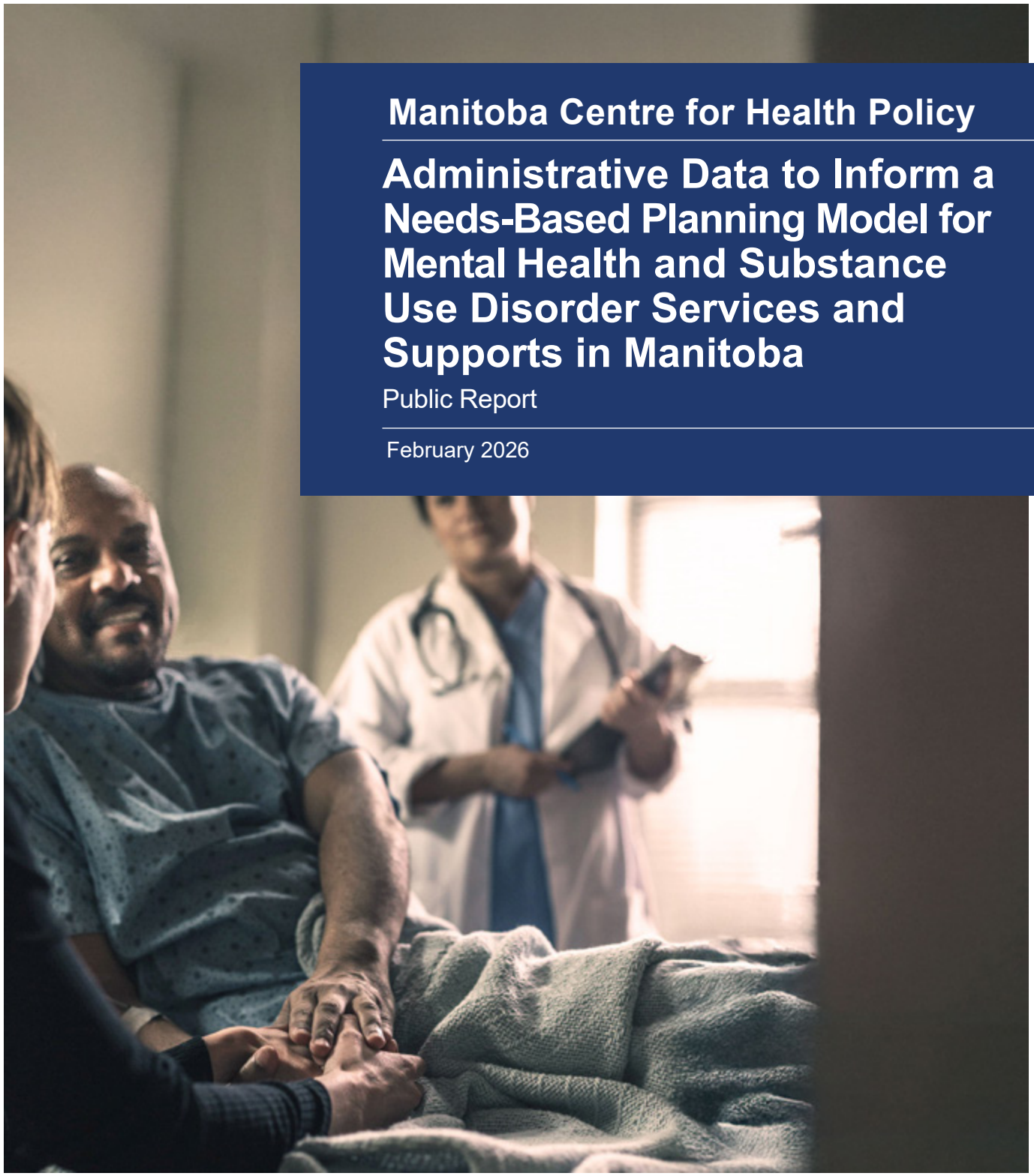

Manitoba Centre for Health Policy

Administrative Data to Inform a Needs-Based Planning Model for Mental Health and Substance Use Disorder Services and Supports in Manitoba

Public Report

February 2026

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This report was prepared at the request of Manitoba Health, Seniors and Long-Term Care (MHSLTC), a department within the Government of Manitoba, as part of the contract between the University of Manitoba and MHSLTC. It was supported through funding provided by MHSLTC to the University of Manitoba. The results and conclusions are those of the authors and no official endorsement by MHSLTC was intended or should be inferred. Data used in this study included primary data collected by the Mental Health, Addictions Treatment and Recovery branch of the Department of Housing, Addictions and Homelessness, as well as data from the Manitoba Population Research Data Repository housed at the Manitoba Centre for Health Policy, University of Manitoba that were derived from data provided by MHSLTC. Strict policies and procedures were followed in producing this report to protect the privacy and security of the Repository data.

About the Manitoba Centre for Health Policy

The Manitoba Centre for Health Policy (MCHP) conducts world-class population-based research on health and the social determinants of health. Our mission is to conduct collaborative research and analytics which inform solutions to support a thriving society.

We curate Manitoba's unique data repository and develop trainees in population-based research. Our work is guided by our core values of innovation, reconciliation, excellence, IDEA (Inclusion, Diversity, Equity, and Accessibility), and teamwork and collaboration. MCHP is located within the Rady Faculty of Health Sciences at the University of Manitoba.

We use data held within the Manitoba Population Research Data Repository (Repository) to examine patterns in population-based health and wellbeing and explore relationships with factors such as income, education, employment, and social status. Linkable at the individual level and over time, the Repository holds a comprehensive collection of de-identified administrative, registry, survey, and other data primarily relating to Manitobans across multiple sectors including health, justice, education, social services and more.

New data sets continue to be added to the Repository, and all other data sets are updated on an annual basis. MCHP acts as a steward of the information in the Repository for agencies such as Manitoba Health and provides access to the data to researchers, students and groups outside of MCHP for a wide variety of research and educational purposes.

MCHP conducts two streams of research: contracted “Deliverable” projects for the Manitoba Government and grant-funded research. We produce several research projects every year under contract with Manitoba Health, which contributes to the health policy process. MCHP consults extensively with government officials, healthcare administrators and clinicians to develop a research agenda that is topical and relevant. Our research team also conducts studies funded through research grants. Research topics range across several areas of expertise such as newborn and maternal health, Indigenous health and wellbeing, older adults, family medicine, data quality, child development, mental health and substance use, and more. We collaborate with community partners, stakeholders and scientists worldwide, and our research is published in some of the field’s most preeminent journals.

Acknowledgments

This report represents a joint effort between MCHP and the Mental Health and Addictions Treatment and Recovery Branch of the Provincial Department of Housing, Addictions and Homelessness. We extend our sincere appreciation to the many individuals and organizations who contributed their expertise and time to help make it possible. We apologize in advance to anyone we might have inadvertently omitted.

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Acronyms

ADHD	Attention Deficit Hyperactivity Disorder
CTAS	Canadian Triage and Acuity Scale
DAD	Discharge Abstract Database
DPIN	Drug Program Information Network
EDIS	Emergency Department Information System
FTE	Full-Time Equivalent
HAH	Housing, Addictions and Homelessness
HSC	Health Sciences Centre
ICD	International Classification of Diseases
MCHP	Manitoba Centre for Health Policy
MHATR	Mental Health, Addictions Treatment and Recovery
MHSLTC	Manitoba Health, Seniors and Long-Term Care
MH/SU	Mental Health and Substance Use
NBP	Needs-Based Planning
RHA	Regional Health Authority
SBGH	St. Boniface General Hospital

Executive Summary

To assist planners and decision makers in identifying gaps within the current mental health and substance use (MH/SU) disorder support system in Manitoba, the Manitoba Centre for Health Policy (MCHP) was commissioned by Manitoba Health, Seniors and Long-Term Care (MHSLTC) to implement a needs-based planning (NBP) model across the province. MCHP collaborated with the Mental Health, Addictions Treatment and Recovery (MHATR) branch of the Department of Housing, Addictions and Homelessness (HAH) and with a system planner in Prairie Mountain Health with experience using the model to complete the project. The NBP model was developed by the National NBP team and has been pilot-tested in six Canadian jurisdictions, including Prairie Mountain Health.

Implementing the NBP model required information from multiple data sources, including the administrative datasets in the Manitoba Population Research Data Repository (Repository) and primary data collected by the MHATR branch. These data were used to generate the projected population need for MH/SU disorder services and the system's current capacity to provide those services for the province and health regions. This information was used in a gap analysis to identify any deficits or surpluses in MH/SU disorder services.

This report focuses **solely** on the administrative data analyses, which included providing data inputs for the NBP model, as well as additional information about MH/SU disorder health services use in the province.

The objectives of this report are two-fold:

1. Describe the burden of MH/SU disorders in terms of prevalence and patterns of health services use in Manitoba.
2. Assess the usefulness of the administrative data housed in the Manitoba Population Research Data Repository in supporting the implementation of the NBP model.

Methods

The administrative data was used to identify the study population, which included all individuals in Manitoba who were 15 years or older as of December 31, 2022, and to produce prevalence and health services use estimates for select MH/SU disorders as required by the planning model. Administrative data definitions were used to produce two prevalence estimates for each disorder: one based on a single year of data (to match the timeframe used in prevalence estimates produced by the NBP team) and another based on multiple years of data (to match the timeframes used in validated definitions).

Health services use indicators were based on visits to emergency departments, urgent care, primary care, and hospitalizations for MH/SU disorder reasons. Results for all indicators are provided at the provincial and Regional Health Authority (RHA) levels.

Summary of Findings

Prevalence of Mental Health and Substance Use Disorders

Prevalence estimates were based on the 1,169,605 individuals in the study population. The one-year and multi-year administrative data prevalence estimates for the province and each region are shown in Tables E.1-E.4. The national one-year prevalences produced by the NBP team are included in the tables for comparison. The highest one-year and multi-year administrative data prevalences in the province were for anxiety (7.5% and 20.5%, respectively), depression (7.1% and 15.8%), and attention deficit hyperactivity disorder (ADHD) (2.3%). In Manitoba, 1.8% of the population either had a formal diagnosis of, or were prescribed treatment for alcohol use disorder, followed by opioid (0.7%), cannabis (0.4%), non-cocaine stimulant (0.4%), and cocaine (0.2%) use disorder.

Table E.1: Mental Health Disorder Prevalence: Needs-Based Planning Model and One-Year Administrative Data Estimates by Region of Residence, 2022/23

Disorder	Needs Based Planning Model (%)	Southern Health-Santé Sud (%)	Winnipeg RHA (%)	Interlake-Eastern RHA (%)	Prairie Mountain Health (%)	Northern Health Region (%)	Public Trustee* (%)	Manitoba (%)
Anxiety	6.90	5.59	8.25	6.55	8.70	2.13	12.29	7.48
Depression	4.90	6.48	7.27	8.06	7.83	2.48	12.79	7.10
ADHD**	3.60	2.31	2.49	1.82	2.46	0.88	8.69	2.34
Personality	1.90	0.21	0.46	0.24	0.21	0.30	2.30	0.37
Bipolar	0.93	0.43	0.59	0.50	0.53	0.24	3.42	0.54
Intellectual Disability	0.60	<0.01	<0.01	s	0.03	s	0.84	0.01
Schizophrenia	0.55	0.45	0.87	0.77	0.78	0.78	19.83	0.85
Eating Disorder	0.33	0.07	0.10	0.07	0.08	0.04	0.23	0.09

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.
** Attention Deficit Hyperactivity Disorder
s Data suppressed due to small counts.

Table E.2: Substance Use Disorder Prevalence: Needs-Based Planning Model and One-Year Administrative Data Estimates by Region of Residence, 2022/23

Disorder	Needs Based Planning Model (%)	Southern Health-Santé Sud (%)	Winnipeg RHA (%)	Interlake-Eastern RHA (%)	Prairie Mountain Health (%)	Northern Health Region (%)	Public Trustee* (%)	Manitoba (%)
Alcohol Use	5.40	0.36	0.57	0.69	0.65	1.96	2.89	0.64
Cannabis Use	1.60	0.06	0.14	0.10	0.17	0.34	0.93	0.14
Opioid Use	0.85	0.17	0.40	0.48	0.25	0.77	1.00	0.38
Cocaine Use	0.37	0.03	0.07	0.07	0.06	0.26	0.36	0.07
Non-Cocaine Stimulant Use	0.28	0.04	0.14	0.09	0.14	0.15	1.78	0.12

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Table E.3: Mental Health Disorder Prevalence: Needs-Based Planning Model and Multi-Year Administrative Data Estimates by Region of Residence, 2022/23

Disorder	Needs Based Planning Model (%)	Southern Health-Santé Sud (%)	Winnipeg RHA (%)	Interlake-Eastern RHA (%)	Prairie Mountain Health (%)	Northern Health Region (%)	Public Trustee* (%)	Manitoba (%)
Anxiety	6.90	16.11	21.86	19.22	24.61	8.38	29.88	20.49
Depression	4.90	14.45	15.87	17.45	17.87	9.63	31.82	15.82
ADHD**	3.60	2.31	2.49	1.82	2.46	0.88	8.69	2.34
Personality	1.90	0.66	1.26	0.69	0.73	0.86	6.95	1.06
Bipolar	0.93	0.94	1.28	1.05	1.07	0.55	9.12	1.17
Intellectual Disability	0.60	0.17	0.15	0.12	0.24	0.16	13.04	0.21
Schizophrenia	0.55	1.51	2.40	2.21	2.33	2.69	40.89	2.40
Eating Disorder	0.33	0.27	0.34	0.23	0.25	0.19	0.96	0.30

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

** Attention Deficit Hyperactivity Disorder

Table E.4: Substance Use Disorder Prevalence: Needs-Based Planning Model and Multi-Year Administrative Data Estimates by Region of Residence, 2022/23

Disorder	Needs Based Planning Model (%)	Southern Health-Santé Sud (%)	Winnipeg RHA (%)	Interlake-Eastern RHA (%)	Prairie Mountain Health (%)	Northern Health Region (%)	Public Trustee* (%)	Manitoba (%)
Alcohol Use	5.40	1.05	1.58	2.06	1.89	5.94	9.21	1.82
Cannabis Use	1.60	0.19	0.39	0.32	0.61	1.09	3.05	0.42
Opioid Use	0.85	0.31	0.72	0.86	0.55	1.19	2.23	0.68
Cocaine Use	0.37	0.08	0.23	0.22	0.27	0.76	1.46	0.24
Non-Cocaine Stimulant Use	0.28	0.14	0.42	0.28	0.46	0.48	4.33	0.39

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Health Service Use Indicators

In Manitoba, 14,501 individuals made 28,539 emergency department visits for MH/SU disorder reasons in 2022/23; 3,512 individuals made 5,263 urgent care visits; 184,882 individuals made 439,021 primary care visits; and 22,049 individuals made 129,492 psychiatrist visits. The crude visit rates for these services are shown in Table E.5. The Northern Health Region had the highest rate of emergency department visits and hospitalizations in the province, but the lowest rates of primary care and psychiatry visits.

Among emergency department visits for MH/SU disorders, the proportion made by residents living in the same region as the facility ranged between 74% and 90% across regions. In Interlake-Eastern RHA, 22% of emergency department visits were made by Winnipeg RHA residents – the highest proportion among all regions. In most regions, more than 70% of residents accessed emergency department services within their home region. One exception was Interlake-Eastern RHA residents; only 46% of their visits occurred in that region, while nearly 48% were in the Winnipeg RHA.

