1	14.3	11.6	12.8	17.4	20.8	6.1	12.5
Schizophrenia	Non-Métis	7.4	13.1	12.5	12.0	12.7	21.1	16.0	19.2	14.3
Substance	Métis	2.3	3.4	4.8	5.3	2.9	5.6	5.8	3.4	4.2
Sunstance	Non-Métis	1.5	2.4	2.8	3.3	3.2	3.5	4.3	5.2	3.3

FIGURE 3.4 MOOD STABILIZER INITIATION INCIDENCE - MEAN

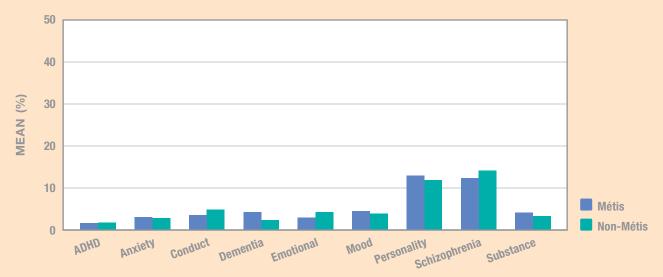


TABLE 3.5 ANTIPSYCHOTIC INITIATION INCIDENCE

Disorder	Donulation				Yea	r (%)				Mean
Disorder	Population	2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	6.2	10.8	14.9	9.6	13.0	9.4	23.9	13.7	12.7
	Non-Métis	7.3	11.4	14.8	11.0	12.5	10.3	14.5	18.9	12.6
Anviotu	Métis	7.6	8.9	13.5	13.5	18.7	22.3	23.5	22.1	16.3
Anxiety	Non-Métis	6.8	9.9	12.6	13.1	14.6	18.0	18.9	20.9	14.4
Conduct	Métis	9.3	25.0	24.6	16.4	24.1	32.5	34.0	18.9	23.1
Conduct	Non-Métis	21.6	18.4	23.5	30.2	27.1	32.3	27.4	28.6	26.1
Dementia	Métis	18.8	13.0	15.4	22.2	21.2	28.6	24.2	26.0	21.2
Dementia	Non-Métis	13.8	16.6	17.0	20.1	21.7	23.8	22.9	24.6	20.1
Emotional	Métis	9.4	21.2	35.4	25.6	30.6	14.3	60.0	11.6	26.0
EIIIOUOIIAI	Non-Métis	17.0	19.9	22.1	30.1	20.1	21.8	30.3	43.3	25.6
Mood	Métis	10.8	14.7	18.0	16.8	22.2	27.3	26.8	28.7	20.7
MOOU	Non-Métis	10.1	13.4	16.4	18.7	19.4	22.6	24.3	24.1	18.6
Doroonolity	Métis	27.4	13.5	14.9	27.4	29.8	31.9	26.1	23.2	24.3
Personality	Non-Métis	17.2	24.6	22.7	24.7	22.9	25.9	26.7	25.2	23.7
Cohizonhronio	Métis	18.0	33.3	40.5	37.2	31.9	34.8	45.8	30.6	34.0
Schizophrenia	Non-Métis	26.0	31.7	28.1	30.6	34.6	33.0	32.1	31.8	31.0
Substance	Métis	9.5	10.5	13.7	15.1	18.8	21.4	22.5	25.9	17.2
Substance	Non-Métis	7.1	9.3	12.7	13.6	13.8	16.2	18.4	20.1	13.9