Among residents who saw a primary care provider for MH/SU disorder reasons, the Winnipeg RHA had the highest proportion (97%) of individuals who made all their visits within their region. In contrast, Interlake-Eastern RHA had the lowest (17%). Notably, Interlake-Eastern RHA also had the highest proportion of residents who received all their primary care for MH/SU disorders outside their home region (80%).

Most inpatient psychiatric hospitalizations at acute hospitals were for patients from the same region as the facility (87-90% across the regions). Among the two tertiary hospitals in the province, almost 80% of the hospitalizations at Health Sciences Centre (HSC) and 90% at the St. Boniface General Hospital (SBGH) were by Winnipeg residents. Looking at where residents were hospitalized, between 93% and 97% were in acute hospitals in their home region. Among tertiary hospitals, the proportion of region residents hospitalized at HSC ranged from 70% to 100%, with the remaining hospitalizations having occurred at SBGH.

Table E.5: Mental Health and Substance Use Disorder Visits by Service Type and Region of Residence, 2022/23

Crude rate of visits per 1,000 population aged 15 years and older

Health Services	Southern Health-Santé Sud	Winnipeg RHA	Interlake-Eastern RHA	Prairie Mountain Health	Northern Health Region	Public Trustee*	Manitoba
Emergency Department	19.19	19.62	15.82	23.90	98.13	279.92	24.40
Urgent Care	1.04	6.48	1.42	0.31	3.53	59.04	4.50
Primary Care	269.31	412.74	336.65	442.39	110.87	823.57	375.36
Psychiatrist	52.21	150.03	60.44	50.56	31.00	519.72	110.71
Hospital	1.27	4.81	1.90	5.13	10.30	63.82	4.53

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Discussion/Conclusion

Mental health and substance use (MH/SU) disorders impact a substantial proportion of the population across the province. Of the health services studied, Manitobans' use of primary care services is most often followed by psychiatry, emergency departments, hospitals, and then urgent care centres. There is some variation in the utilization rates across the province as individuals can only use services that are available to them, which is not the same across the regions. Given the breadth of disorders and the varying degrees of severity, whole-system approaches to planning and providing appropriate levels of prevention and treatment services have been suggested alongside addressing the structural drivers of MH/SU disorders such as embedded colonial policies and racism that also play critical roles in shaping MH/SU disorder service provision in the province.

A needs-based planning model may help to identify where service gaps may exist but requires information about the current system. The administrative data was used to provide only a small proportion of that information and only includes information for those who seek services from a portion of the system. For example, many services offered in the community, such as psychologist services, are not captured in the data. Therefore, the administrative data can provide important information for planners to better understand the burden of MH/SU disorders and the volume of health services they use, however, its ability to produce NBP model information is limited.

Chapter 1: Introduction and Background

1.1 Prevalence of Mental Health and Substance Use Disorders

Mental health disorders may be described as a clinically significant disturbance in an individual's cognition, emotion regulation, or behaviour that can lead to distress and impaired functioning.[1] There are over 200 types of mental health disorders, each existing on a continuum of severity that can affect and disrupt many areas of life for varying lengths of time. The most common types include anxiety and depressive disorders.[1] Substance use disorder is another common mental health disorder, which is characterized by an individual's inability to control their use of substances that have addiction potential, such as alcohol, cannabis, opioids, or prescription drugs.[2] While some individuals living with a substance use disorder may have other co-occurring mental health disorders, it is possible for some to be living in 'good mental health'.[3,4] In some individuals, a mental health disorder may lead to a substance use disorder; however, this is not always the case (i.e., mental health disorders do not necessarily cause substance use disorders). In fact, the development of any mental health and substance use (MH/SU) disorder is complex and multifaceted. Risk factors include those related to the individual (e.g., genetics and biology) and the environment (e.g., social supports, relationships, experiences, workplace).[5–8] These factors interact in various ways throughout an individual's life, influencing their susceptibility to symptoms, the severity of those symptoms, and their likelihood of seeking care.

Globally, the lifetime prevalence of any mental health disorder is almost 30% and the risk of experiencing a disorder by age 75 is one in every two people.[9] In Canada, studies using 2012 Canadian Community Health Survey data have estimated that 6.1% of Canadians aged 15-64 reported a mood and anxiety disorder (major depressive disorder, bipolar disorder, and/or

generalized anxiety disorder) in the previous year, 3.8% reported a substance use disorder (alcohol, cannabis, and/or other drug abuse or dependence), and 1.2% reported concurrent mood/anxiety and substance use disorders. [10,11] Meanwhile, approximately 14.4% of Canadians aged one year and older in 2009/10 were estimated to have received health services for a mental health disorder based on data from the Canadian Chronic Disease Surveillance System.[12]

Using administrative data in Manitoba, 27.6% of adults were reported to have received at least one mental health disorder diagnosis (mood and anxiety disorders, substance use disorders, psychotic disorders, or personality disorders) measured over 5 years from 2010/11 to 2014/15; this was driven primarily by the 23.2% of individuals diagnosed with a mood and anxiety disorder.[13] As noted by the authors of that report, the availability of data and the definitions used to identify individuals with mental health disorders fail to identify those who have never received treatment, were diagnosed by a psychologist, or who received services from nurses, social workers or other counsellors. As a result, the true prevalence of mental illness in Manitoba is likely higher than was reported — a troubling realization considering that Manitoba already has relatively high rates of mental health disorders, including major depressive disorder, alcohol use disorder, and suicide ideation, compared to other provinces.[14]

Mental health and substance use disorders also disproportionately affect racialized and marginalized populations where inadequate living conditions, limited access to appropriate health services, and a lack of employment opportunities contribute to chronic stress and feelings of hopelessness that erode mental wellbeing.[15] This is evidenced in Manitoba by the higher prevalence of mood and anxiety disorders, psychotic disorders, substance use disorders, and suicides among First Nations people than among all other Manitobans.[16,17]

Colonization and racism remain central determinants of health for Indigenous peoples. The imposition of colonial systems, laws, and institutions has created an enduring structure designed to assert dominance that continues to shape the health, including mental well being, of Indigenous communities that result in persistent inequities.[18] Racism operates across interpersonal, community, institutional, and structural levels and plays a significant role in the mental health disparities that are experienced.[18]

These ongoing structures also restrict First Nations peoples' capacity for self determination, where the systematic exclusion of certain forms of evidence and community voices can further marginalize affected populations and perpetuate health and social inequities.[15,18] When policy makers and the communities they serve are not meaningfully engaged in evidence synthesis and decision making, resulting programs may fail to address community specific needs.[19] Best practices in public health emphasize incorporating multiple ways of knowing and diverse knowledge sources when defining key issues and concepts.[20]

Individuals living with a mental health disorder have higher rates of health service use encounters, such as hospitalizations, emergency department visits, and ambulatory care visits. They are also more likely to experience premature death (i.e., death before age 75) compared to those without a disorder.[13] Further, visits to physicians and emergency departments for mental health reasons are higher among those living in neighbourhoods where income, material resources, and housing stability are lowest compared to those living where they are highest. [21] Individuals with mental health disorders are also more likely to experience homelessness, drop out of school, and have marital instability, economic insecurity, social isolation, and reduced social networks.[22–26] These points illustrate the important relationship that exists between the social determinants and individuals with mental health disorders and the health services they use.

It is abundantly clear that planning for and addressing MH/SU disorders across the spectrum of severity and complexity is a public health concern and critically important for the wellbeing of individuals, families, and communities. Ensuring that the correct mix of services is available is vital for the MH/SU health system to meet the varying needs of this population.

1.2 Planning for Mental Health and Substance Use Disorder Services and Supports in Manitoba

MH/SU disorder service gaps have been reported, especially among more vulnerable groups of people, highlighting the need for a comprehensive, system-wide approach to planning and providing services and supports to meet the needs of these individuals.[27] Historically, planning for MH/SU disorder supports and services has taken a fragmented approach across many Canadian jurisdictions, with investment in resources made without the benefit of an integrated model.[28]

In 2018, the government of Manitoba commissioned Virgo Planning and Evaluation Consultants Inc. to develop a strategic plan to improve access and coordination of the services and supports for individuals living with MH/SU disorders in the province. The comprehensive approach to developing the plan is described in the resulting report titled *Improving Access and Coordination of Mental Health and Addiction Services: A Provincial Strategy for all Manitobans*.[28] The strategy proposes a population-based approach to service planning and emphasizes the need to address the social determinants of health and inequities within certain populations, particularly for Indigenous Peoples. The report provides 125 recommendations within 6 strategic priority areas. Since the report's release, the province has taken a whole-of-government approach to support initiatives guided by those recommendations.[29]

In 2021, the Prairie Mountain Health Region was one of six sites across Canada to participate in a project that pilot-tested a national needs-based planning (NBP) model aimed at systematically quantifying MH/SU treatment and support systems. In addition to further developing the NBP model, the project identified priority areas for investment and provided recommendations for system-planning work for each pilot site, including Prairie Mountain Health.[30] Participation in the pilot project in Prairie Mountain Health resulted in a greater understanding of the target state for current programs to work towards, in alignment with national consensus. More specifically, the findings served as a fundamental tool in service planning, including annual operating plans and the systematic shift of support service staff to peer support programs.

1.3 National Needs-Based Planning (NBP) Model

The NBP model was developed by a national team led by Dr. Brian Rush (Centre for Addictions and Mental Health) and Dr. Daniel Vigo (University of British Columbia). The model is intended to provide evidence to health system policymakers and planners to support decisions about the MH/SU disorder services in their area.[31] The model is based on a framework that guided the selection of core services and supports that should ideally be available and accessible to all residents within a planning area. The framework is centred around three elements: (1) the functions of an MH/SU health system; (2) the core service delivery platforms; and 3) the specific treatment activities and supports of those platforms.

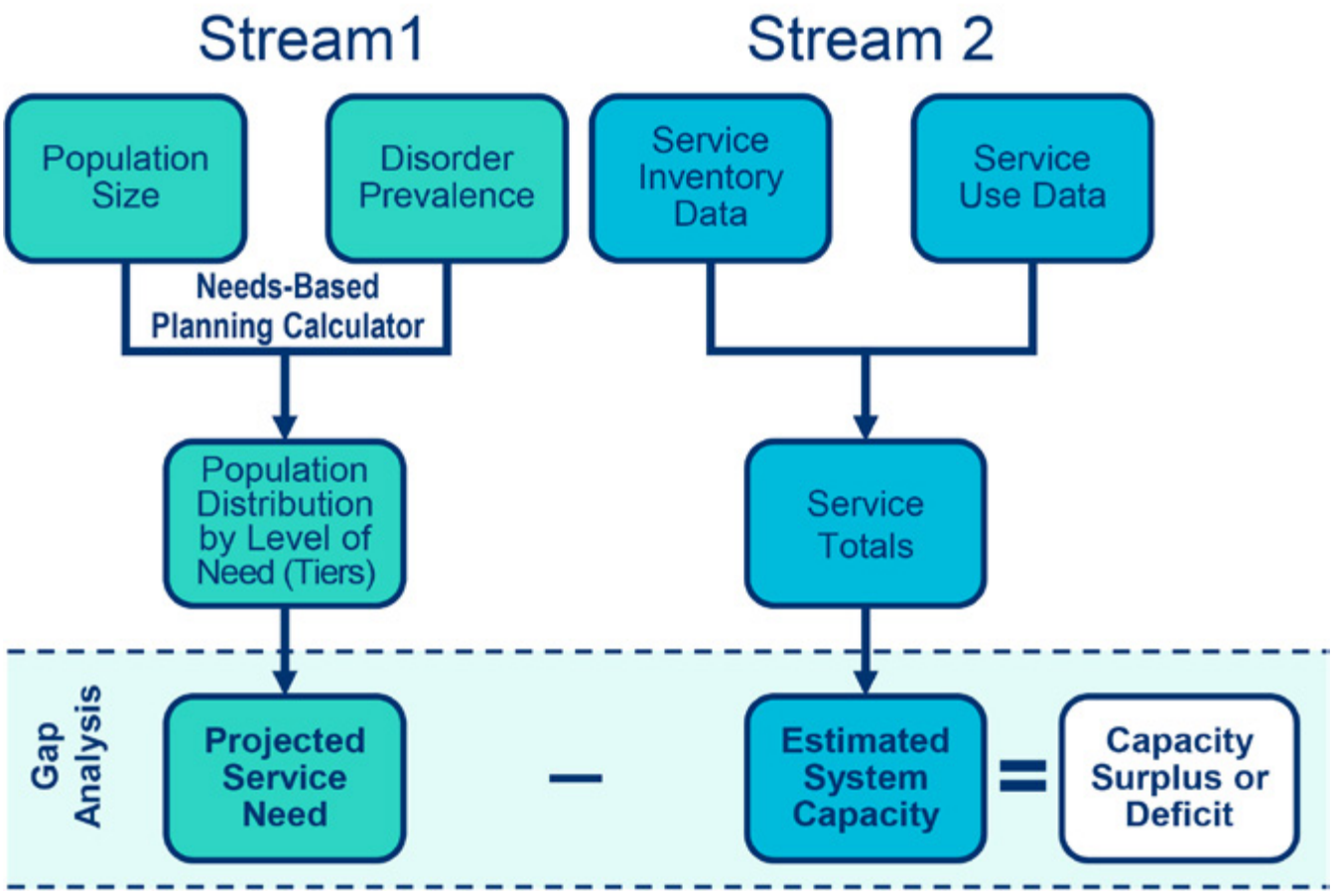
The core service delivery platforms define the structural components of the MH/SU health system that are responsible for delivering services and carrying out the activities associated with each system function. The framework organizes the platforms into the following three main service areas:

1. Emergency and Crisis Response Services
2. Community Treatment and Support Services
3. Acute and Specialized Care Services

As shown in Figure 1.1, the model consists of streams that result in two sets of estimates for the platforms. One stream produces estimates of the projected need for services and is based on the size of the population and the prevalence of MH/SU disorders, while the other stream provides estimates of the current capacity, or service use, within the system to provide those services. To facilitate a gap analysis, the estimates for each platform from the two streams are measured in the same units; this may be the number of patients using a service, the full-time equivalents (FTEs) for providers, or the number of beds required for bed-based services. The gap is defined as the difference between the estimates and indicates whether there is a surplus or deficit in service capacity.

More details about the service platforms and how to implement the planning model may be found on the **Needs-Based Planning website.**

Figure 1.1: Needs-Based Planning Model Gap Analysis Framework



1.4 Report Context

To assist planners and decision makers in identifying gaps within Manitoba's current mental health and substance disorder support system, the Manitoba Centre for Health Policy (MCHP) was commissioned by Manitoba Health, Seniors and Long-Term Care (MHSLTC) to apply the NBP model in the province and across the Regional Health Authorities (RHA). MCHP collaborated with the Mental Health, Addictions Treatment and Recovery (MHATR) branch of the Department of Housing, Addictions and Homelessness (HAH) and with a system planner in Prairie Mountain Health who had experience using the model to complete the project.

The steps outlined in the NBP implementation manual were followed, which included estimating population need by severity level (i.e., tiers), determining the need for core services, mapping the system services to service delivery platforms, estimating current service capacity (supply and utilization), and conducting the gap analysis. [31] Completing these steps required data from multiple sources, including the administrative datasets in the Manitoba Population Research Data Repository (Repository) and primary data collected by the MHATR branch. The NBP team used the information derived from these data to generate projected need estimates at the core service delivery platform level for the province and health regions and to conduct the gap analysis to identify service need and capacity misalignment for the 2022 fiscal year.

A separate report on the full application of the NBP model, including the findings from the gap analysis, has been delivered to MHSLTC. This report focuses **solely on the administrative data analyses** that were conducted as part of the larger project.

1.5 Report Objectives

In the core work implementing the NBP model, the administrative data was used to supplement primary data that was collected by the MHATR branch. The administrative data was used to contribute to information for the projected need and some service capacity estimates. It should be noted that not all estimates produced from the administrative data were used in the final application of the NBP model, but they are included in this report. It is indicated throughout the report whether the estimates were or were not used in the model. Additional health service use measures were also produced over the course of the project, which were not required in the NBP model but do provide valuable information regarding the volume of services used.

The objectives of this report are two-fold:

1. Using administrative data housed in the Manitoba Population Research Data Repository, describe the burden of MH/SU disorders in Manitoba in terms of prevalence and patterns of health services use.
2. Assess the usefulness of the administrative data housed in the Manitoba Population Research Data Repository in supporting the implementation of the NBP model.

1.6 Organization of the Report

The report is organized into the following chapters:

- Introduction and Background (Chapter 1)
- Methods (Chapter 2)
- Results (Chapter 3)
- Summary and Discussion (Chapter 4)

Chapter 2 explains how the study population and the prevalence of MH/SU disorder were determined in the administrative data. This is followed by a description of the indicators of health service use for MH/SU reasons. Chapter 3 presents the prevalence estimates and the results for the use of emergency department, urgent care, primary care, psychiatry, and hospital services. Finally, in Chapter 4, we discuss the overall level of health services used by individuals living with MH/SU disorders and provide an assessment of the utility of the administrative data at MCHP in contributing information for the NBP model.

Chapter 2: Methods

This chapter describes the administrative data analyses that were conducted. This includes identifying the study population, calculating the prevalence of disorders, and measuring health services use rates. It is important to note that the prevalence and visit rates are reported as crude measures, meaning they reflect what actually happened and do not consider the differences in age and sex distributions between regions. Therefore, caution should be used when comparing measures between regions given their well-documented demographic differences. All measures were calculated for the 2022 fiscal year (April 1, 2022 - March 31, 2023).

Data and Study Population

We used the following data sources to carry out the analyses:

- Manitoba Health Insurance Registry
- Discharge Abstracts Database (DAD)
- Medical Claims
- Drug Program Information Network (DPIN)
- Emergency Department Information System (EDIS)
- Provider Registry

All data were accessed for 2022/23, while the Insurance Registry, DAD, Medical Claims, and DPIN data were accessed as early as 1979/80, depending on the disorder definition used in the prevalence estimates.

The study population included individuals aged 15 years or older as of December 31, 2022. These individuals were identified in the Insurance Registry and assigned to regions based on their postal codes. The Winnipeg RHA provides services to Churchill; therefore, residents with postal codes for Churchill are included in the Winnipeg RHA. Individuals whose financial affairs were the responsibility of the Public Guardian and Trustee of Manitoba

were not assigned to a region because they have the address of the Public Trustee Office on their record, which may not be in their region of residence and cannot be confirmed in the data. These individuals were included as a separate category.

MH/SU Disorder Prevalence

In the NBP model, the projected need for services is based on the size of the population (i.e., the study population) and the prevalence of the MH/SU disorders. For this report, we calculated the prevalence for the same MH/SU disorders listed in the NBP Implementation Manual, which include:

- Anxiety
- Depression
- Attention Deficit Hyperactivity Disorder
- Bipolar Disorder
- Schizophrenia
- Personality Disorder
- Eating Disorders
- Intellectual Disability
- Neurocognitive Disease due to Traumatic Brain Injury or Substance Use
- Alcohol Use
- Cannabis Use
- Opioid Use
- Non-Cocaine Stimulants Use
- Cocaine Use
- Heroin Use

The NBP team calculated one-year prevalence estimates for Canada using a methodology that included a systematic review, quality assessment, and meta-analysis.[31] More specifically, the prevalences were produced from a combination of data from published, peer-reviewed literature from Canada and comparable countries, the Canadian Community Health Survey (CCHS), and administrative data from British Columbia.[31] However, the NBP model does allow for prevalences that are produced using other methods or sources (i.e., local administrative data) to be used. Most definitions using MCHP's administrative data require multiple years of data to capture disorder prevalence accurately. For the larger project, we adapted our definitions to produce one-year and multi-year estimates. For example, the validated administrative data definition for personality disorders uses diagnosis codes from the hospital or physician data over a five-year period. However, to match the NBP model timeframe, diagnosis codes were also identified within only a one-year period.

To also align with the NBP model, we made the following adaptations to definitions. We separated our definition for mood and anxiety disorders into three separate definitions for depression, anxiety, and bipolar disorders, and also included codes for heroin poisonings in our definition for opioid use disorder. We also identified schizophrenia with a definition that included diagnosis codes for psychosis to more closely replicate that used in the NBP model but also include the prevalence using a definition without those codes to be consistent with previous MCHP reports. The prevalence that includes psychosis is used in the result figures. Lastly, the NBP model includes neurocognitive disorder due to traumatic brain injury or substance use; however, this disorder could not be accurately identified in the administrative data and is not included.

All definitions, including diagnosis codes, for each disorder are provided in Appendix 1; prevalence was calculated for Manitoba overall and for each health region.

Emergency Department and Urgent Care

We identified all visits to an emergency department or urgent care centre for an MH/SU disorder reason in 2022/23. These visits were defined as any visit with a Canadian Triage and Acuity Scale (CTAS) chief complaint of either 'mental health' or 'substance use' or an ICD-10-CA diagnosis code for an MH/SU disorder (see Appendix 2 for diagnosis codes). We then calculated the crude visit rate (a visit-based measure) and identified the number of unique individuals who made these visits (a person-based measure). The person-based measure is specified for the NBP model and was used to provide a system capacity estimate for this service.

Visit-based catchment and location measures were also calculated to provide information regarding where patients came from and where each region's residents sought care. The key difference between these two measures is in how the visits are organized. For the catchment measure, visits were grouped by the facility's region. We calculated the proportion of patients who came from the same region as the facility, from a different region, or from Winnipeg. For the location measure, visits were grouped by the patients' region of residence. We calculated the proportion of visits made to facilities within the patients' home region, in another region, or at the Health Sciences Centre (HSC). Although HSC is located in the Winnipeg region, it is operated by Shared Health and was included as a separate entity. These two visit measures are not included in the NBP model.

Primary and Psychiatric Care

All ambulatory primary care and psychiatry visits for MH/SU disorder reasons in 2022/23 were identified. Primary care providers included family physicians and nurse practitioners. Visits with an ICD-9-CM diagnosis code for an MH/SU disorder were included (see Appendix 2 for diagnosis codes). We calculated crude rates (a visit-based measure) and the number of unique individuals who made these visits (a person-based measure) separately for primary care providers and for psychiatrists. The person-based measure for primary care provider visits is specified for the NBP model and was used to provide a system capacity estimate.

Person-based location measures for primary care and psychiatry visits were also calculated to show where residents went for care. Location is reported as the proportion of patients who made all their visits in their home region, all in another region, or a mix of both. These measures are not included in the NBP model.

FTE measures were calculated for primary care providers and psychiatrists and used as system capacity estimates in the NBP model. We first calculated the total FTE for each provider by summing all their billings (i.e., claims) in 2022/23, regardless of diagnosis (i.e., not just MH/SU disorders). An FTE for each provider was then estimated using the following formulas:

1. **FTE = 1** when the provider's number of billings were in the top 40th to 60th percentile of providers.
2. **FTE = Provider's billings/40th percentile billings** when the provider's number of billings were less than the top 40th percentile of providers.
3. **FTE = 1 + natural log (provider's billings/60th percentile billings)** when the provider's number of billings were greater than the top 60th percentile of providers.

For each provider, medical claims for MH/SU disorders were then identified based on the ICD-9-CM diagnosis codes listed in the billing (see Appendix 2 for diagnosis codes). These were then used to calculate the proportion of the provider's total billings that were for MH/SU disorders. Next, each provider's FTE for MH/SU disorders was estimated by multiplying their total FTE by the proportion of their claims related to MH/SU disorders. The individual provider FTEs were then summed to generate the total MH/SU disorder FTE for the entire province and for each region. Regional FTE calculations were based on the billing location of the family physician, nurse practitioner, or psychiatrist.

Hospital Services

We identified all inpatient psychiatric hospitalizations for an MH/SU disorder in 2022/23. These hospitalizations were identified in the Discharge Abstracts Database (DAD) using records where the patient was in a psychiatric bed, had a main patient service code or service transfer code for psychiatry or paediatric psychiatry, and an ICD-10-CA diagnosis code for an MH/SU disorder (Appendix 2) listed as the most responsible diagnosis. We calculated both the crude rate (a hospitalization-based measure) and the number of unique individuals who were hospitalized (a person-based measure).

The DAD was also used to identify forensic psychiatry inpatient hospitalizations. These were defined as all hospitalizations at HSC with a level of care recorded as '5', which is a mandatory designation for these specific types of hospitalizations.

Visit-based catchment and location measures were also calculated to provide information on where patients came from and where each region's residents went for their inpatient psychiatric hospitalization. The key difference between these two measures is how hospitalizations are organized (i.e., the denominator). For the catchment measure, hospitalizations were grouped by the facility's region. We calculated the proportion of patients who came from the same region, from a different region, from Winnipeg, or from outside Manitoba. For the location measure, hospitalizations are grouped by the patient's region of residence who was hospitalized; we calculated the proportion of hospitalizations within the patient's home region, in another region, or at HSC. Although HSC is in the Winnipeg region, it is operated by Shared Health and was included as a separate entity. These measures are also separated by acute and tertiary hospitals. There are two tertiary hospitals, HSC and St. Boniface General Hospital (SBGH), both located in Winnipeg.

No measures of hospital service use were included in the NBP model.

Chapter 3: Results

3.1 Study Population

We identified 1,169,605 individuals aged 15 years or older as of December 31, 2022, in Manitoba. The distribution of individuals by health region is shown in Table 3.1.

Table 3.1: Distribution of Individuals by Health Region

Number and percent of residents aged 15 years and older on December 31, 2022

Health Region	Number	Percent
Southern Health-Santé Sud	171,038	14.62
Winnipeg RHA	683,474	58.44
Interlake-Eastern RHA	112,489	9.62
Prairie Mountain Health	142,984	12.22
Northern Health Region	55,233	4.72
Public Trustee*	4,387	0.38
Manitoba	1,169,605	100.00

* Individuals whose estate or trust money are managed by the Public Guardian and Trustee of Manitoba and were not assigned to a region.

3.2 MH/SU Disorder Prevalence

The one-year and multi-year prevalence estimates for MH/SU disorders for Manitoba overall are provided in Figure 3.1 and for each region in Figures 3.2 to 3.6.

One-year Estimates

In Manitoba, and across each region, prevalence was highest for anxiety, depression, and attention deficit hyperactivity disorder (ADHD). The provincial prevalence for anxiety was 7.5% and was highest in Prairie Mountain Health (8.7%) and lowest in the Northern Health Region (2.1%). The prevalence of

depression in Manitoba was 7.1% and was highest in Interlake-Eastern RHA (8.1%), and lowest in the Northern Health Region (2.5%). ADHD prevalence was 2.3% in Manitoba; regionally, it was highest in the Winnipeg RHA (2.5%) and lowest in the Northern Health Region (0.9%). The one-year prevalence for each of the other mental health disorders were all under 1% in the province and each region. The highest prevalence estimates for these remaining disorders were observed in the Winnipeg RHA, except for intellectual disability, which was highest in Prairie Mountain Health.

The highest prevalence of substance use disorders in the province was for alcohol (0.6%), followed by opioids (0.4%), cannabis (0.4%), stimulants excluding cocaine (0.1%), and cocaine (0.1%). The Northern Health Region had the highest prevalence estimates for each of the substance-specific disorders across the regions, while the lowest were in the Southern Health-Santé Sud region.

Multi-year Estimates

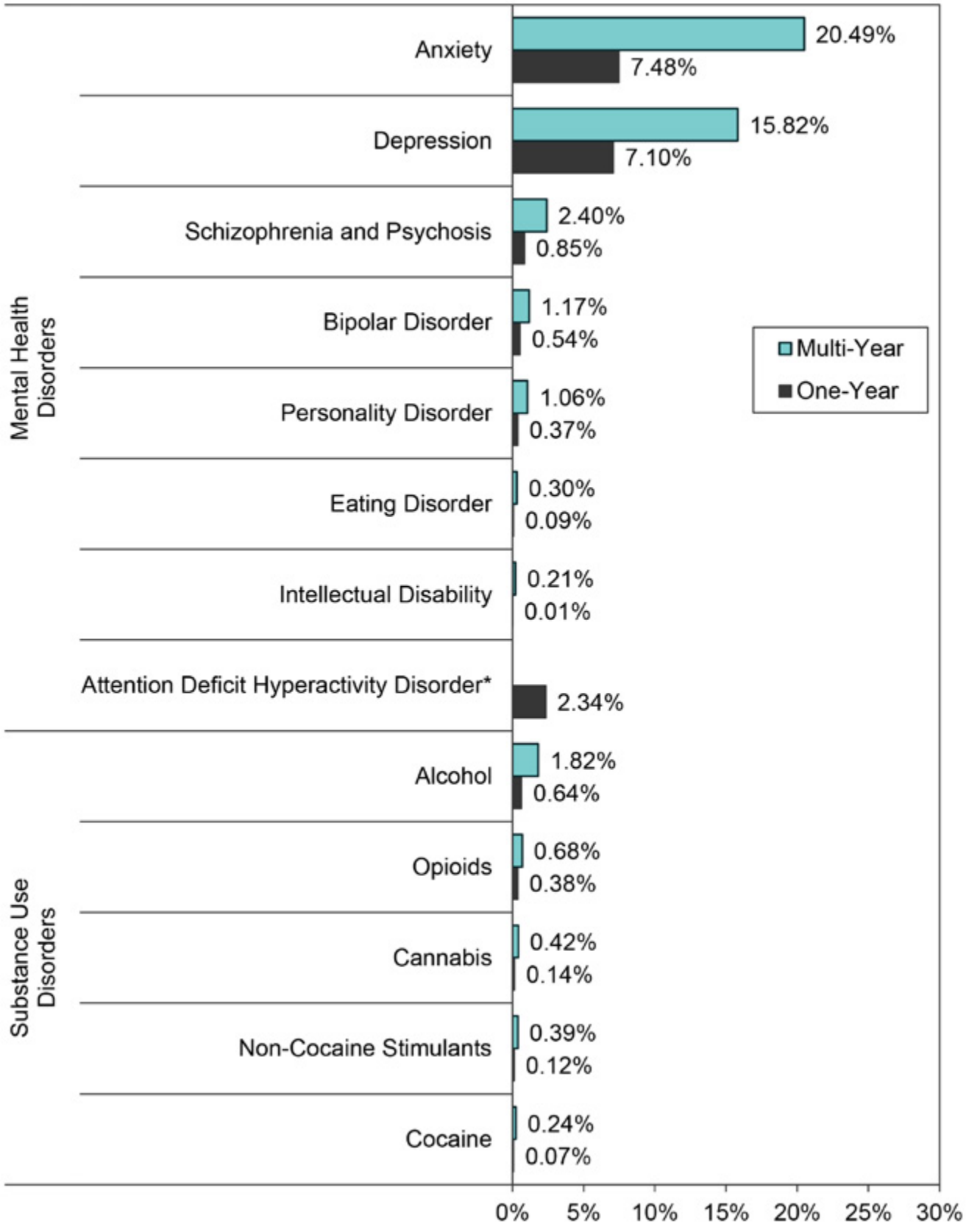
As expected, the prevalence estimates using the multi-year administrative data definitions were higher than the one-year estimates. The validated definition for ADHD is for one year of data, therefore, there is no multi-year estimate.