FIGURE 3.5 ANTIPSYCHOTIC INITIATION INCIDENCE - MEAN

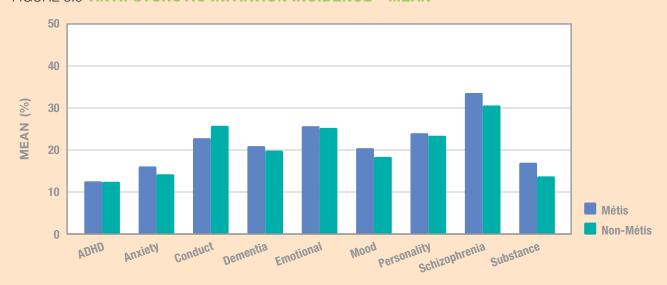


TABLE 3.6 PSYCHOSTIMULANT INITIATION INCIDENCE

Disarder	Population				Yea	r (%)				Mean
Disorder	Population	2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	36.3	42.6	55.3	46.6	53.2	45.9	65.5	72.5	52.2
ADIID	Non-Métis	36.4	47.6	58.8	46.9	56.4	56.2	52.2	58.6	51.6
Anxiety Métis Non-Métis	Métis	2.5	3.9	5.1	5.6	6.1	8.1	8.5	11.1	6.4
	Non-Métis	1.9	2.5	2.7	3.6	4.7	5.9	6.2	8.2	4.5
Conduct	Métis	14.7	21.7	18.5	28.4	31.0	30.0	32.0	26.4	25.3
Colluuct	Non-Métis	21.1	20.2	28.0	30.2	24.4	36.6	30.3	27.6	27.3
Dementia	Métis	6.3	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0
Dementia	Non-Métis	0.3	0.4	0.6	0.3	0.6	0.5	1.0	0.8	0.6
Emotional	Métis	12.5	25.0	37.5	27.9	32.3	10.2	40.0	23.3	26.1
Emotional	Non-Métis	18.7	13.4	39.0	30.8	20.6	34.7	28.5	48.8	29.3
Mood	Métis	2.8	4.1	4.7	6.9	7.4	6.6	8.4	11.1	6.5
WOOU	Non-Métis	2.0	2.6	3.4	4.4	5.1	6.8	7.1	8.8	5.0
Personality	Métis	2.7	4.5	3.0	8.3	8.3	17.0	18.0	24.2	10.8
reisoliality	Non-Métis	2.5	4.4	5.4	7.4	7.7	12.7	10.6	12.7	7.9
Schizophrenia	Métis	4.0	5.6	2.4	11.6	6.4	10.9	16.7	6.1	8.0
Schizophilenia	Non-Métis	1.1	3.5	2.0	4.1	4.6	5.4	4.8	4.2	3.7
Substance	Métis	1.8	2.1	2.4	4.0	4.4	5.4	5.0	6.7	4.0
Sunstaile	Non-Métis	0.9	1.5	1.8	3.0	2.6	3.6	4.1	5.2	2.8

FIGURE 3.6 PSYCHOSTIMULANT INITIATION INCIDENCE - MEAN

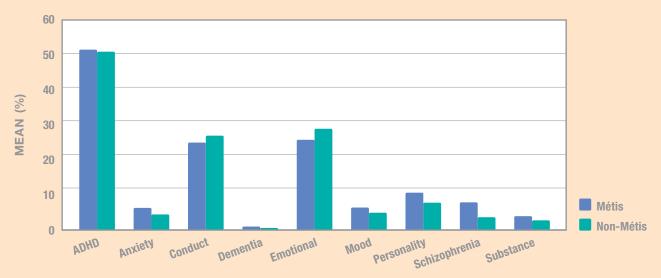


TABLE 3.7 OPIOID INITIATION INCIDENCE

Dioardor	Population	Year (%)							Mean	
Disorder		2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	1.4	7.4	11.3	11.0	7.8	13.8	22.5	22.9	12.3
AUTU	Non-Métis	2.2	2.8	7.8	7.8	8.6	8.8	14.0	16.2	8.5
Anviotu	Métis	10.6	16.7	25.4	29.3	27.7	30.4	34.7	28.9	25.5
Anxiety	Non-Métis	11.7	19.7	22.8	25.7	27.9	28.7	29.8	28.5	24.4
Conduct	Métis	5.3	10.0	10.8	17.9	19.0	35.0	32.0	24.5	19.3
Conduct	Non-Métis	3.9	7.2	10.0	13.4	10.0	23.6	18.9	19.4	13.3
Dementia	Métis	25.0	8.7	11.5	11.1	18.2	22.9	3.0	2.0	12.8
Dementia	Non-Métis	9.4	12.4	13.1	18.4	14.3	16.2	16.8	14.9	14.4
Emotional	Métis	3.1	3.8	20.8	18.6	16.1	36.7	37.1	39.5	22.0
Emotional	Non-Métis	4.9	8.1	12.5	16.0	11.5	14.7	23.6	37.0	16.0
Mood	Métis	12.0	18.6	24.8	27.9	27.3	34.9	36.7	30.5	26.6
WOOd	Non-Métis	12.1	18.3	24.1	25.4	26.5	29.9	30.5	28.4	24.4
Personality	Métis	6.8	7.9	22.4	16.7	23.8	26.6	29.7	21.2	19.4
reisonanty	Non-Métis	12.9	16.9	22.9	22.2	20.2	26.1	23.4	21.3	20.7
Cohizonhronia	Métis	8.0	25.0	16.7	16.3	34.0	26.1	31.3	14.3	21.5
Schizophrenia	Non-Métis	7.8	14.7	14.5	25.2	21.9	30.7	24.9	22.6	20.3
Substance	Métis	15.0	19.9	23.5	27.4	25.7	27.5	29.7	27.0	24.4
Substance	Non-Métis	13.4	19.9	24.6	25.1	26.2	25.2	25.5	30.3	23.8