The highest multi-year prevalences in the province were for anxiety (20.5%) and depression (15.8%). Across the regions, Prairie Mountain Health had the highest prevalence for both anxiety (24.6%) and depression (17.9%), while the Northern Health Region had the lowest (8.4% for anxiety and 9.6% for depression). Prevalence estimates for the remaining disorders remained low and the Winnipeg RHA continued to have the highest estimates, except for schizophrenia (including psychosis) where the Northern Health Region had a slightly higher prevalence (2.7%) than the Winnipeg RHA (2.4%). Note that when the stricter definition for schizophrenia was used, the 12-year prevalence in the province was 1.1% in the Northern Health Region, 1.1% in the Winnipeg RHA, 0.9% in the Interlake-Eastern RHA and Prairie Mountain Health, and 0.5% in the Southern Health-Santé Sud region.

In Manitoba, 1.8% of the population had a substance use disorder for alcohol, followed by opioids (0.7%), cannabis (0.4%), non-cocaine stimulants (0.4%), and cocaine (0.2%). Like the estimates using one-year of data, the Northern Health Region had the highest estimates, and the Southern Health-Santé Sud region had the lowest estimates across each of the disorders.

Figure 3.1: One-Year and Multi-Year Prevalence of Mental Health and Substance Use Disorders in Manitoba 2022/23

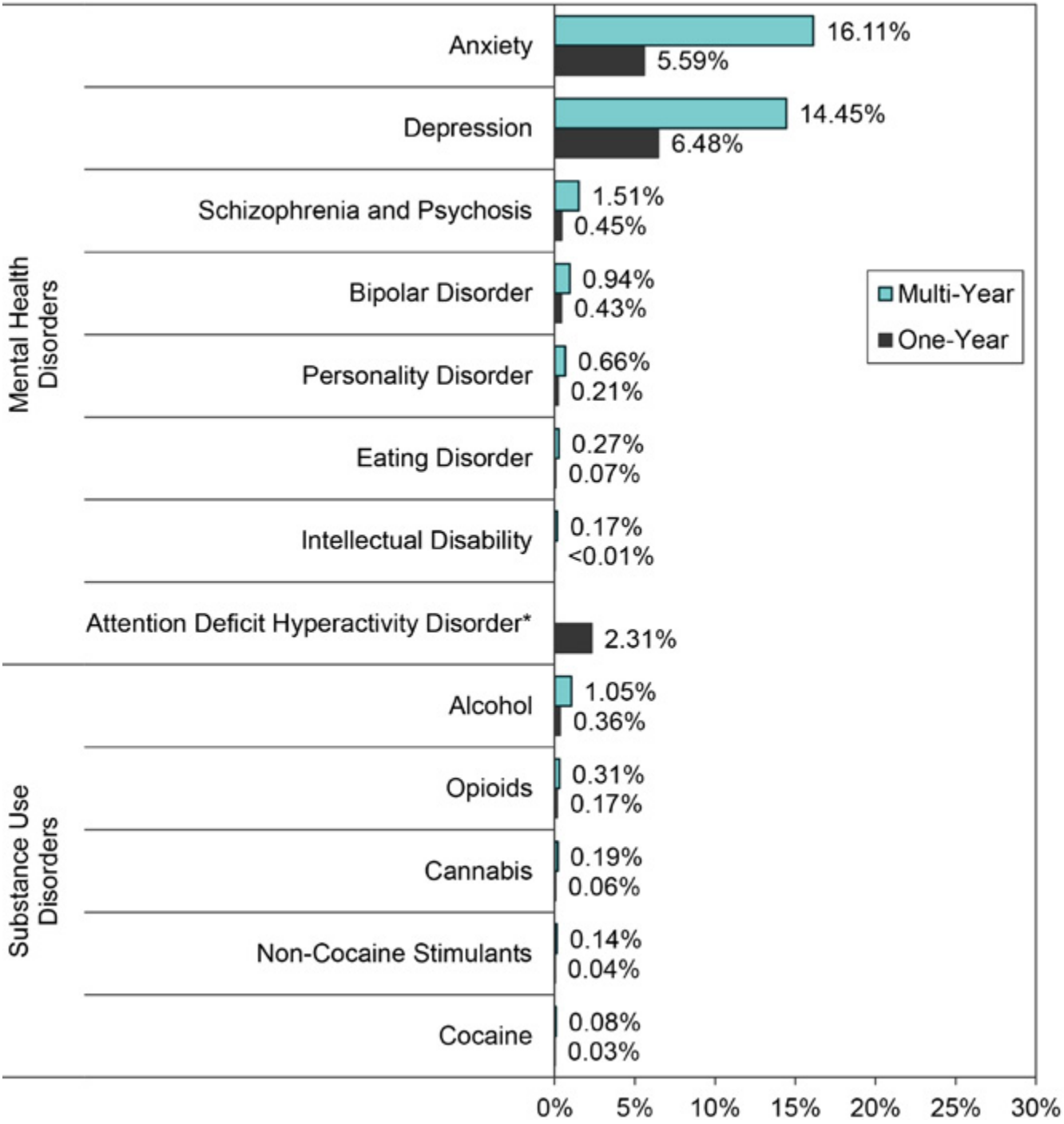
Crude percent of individuals aged 15 years and older (n = 1,169,605)



* There is no multi-year estimate because the validated definition only applies to a one-year period.

Figure 3.2: One-Year and Multi-Year Prevalence of Mental Health and Substance Use Disorders in Southern Health-Santé Sud, 2022/23

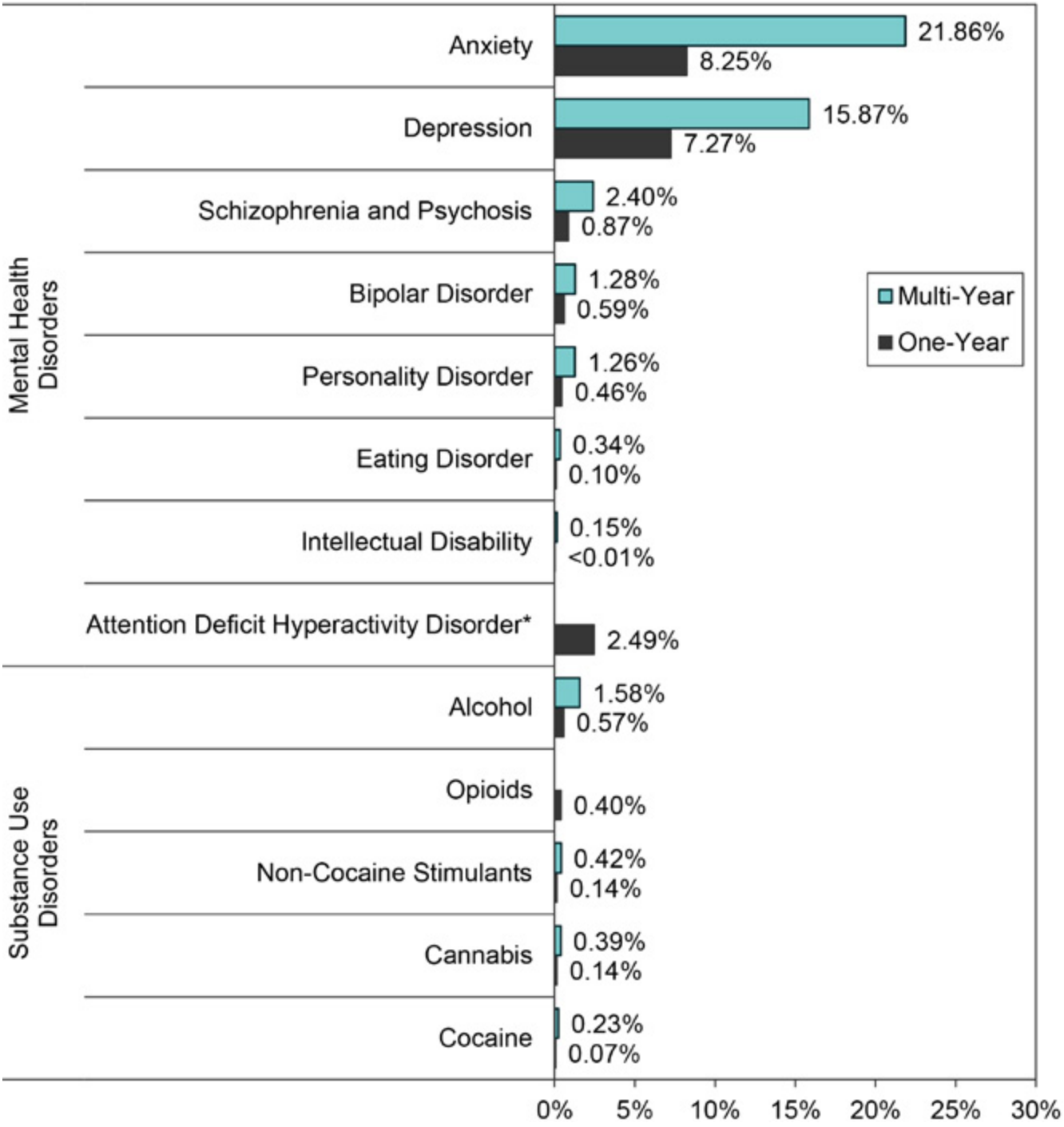
Crude percent of individuals aged 15 years and older (n = 171,038)



* There is no multi-year estimate because the validated definition only applies to a one-year period.

Figure 3.3: One-Year and Multi-Year Prevalence of Mental Health and Substance Use Disorders in Winnipeg RHA, 2022/23

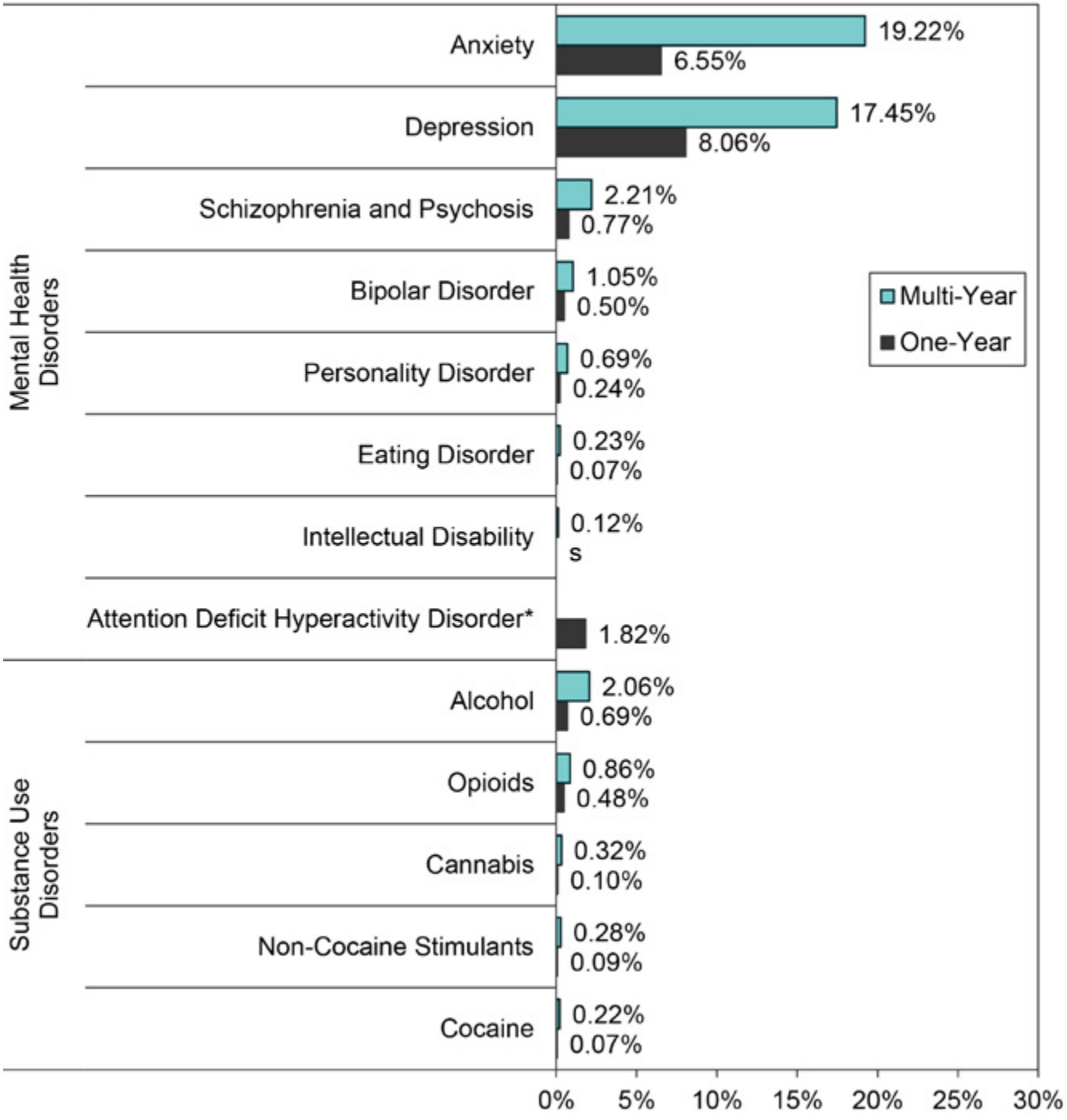
Crude percent of individuals aged 15 years and older (n = 683,474)



* There is no multi-year estimate because the validated definition only applies to a one-year period.

Figure 3.4: One-Year and Multi-Year Prevalence of Mental Health and Substance Use Disorders in Interlake-Eastern RHA, 2022/23

Crude percent of individuals aged 15 years and older (n = 112,489)

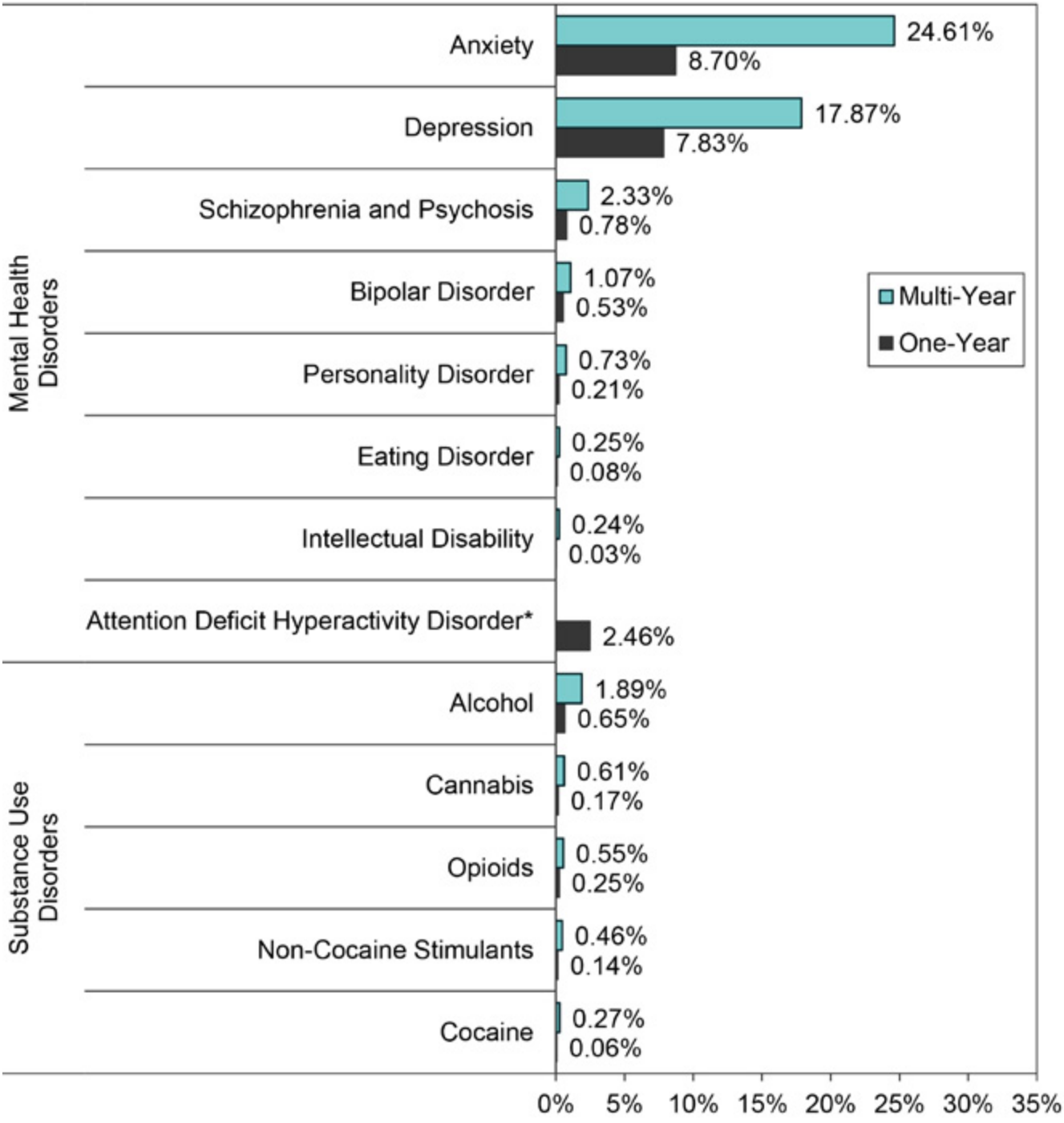


s Data suppressed due to small counts.

* There is no multi-year estimate because the validated definition only applies to a one-year period.

Figure 3.5: One-Year and Multi-Year Prevalence of Mental Health and Substance Use Disorders in Prairie Mountain Health, 2022/23

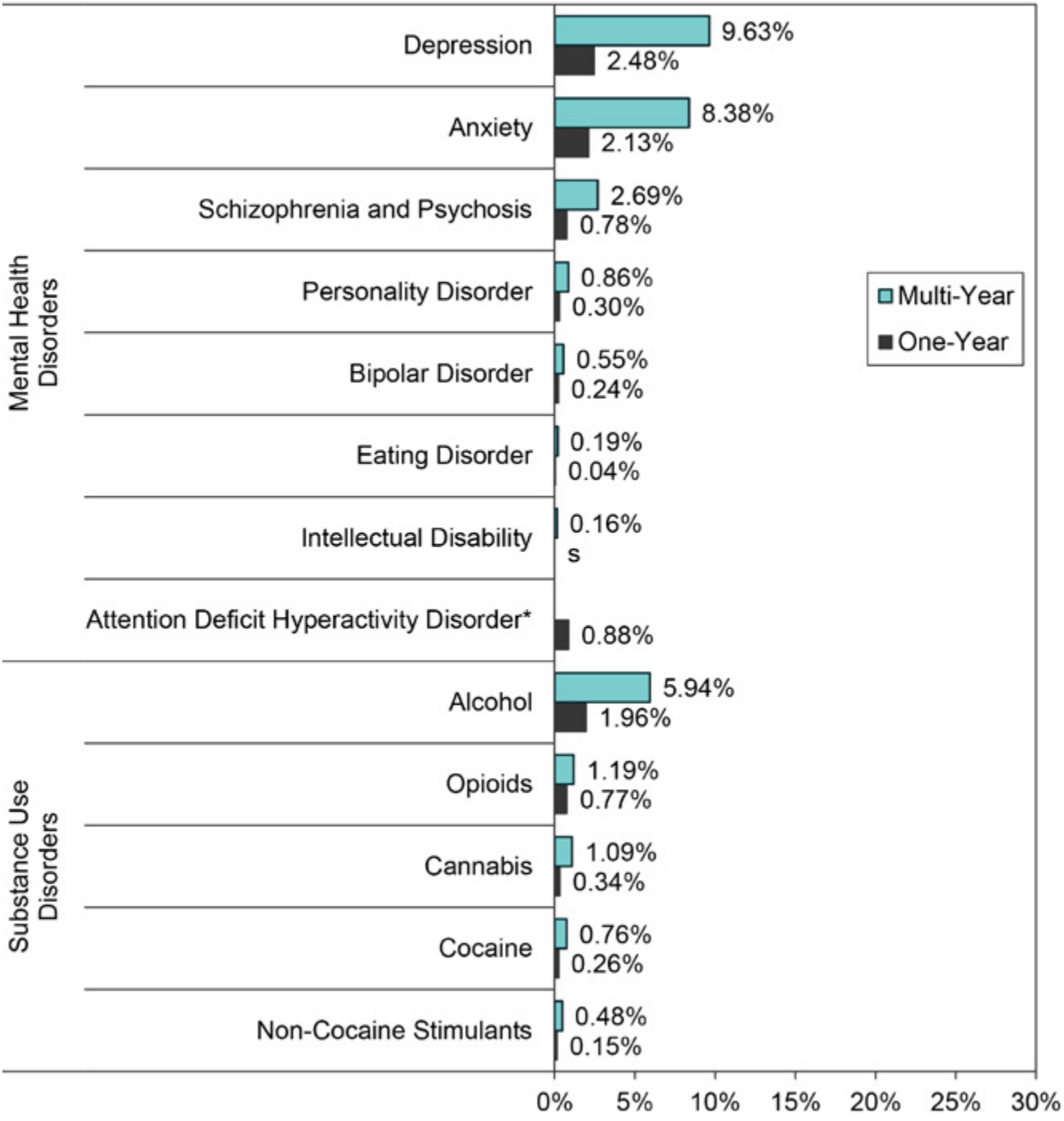
Crude percent of individuals aged 15 years and older (n = 142,984)



* There is no multi-year estimate because the validated definition only applies to a one-year period.

Figure 3.6: One-Year and Multi-Year Prevalence of Mental Health and Substance Use Disorders in Northern Health Region, 2022/23

Crude percent of individuals aged 15 years and older (n = 55,233)



s Data suppressed due to small counts.

* There is no multi-year estimate because the validated definition only applies to a one-year period.

3.3 Emergency Department and Urgent Care

In 2022/23, there were 12 hospitals across the province with emergency departments and 3 with urgent care centres that had individuals who visited for an MH/SU disorder reason (Appendix 3). All urgent care centres were in Winnipeg, including one at the Victoria Hospital that provides dedicated mental health care.

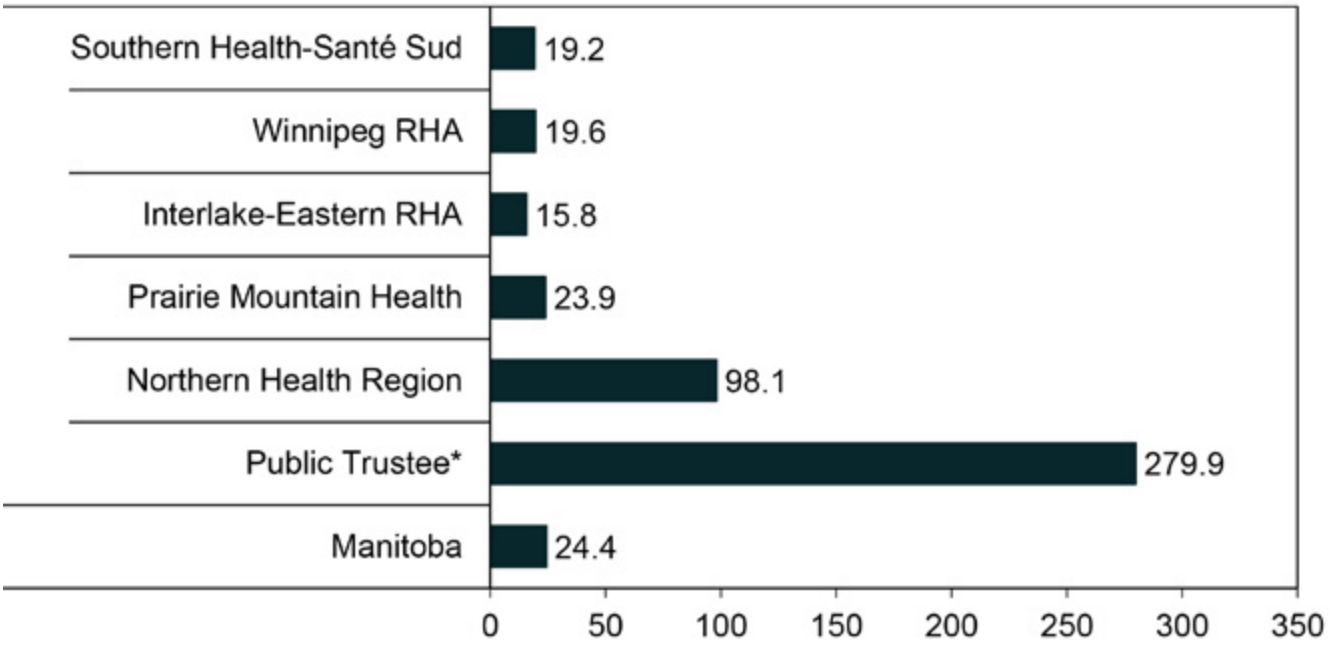
Visit Rates

In Manitoba, 28,539 emergency department visits were made for MH/SU disorder reasons in 2022/23, which translates to a crude rate of 24.4 visits per 1,000 residents (Figure 3.7). The rate was highest in the Northern Health Region (98.1/1,000) and lowest in the Interlake-Eastern RHA (15.8/1,000). The rate among those under the care of the Public Trustee's Office (279.9/1,000) was considerably higher than in any of the regions. Individuals in this category accounted for 4.3% of all MH/SU disorder-related emergency department visits despite making up only 0.4% of the total study population.

In Manitoba, 5,263 urgent care visits were for MH/SU disorder reasons, resulting in a crude rate of 4.5 visits per 1,000 residents (Figure 3.8). Winnipeg RHA residents had the highest rate of visits (6.5/1,000) among the regions, while residents of Prairie Mountain Health had the lowest (0.3/1,000). Again, individuals under the care of the Public Trustee's Office had a higher rate (59.0/1,000) than each of the regions and accounted for 4.9% of all urgent care visits in the province.

The total number of emergency department and urgent care visits for each region are shown in Appendix Tables 4.1 and 4.2.

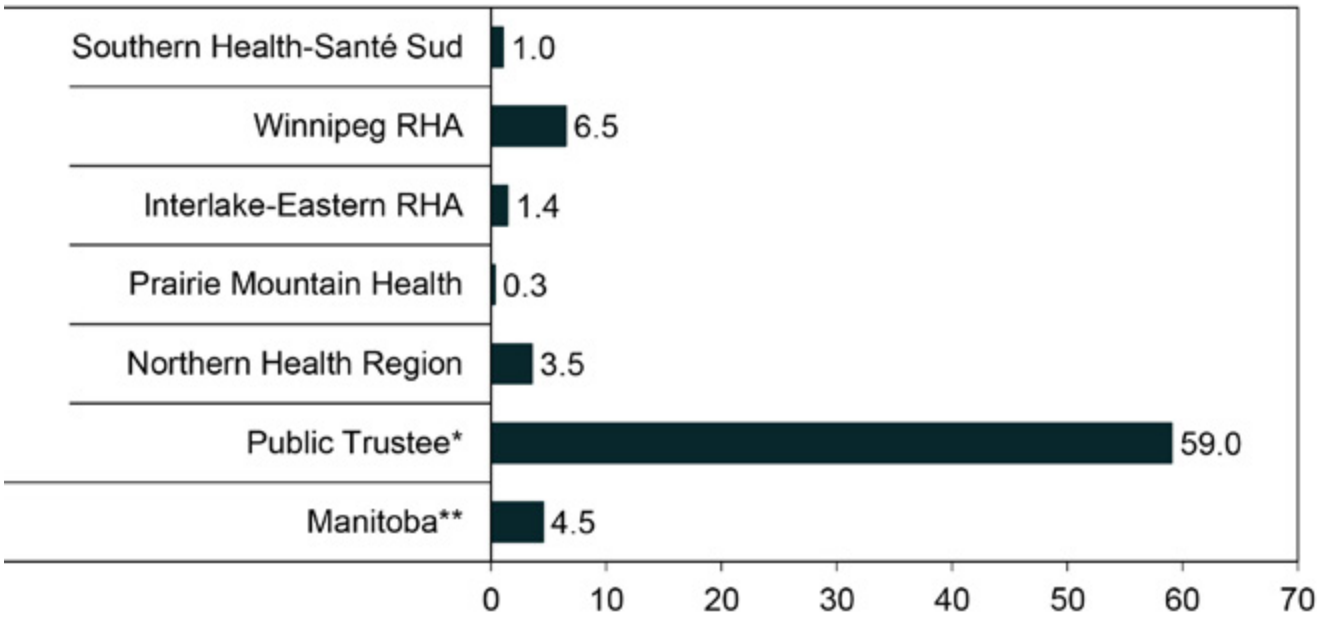
Figure 3.7: Crude Rate of Emergency Department Visits for a Mental Health or Substance Use Disorder Reason by Patient Region of Residence, 2022/23
Number of visits per 1,000 individuals aged 15 years and older



* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Figure 3.8: Crude Rate of Urgent Care Visits for a Mental Health or Substance Use Disorder Reason by Patient Region of Residence, 2022/23