FIGURE 3.7 OPIOID INITIATION INCIDENCE - MEAN

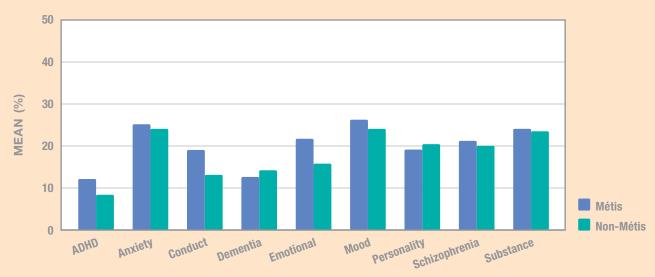


TABLE 3.8 ADDICTIONS TREATMENT INITIATION INCIDENCE

Discussor	Population	Year (%)						Mean		
Disorder	Population	2010	2011	2012	2013	2014	2015	2016	2017	(%)
ADHD	Métis	0.7	0.0	1.4	0.7	0.6	0.0	2.1	0.7	0.8
AUNU	Non-Métis	0.2	0.2	0.0	0.9	1.1	0.8	0.8	0.6	0.6
Anviotu	Métis	2.4	4.1	5.8	7.4	7.4	9.7	10.0	8.8	7.0
Anxiety	Non-Métis	2.3	3.5	4.0	5.9	5.4	6.8	6.6	7.1	5.2
Conduct	Métis	0.0	0.0	1.5	1.5	1.7	7.5	4.0	1.9	2.3
Collauct	Non-Métis	0.4	1.8	0.5	3.5	2.7	4.3	2.0	1.5	2.1
Dementia M	Métis	0.0	4.3	0.0	2.8	6.1	17.1	3.0	4.0	4.7
Dementia	Non-Métis	0.9	1.8	1.8	1.5	1.5	3.0	1.2	1.6	1.7
Emotional	Métis	1.6	0.0	0.0	2.3	1.6	4.1	2.9	0.0	1.6
Emotional	Non-Métis	0.0	1.1	0.7	3.8	2.4	2.4	3.6	0.0	1.8
Mood	Métis	2.0	4.9	6.3	7.8	8.0	10.5	11.8	10.3	7.7
WOOU	Non-Métis	2.4	3.3	4.2	5.8	6.7	7.5	8.1	7.7	5.7
Doroonality	Métis	1.4	7.9	9.0	13.1	19.0	19.1	21.6	18.2	13.7
Personality	Non-Métis	2.8	7.5	9.9	14.2	12.7	16.2	14.2	12.9	11.3
	Métis	6.0	16.7	11.9	14.0	10.6	26.1	31.3	12.2	16.1
Schizophrenia	Non-Métis	3.0	8.5	11.7	17.4	10.8	18.8	13.0	16.1	12.4
Substance	Métis	10.7	15.2	19.3	21.3	18.1	24.4	28.4	25.9	20.4
Sunstance	Non-Métis	10.1	14.2	17.7	20.2	19.6	20.4	20.9	24.6	18.5