Number of visits per 1,000 individuals aged 15 years and older

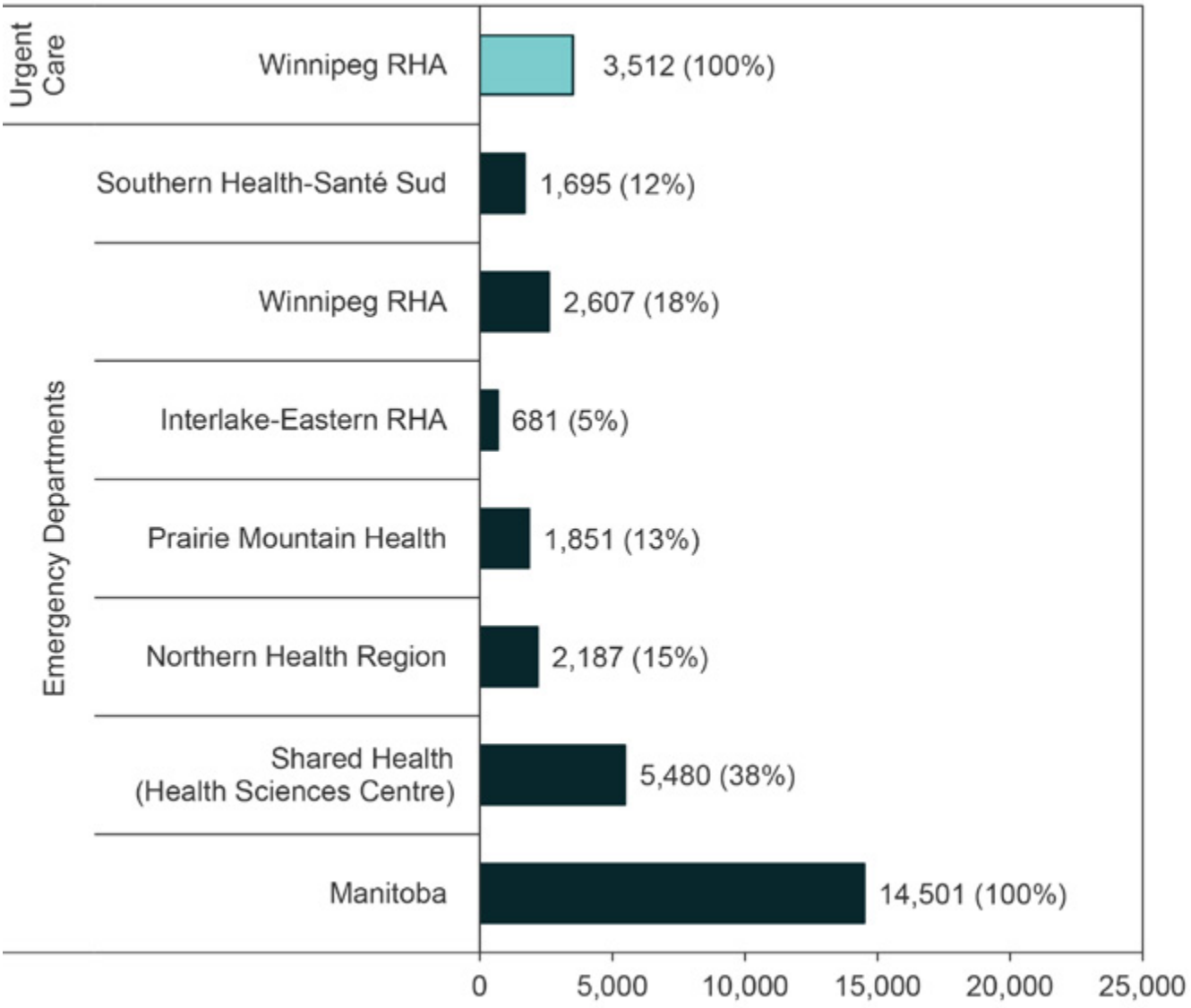


* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.
** All urgent care centres are in Winnipeg.

Number of Patients

In Manitoba, 14,501 individuals (1.2% of the study population) made at least one visit to an emergency department for an MH/SU reason in 2022/23 (Figure 3.9). Approximately 37.8% of these went to HSC, followed by emergency departments in the Winnipeg RHA (18.0%), Northern Health Region (15.1%), Prairie Mountain Health (12.8%), Southern Health-Santé Sud (11.7%), and Interlake-Eastern RHA (4.7%). A total of 3,512 individuals (0.3% of the study population) made at least one visit for an MH/SU disorder to an urgent care facility in Winnipeg (Figure 3.9).

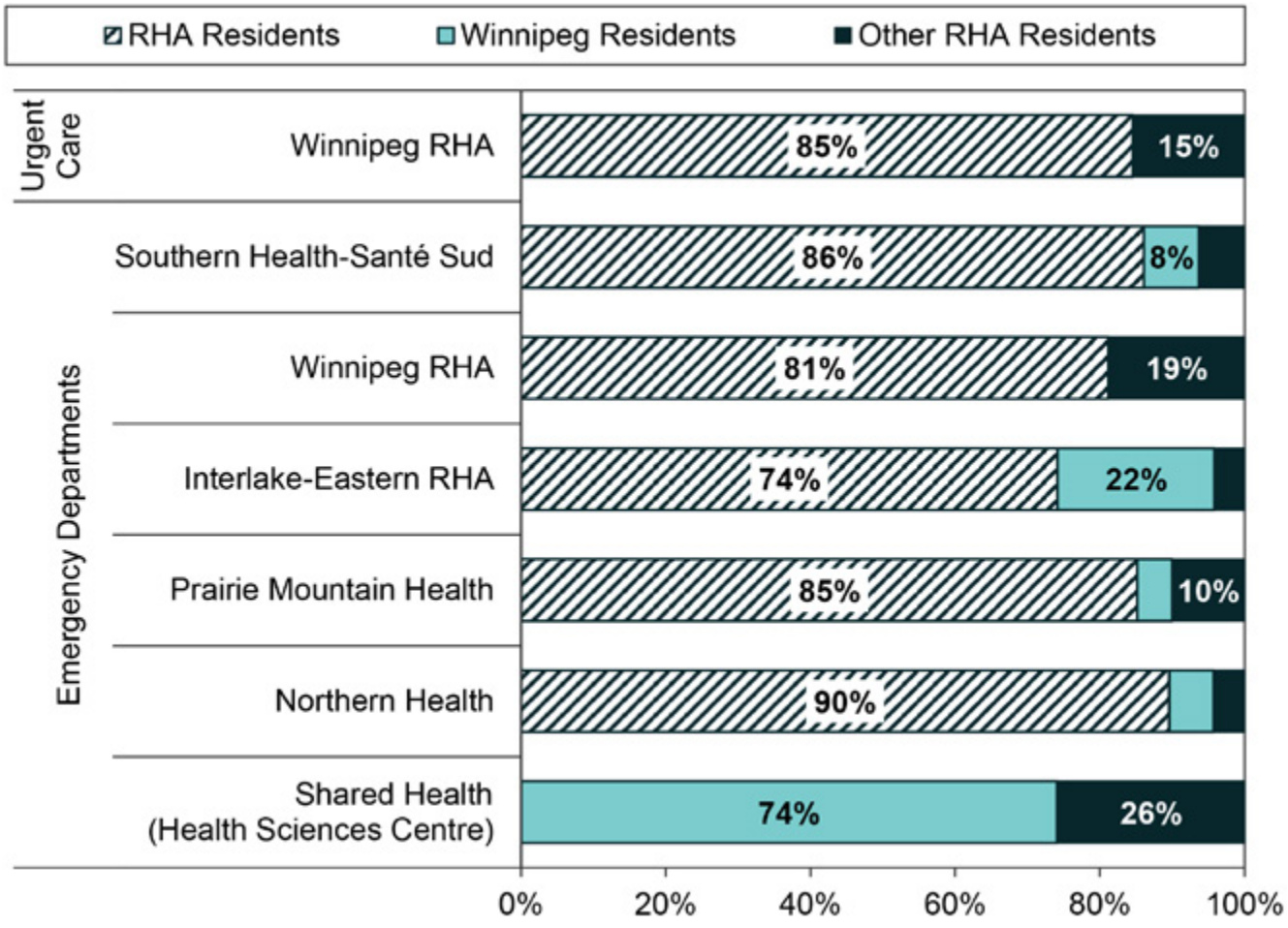
Figure 3.9: Distribution of Individuals Who Visited an Emergency Department or an Urgent Care Facility for a Mental Health or Substance Use Disorder Reason by Facility Region, 2022/23
Count and percent of the Manitoba population aged 15 years and older (n = 14,501)



Catchment (where patients came from)

Figure 3.10 presents the proportions of MH/SU disorder related emergency department and urgent care visits made by patients from the same region as the facility, by patients from a region other than that of the facility, and by patients from Winnipeg. The Northern Health Region had the highest proportion of emergency department visits by residents of the same region as the emergency department (89.6%), while the lowest proportion was in Interlake-Eastern RHA (74.2%). Winnipeg residents made up 21.7% of all the visits to Interlake-Eastern emergency departments, but only 4.8% of the visits in Prairie Mountain Health. Winnipeg RHA residents made a total of 293 emergency department visits in the Northern Health Region, which accounted for 6.1% of that region's visits. These visits were likely made primarily by individuals living in Churchill, who were counted as Winnipeg RHA residents. Approximately 74.1% of the HSC emergency department visits were made by Winnipeg residents. Therefore, 18.9% of the emergency department visits in the Winnipeg RHA, and 25.9% of the visits at HSC were made by people residing outside of the Winnipeg region. Of the 5,326 visits to urgent care facilities for MH/SU disorders, 84.5% were made by individuals from the Winnipeg region.

Figure 3.10: Where Patients Came from for Emergency Department and Urgent Care Visits for a Mental Health or Substance Use Disorder Reason by Facility Region, 2022/23
Percent of visits by individuals aged 15 years and older

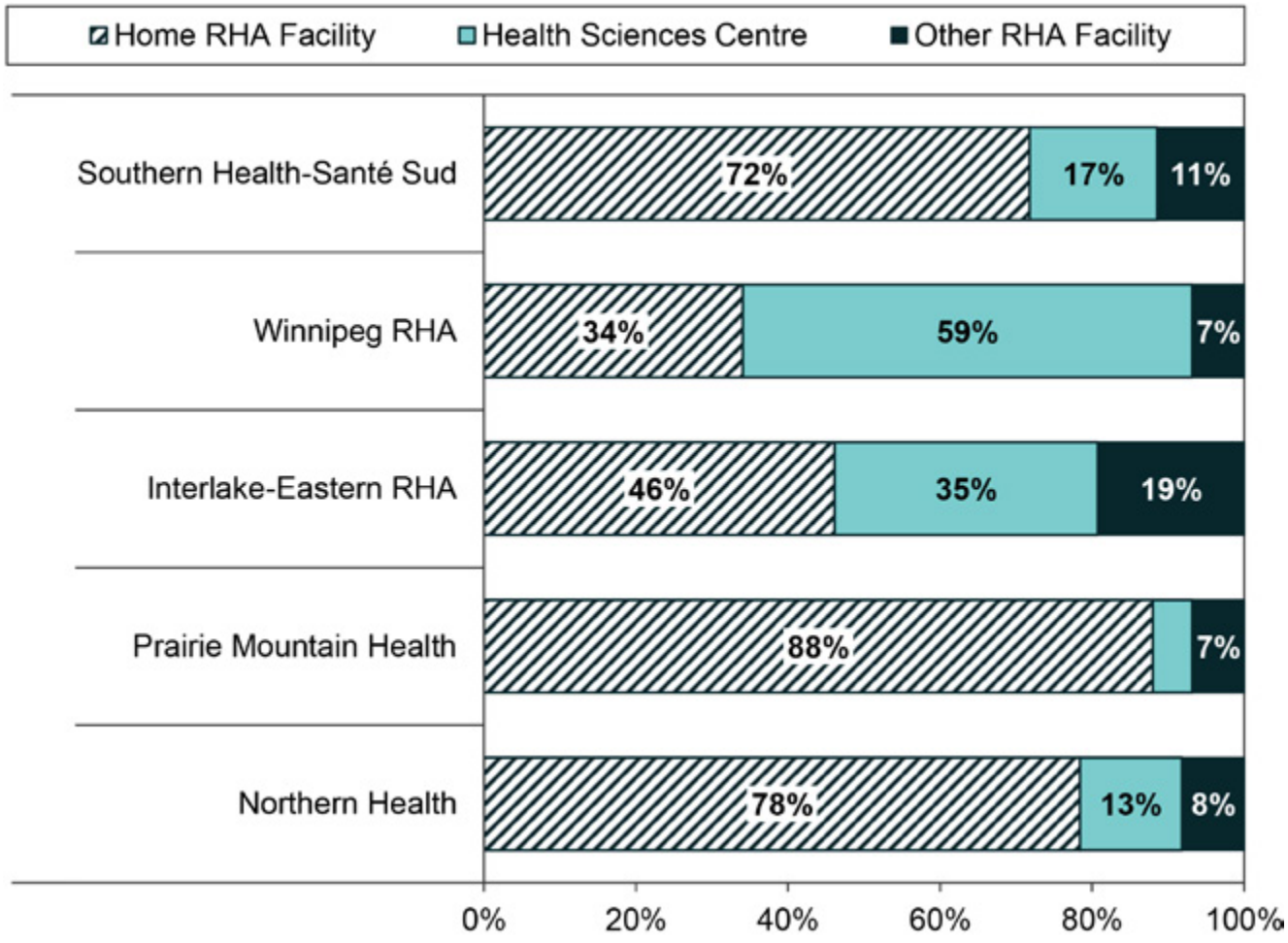


Location (where patients went)

The proportion of visits that patients made to a facility in their home region, another region, or HSC is shown in Figure 3.11. Winnipeg RHA residents made 93.2% of their visits to emergency departments (including HSC) in their home region, which was the highest among the regions. Interlake-Eastern RHA residents made the lowest proportion of their visits to facilities in their home region (46.1%). Aside from residents of the Winnipeg RHA, those from Interlake-Eastern RHA made the highest proportion of visits to HSC (34.6%).

Of note, among the 5,326 urgent care visits, 203 were made by residents from the Northern Health Region, 183 from Southern Health-Santé Sud, 171 from Interlake-Eastern RHA, 44 from Prairie Mountain Health, and 223 from residents under the care of the Public Trustee's Office (not shown). The remaining 4,502 urgent care visits were made by Winnipeg RHA residents.

Figure 3.11: Where Patients Went for Emergency Department Visits for a Mental Health or Substance Use Disorder Reason by Patient Region of Residence, 2022/23
Percent of visits by individuals aged 15 years and older



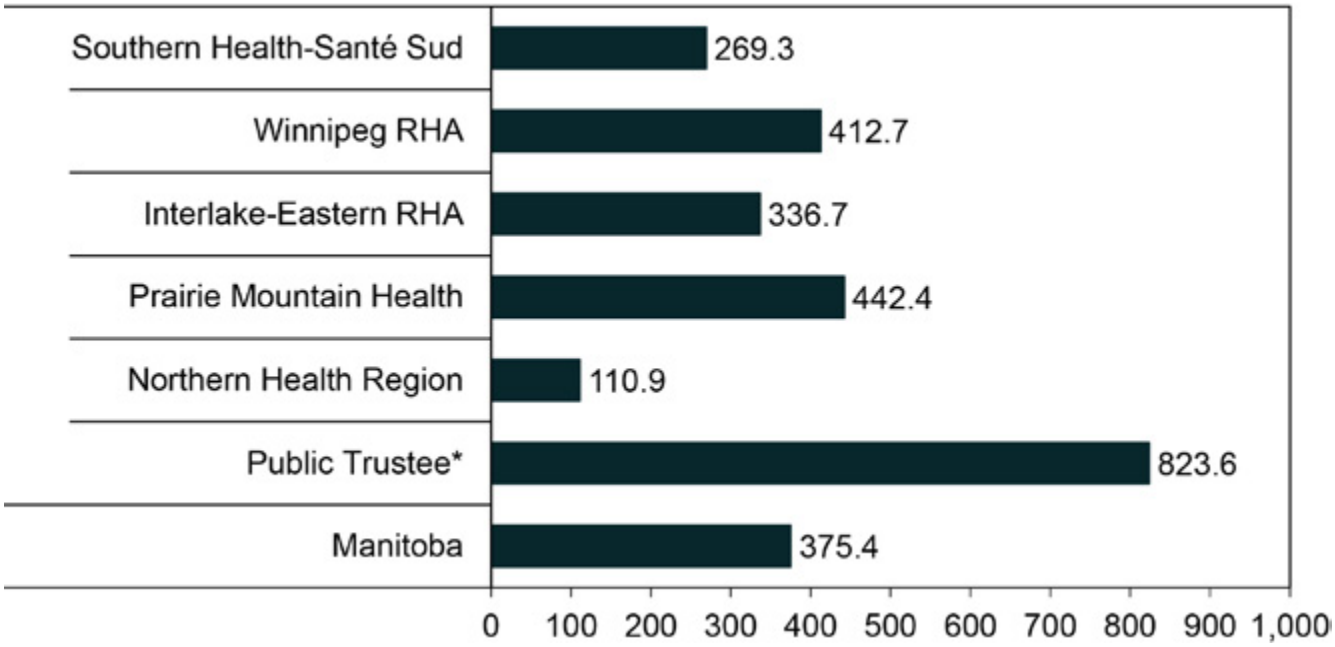
3.4 Primary and Psychiatric Care

Primary Care - Visit Rate

The crude rate of primary care visits by region of residence is shown in Figure 3.12. In Manitoba overall, people made 439,021 primary care visits for MH/SU disorders in 2022/23, which equals a crude rate of 375.4 visits per 1,000 residents.

The highest rate among the regions was in Prairie Mountain Health (442.4/1,000) and the lowest was in the Northern Health Region (110.9/1000). Residents under the care of the Public Trustee's Office had a rate of 823.6 visits per 1,000 individuals. The total number and the rates for visits to family physicians and nurse practitioners are provided in Appendix Tables 4.3 and 4.4, respectively.

Figure 3.12: Crude Rate of Primary Care Visits for a Mental Health or Substance Use Disorder Reason by the Patient's Region of Residence, 2022/23
Number of visits per 1,000 individuals aged 15 years and older

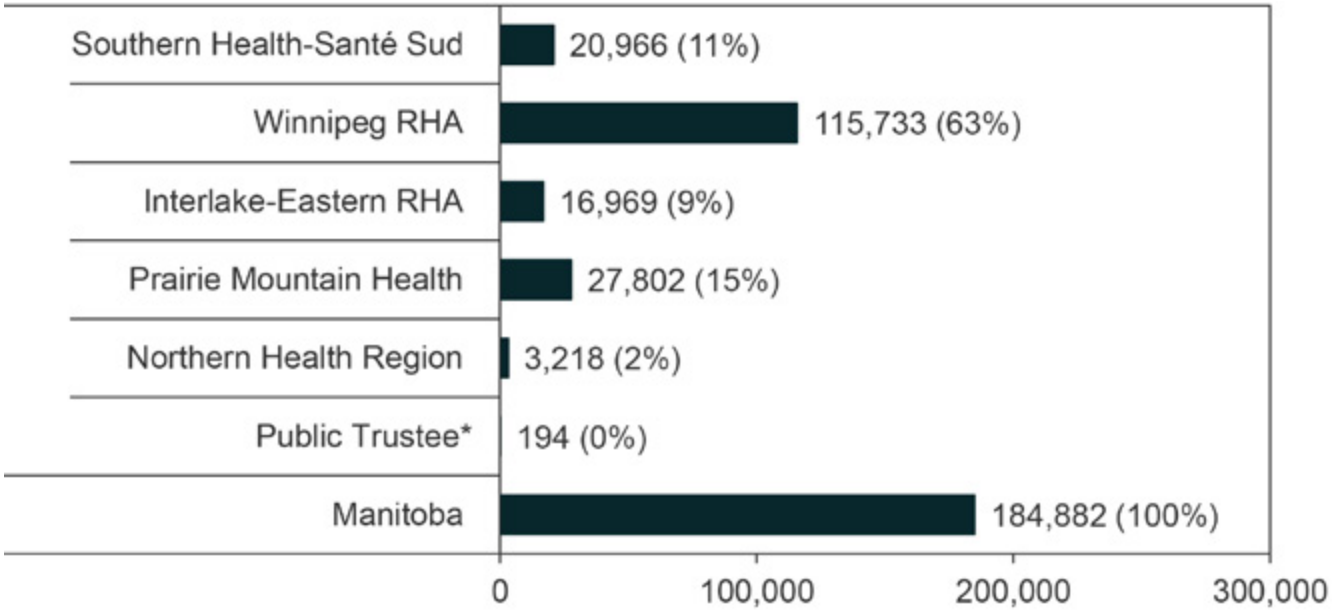


* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Primary Care - Number of Patients

In Manitoba, 184,882 individuals (15.8% of the study population) had at least one MH/SU disorder-related primary care visit in 2022/23 (Figure 3.13). Among all the individuals who made a visit, 62.6% were Winnipeg RHA residents, followed by Prairie Mountain Health (15.0%), Southern Health-Santé Sud (11.3%), Interlake-Eastern RHA (9.2%), and Northern Health Region (1.7%). However, the highest proportion of residents who made at least one primary care visit within their own region was in Prairie Mountain Health (19%; Appendix Figure 5.1). Approximately 16.9% of Winnipeg RHA residents made a visit and the lowest proportion was observed for residents in the Northern Health Region at 5.8%.

Figure 3.13: Distribution of Individuals Who Visited a Primary Care Provider for a Mental Health or Substance Use Disorder Reason by the Patient's Region of Residence, 2022/23
Count and percent of the Manitoba population aged 15 years and older (n = 184,882)

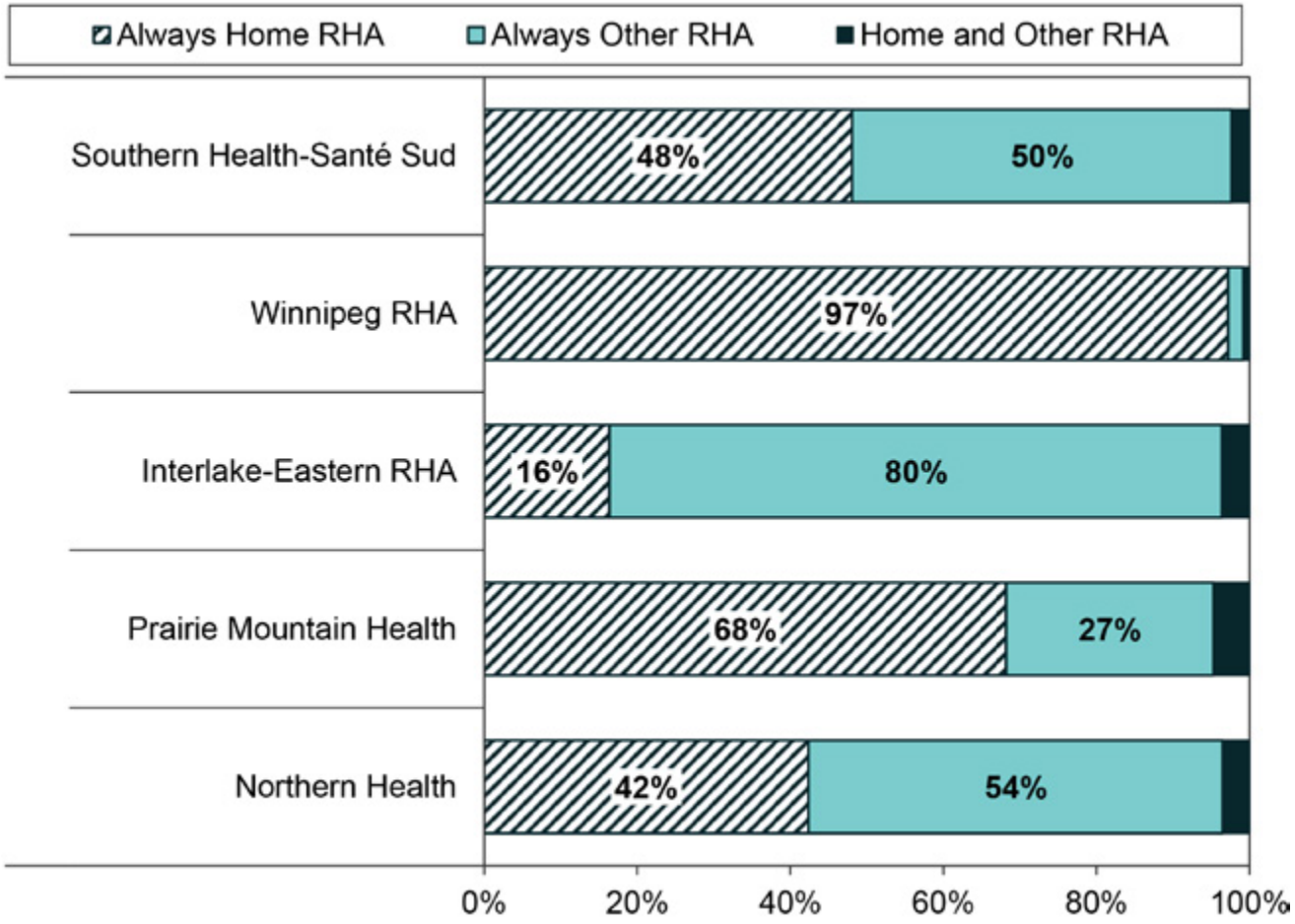


* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Primary Care - Location (where patients went)

Figure 3.14 shows the proportion of patients who made primary care visits that were always in their home region, always in another region, or shared between their home and other regions. The proportion of patients whose visits were always in their home region was highest for Winnipeg RHA residents (97.2%) and second highest among Prairie Mountain Health residents (68.2%). Nearly half of Southern Health-Santé Sud region residents who made visits always saw providers in their region (48.1%), while the other half always saw providers outside of the region (49.6%). The Interlake-Eastern RHA and Northern Health Region had the highest proportions of residents who made all their visits outside of their home region (80.0% and 54.1%, respectively). The proportions separated by visits to family physicians and by nurse practitioners are shown in Appendix Figure 5.2.

Figure 3.14: Where Patients Went for Primary Care Visits for a Mental Health or Substance Use Disorder Reason by the Region of Provider Location, 2022/23
Percent of visits by individuals aged 15 years and older



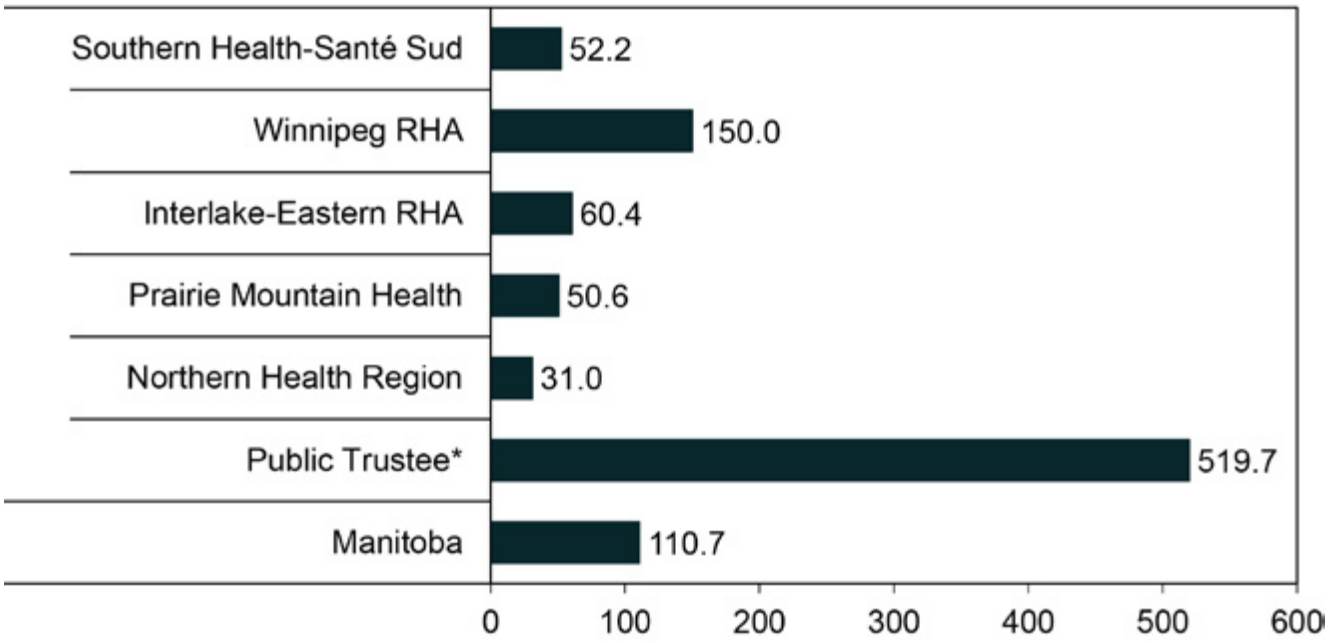
Psychiatric Care - Visit Rate

In Manitoba, there were 129,492 psychiatrist visits for MH/SU disorders in 2022/23, which is a crude rate of 110.7 visits per 1,000 residents (Figure 3.15).

The highest rate among the regions was in the Winnipeg RHA (150.0/1,000) and the lowest in the Northern Health Region (31.0/1,000). The number of visits made by residents in the province and each region are provided in Appendix Figure 4.5.

Figure 3.15: Crude Rate of Psychiatrist Visits for a Mental Health or Substance Use Disorder Reason by the Patient's Region of Residence, 2022/23

Number of visits per 1,000 individuals aged 15 years and older

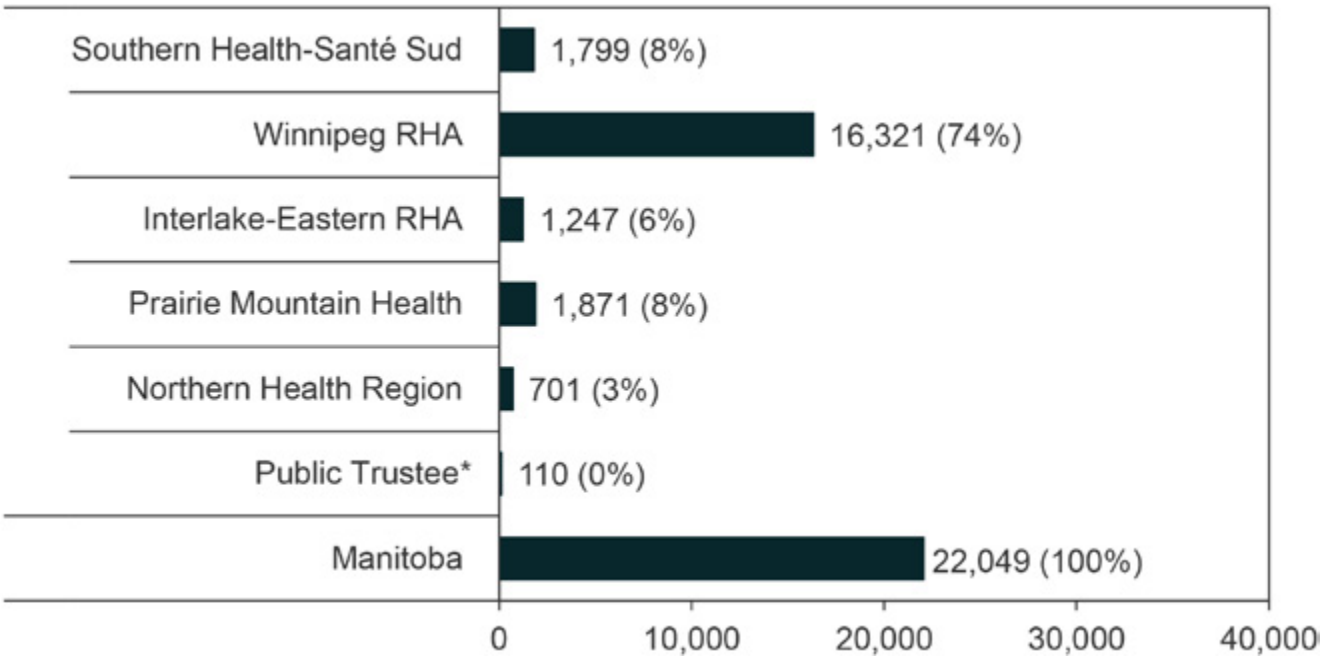


* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Psychiatric Care - Number of Patients

In Manitoba, 22,049 individuals, or 1.9% of the study population, visited a psychiatrist for an MH/SU disorder in 2022/23 (Figure 3.16). Among these individuals, 74.0% were from the Winnipeg RHA, followed by Prairie Mountain Health (8.5%), Southern Health-Santé Sud (8.2%), Interlake-Eastern RHA (5.7%), and Northern Health Region (3.2%). The Winnipeg RHA had the highest proportion of residents in their region who made at least one psychiatrist visit (2.4%), while the lowest was observed for residents in the Southern Health-Santé Sud region (1.1%; Appendix Figure 5.3).