FIGURE 3.8 ADDICTIONS TREATMENT INITIATION INCIDENCE - MEAN

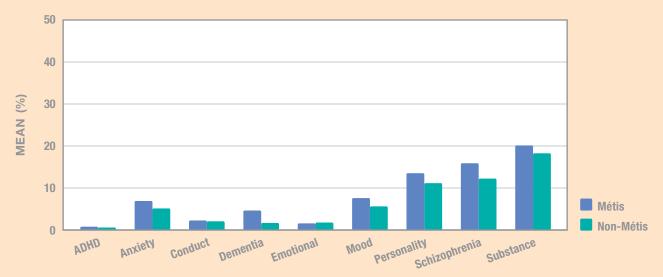


TABLE 4.1 AGE-SEX STANDARDIZED RATE OF SELF-HARM INCIDENCE

Vacu	Age-Sex Standardized Rate			
Year	Métis	Non-Métis		
2009	283	163		
2010	322	150		
2011	277	142		
2012	278	154		
2013	379	166		
2014	320	177		
2015	372	179		
2016	351	185		

FIGURE 4.1 AGE-SEX STANDARDIZED RATE OF SELF-HARM INCIDENCE



TABLE 5.1 AGE-SEX STANDARDIZED RATE OF SELF-HARM-RELATED MORTALITY/SUICIDE

Voor	Age-Sex Standardized Rate				
Year	Métis	Non-Métis			
2009	16,365	3,738			
2010	5,989	1,130			
2011	13,061	2,965			
2012	12,454	2,287			
2013	6,484	2,654			
2014	5,219	2,200			
2015	6,972	3,908			
2016	5,134	1,986			
2017	5,330	2,085			

FIGURE 5.1 AGE-SEX STANDARDIZED RATE OF SELF-HARM-RELATED MORTALITY/SUICIDE



TABLE 6.1 AGE-SEX STANDARDIZED RATE OF MENTAL HEALTH-RELATED PHYSICIAN CLAIMS SERVICE USE

Vacu	Age-Sex Standardized Rate				
Year	Métis	Non-Métis			
2006	65,818	64,298			
2007	68,293	64,270			
2008	62,955	64,978			
2009	74,187	66,715			
2010	76,140	69,133			
2011	79,081	72,348			
2012	85,906	74,120			
2013	91,051	79,219			
2014	97,606	83,825			
2015	110,929	92,347			
2016	126,940	100,167			

FIGURE 6.1 AGE-SEX STANDARDIZED RATE OF MENTAL HEALTH-RELATED **PHYSICIAN CLAIMS SERVICE USE** 



TABLE 6.2 AGE-SEX STANDARDIZED RATE OF MENTAL HEALTH-RELATED **INPATIENT SERVICE USE** 

Voor	Age-Sex Standardized Rate				
Year	Métis	Non-Métis			
2006	576	499			
2007	512	498			
2008	539	476			
2009	555	474			
2010	569	478			
2011	569	488			
2012	626	509			
2013	726	543			
2014	765	539			
2015	822	548			
2016	921	594			

FIGURE 6.2 AGE-SEX STANDARDIZED RATE OF MENTAL HEALTH-RELATED **INPATIENT SERVICE USE** 



TABLE 6.3 AGE-SEX STANDARDIZED RATE OF MENTAL HEALTH-RELATED **ED SERVICE USE** 

Voor	Age-Sex Standardized Rate			
Year	Métis	Non-Métis		
2006	2,566	1,866		
2007	2,560	1,882		
2008	2,387	1,785		
2009	2,477	1,789		
2010	2,708	1,623		
2011	2,752	1,785		
2012	2,998	1,816		
2013	3,003	1,876		
2014	3,246	1,916		
2015	3,606	2,031		
2016	3889	2,235		

FIGURE 6.3 AGE-SEX STANDARDIZED RATE OF MENTAL HEALTH-RELATED **ED SERVICE USE** 





## Featured Artist

Tayler Schenkeveld is a member of the Manitoba Métis and the Bear Clan. She was born and raised on Treaty 1 territory in Win-nipi (Winnipeg) and now is grateful to reside on Treaty 7 territory in Mohkinstsis (Calgary). She is an artist and a Registered Canadian Art Therapist working with themes of cultural reconnection, identity building, and community engagement. Tayler's fine line artwork seeks to represent and honour Indigenous traditional teachings, stories, and concepts.

Featured work: Wild Rose, Elements: Earth, Water, Air, Fire.



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## Otipemisiwak Métis Government · Health Department

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