Figure 3.16: Distribution of Individuals Who Visited a Psychiatrist for a Mental Health or Substance Use Disorder Reason by the Patient's Region of Residence, 2022/23
Count and percent of the Manitoba population aged 15 years and older

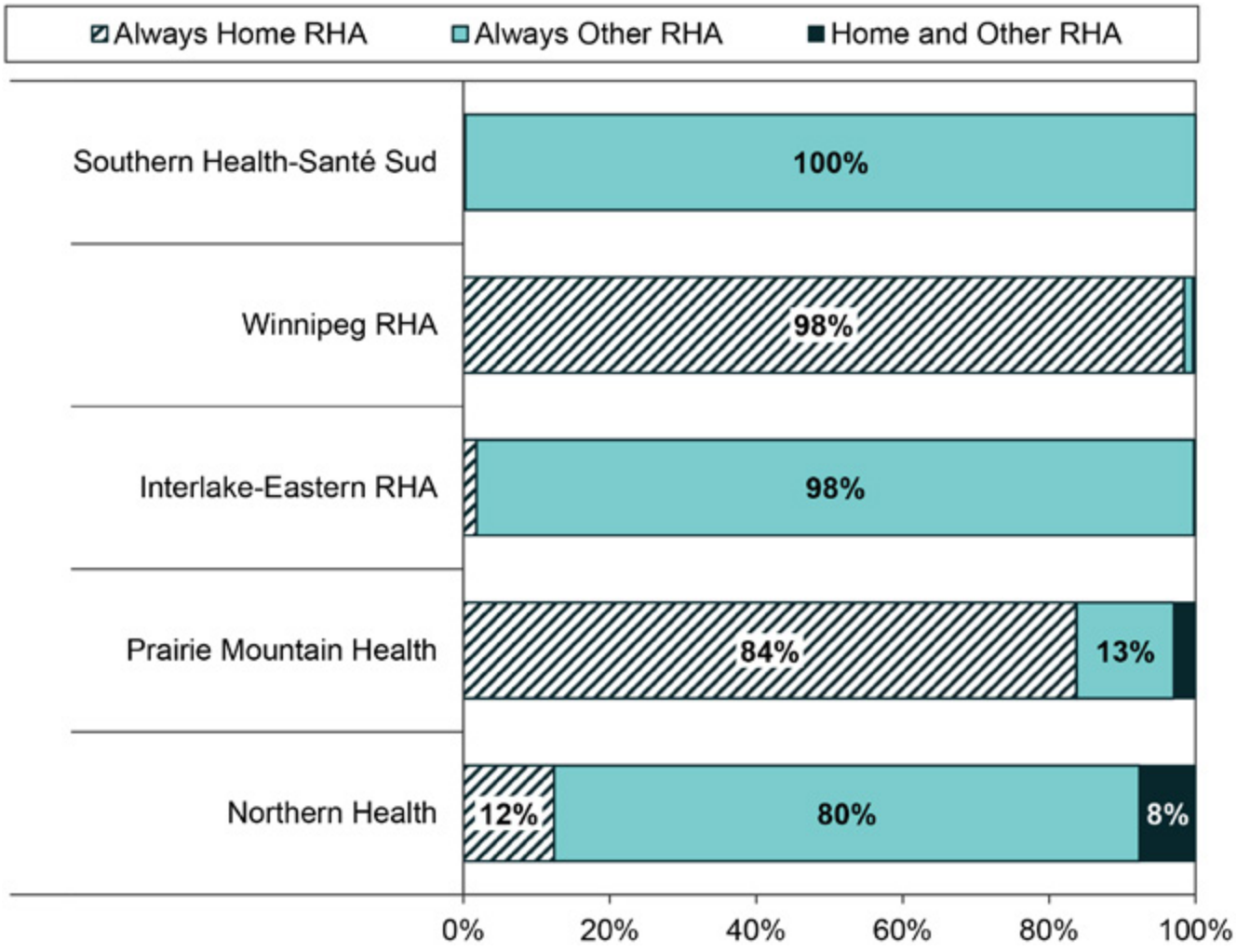


* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Psychiatric Care - Location (where patients went)

Figure 3.17 shows the proportion of patients who made psychiatrist visits that were always in their home region, always in another region, or shared between their home and other regions.
The proportion of patients whose visits were always in their home region was highest in the Winnipeg RHA (98.5%) and Prairie Mountain Health (83.8%). The Southern Health-Santé Sud and Interlake-Eastern RHAs had the highest proportions of residents to have all their visits outside of their home region (99.8% and 98.0%, respectively). Among Northern Health Region residents with at least one visit,12.4% made all their visits in their home region, 80.0% made all their visits outside of the region, and 7.6% had a mix of in-region and outside the region visits.

Figure 3.17: Where Patients Went for Psychiatrist Visits by Region of Provider Location, 2022/23
Percent of visits by individuals aged 15 years and older



Primary and Psychiatric Care - Full-Time Equivalent (FTE)

Based on all billings, the total FTE for primary care providers in Manitoba was 1,320.6 (Table 3.2). The proportion of all billings for MH/SU disorders was 8.6%, which, when applied to the total FTE, resulted in an FTE of 113.1 for primary care providers delivering MH/SU disorder care in the province.

For psychiatrists, the total FTE was 156.9 in the province; 87% of all billings were for MH/SU disorders (Table 3.3). Therefore, the FTE for MH/SU disorder care provided by psychiatrists was 137.0. The FTE in Prairie Mountain Health was 9.0, and less than 1 for Southern Health-Santé Sud, Interlake-Eastern RHA, and Northern Health Region.

Table 3.2: Primary Care Full-Time Equivalents for Mental Health and Substance Use Disorder Care in Manitoba and the Health Regions, 2022/23

Disorders	Number of Billings	Number of MH/SU* Billings	Percent of MH/SU Billings (%)	Total FTE**	Total FTE for MH/SU
Southern Health-Santé Sud	609,207	38,407	6.30	126.71	7.99
Winnipeg RHA	5,693,045	513,037	9.01	975.77	87.93
Interlake-Eastern RHA	184,622	15,197	8.23	46.93	3.86
Prairie Mountain Health	843,864	61,635	7.30	168.63	12.32
Northern Health Region	51,729	4,167	8.05	12.79	1.03
Manitoba	7,382,467	632,442	8.57	1,320.58	113.13

* Mental Health and Substance Use Disorders
** Full-Time Equivalent

Table 3.3: Psychiatrist Full-Time Equivalents for Mental Health and Substance Use Disorder Care in Manitoba and the Health Regions, 2022/23

Disorders	Number of Billings	Number of MH/SU* Billings	Percent of MH/SU Billings (%)	Total FTE**	Total FTE for MH/SU
Southern Health-Santé Sud	443	410	92.55%	0.60	0.55
Winnipeg RHA	288,535	252,919	87.66%	144.46	126.63
Interlake-Eastern RHA	1,295	605	46.69%	1.15	0.54
Prairie Mountain Health	22,587	19,113	84.62%	10.67	9.03
Northern Health Region	352	305	86.75%	0.25	0.21
Manitoba	313,212	273,352	87.27%	156.94	136.97

* Mental Health and Substance Use Disorders
** Full-Time Equivalent

3.5 Hospital Services

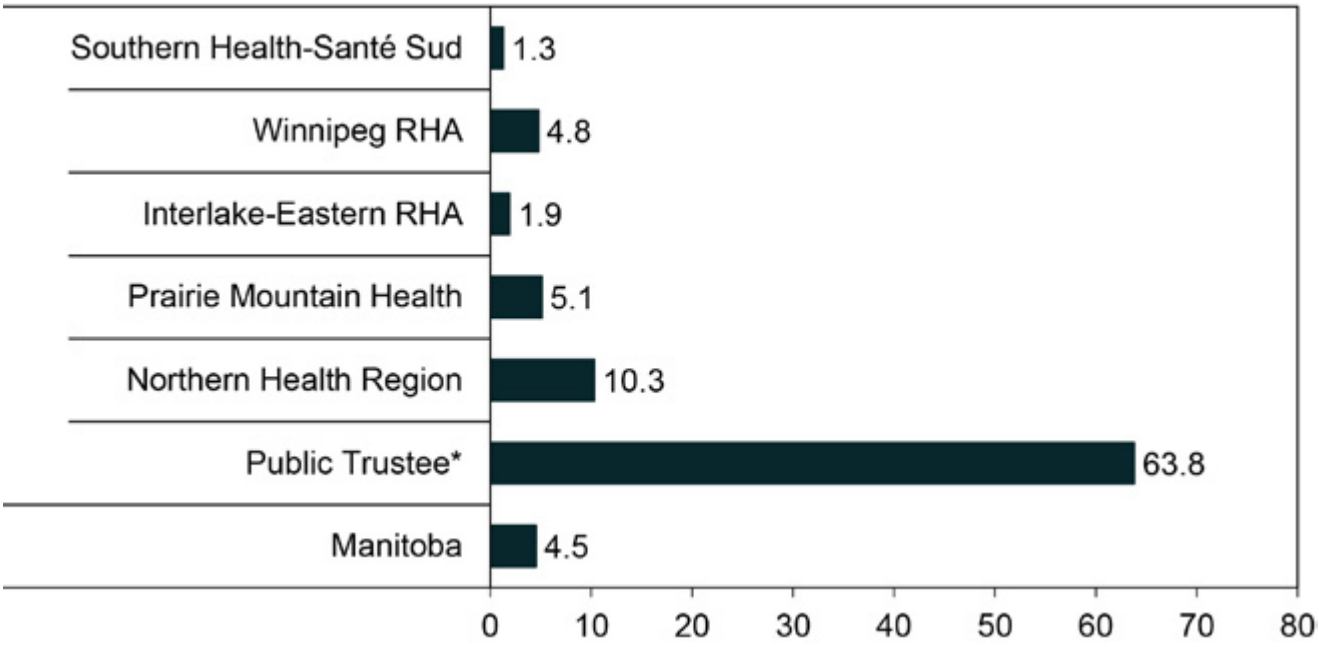
There were seven hospitals across the Northern Health Region, Prairie Mountain Health, and Winnipeg RHA that had inpatient hospitalizations for an MH/SU disorder reason during the study period (Appendix 3).

Hospitalization Rate

The crude rate of inpatient psychiatric hospitalizations by region of residence is shown in Figure 3.18. In Manitoba, there were 5,303 psychiatric hospitalizations in 2022/23, resulting in a crude rate of 4.5 hospitalizations per 1,000 residents. The highest rate among the regions was in Northern Health Region (10.3/1,000) and the lowest was in Southern Health-Santé Sud (1.3/1,000). The total number of psychiatric hospitalizations in each region are provided in Appendix Table 4.6.

Figure 3.18: Crude Rate of Inpatient Psychiatric Hospitalizations by Patient Region of Residence, 2022/23

Number of hospitalizations per 1,000 individuals aged 15 years and older



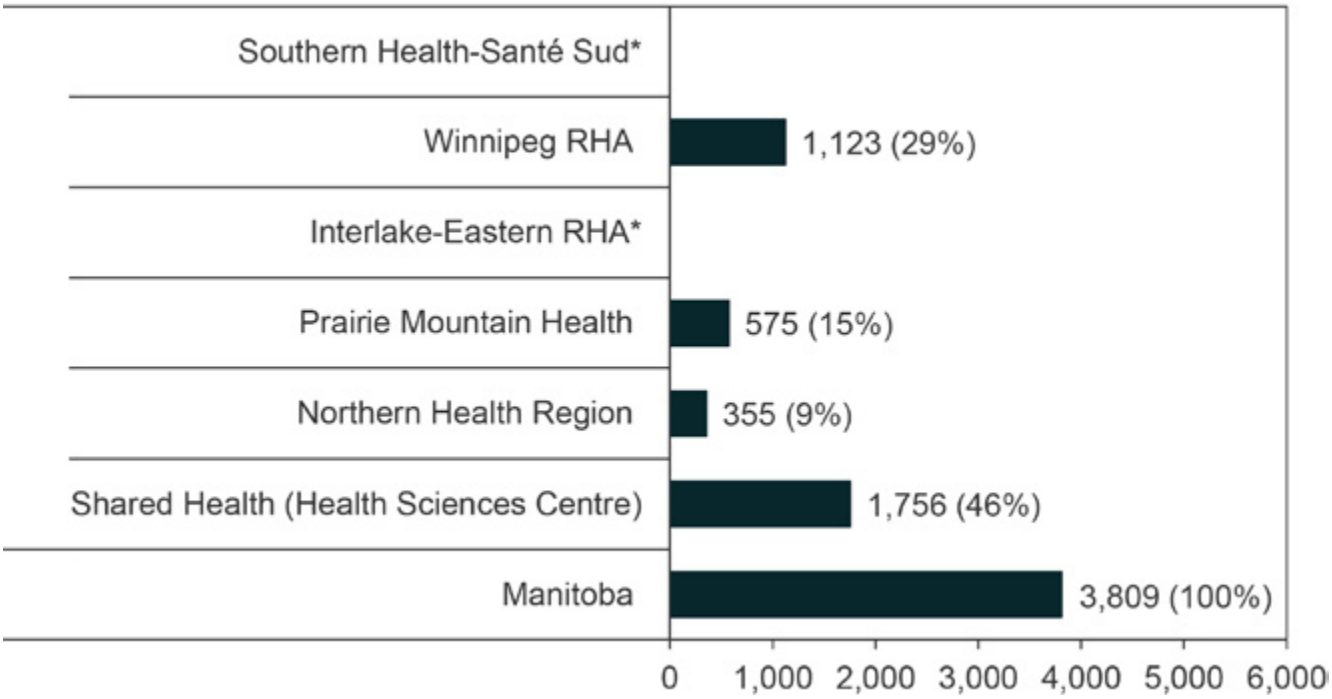
* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Number of Patients

In Manitoba, 3,809 individuals 15 years or older, or 0.3% of the study population, had at least one psychiatric hospitalization in 2022/23 (Figure 3.19). The figure shows the distribution of individuals by the region of the hospital, which may not be the region of the resident. Among all the individuals who had a hospitalization, 46.1% were in HSC, followed by Winnipeg RHA (29.5%), Prairie Mountain Health (15.1%), and Northern Health Region (9.3%) hospitals. Within HSC, 81 patients were identified as having received forensic psychiatry level of care during their hospitalization. There were also 43 individuals admitted to the Manitoba Adolescent Treatment Centre as inpatients (not shown).

Figure 3.19: Distribution of Individuals with Inpatient Psychiatric Hospitalizations by Region of Hospital Location, 2022/23

Count and percent of the Manitoba population aged 15 years and older



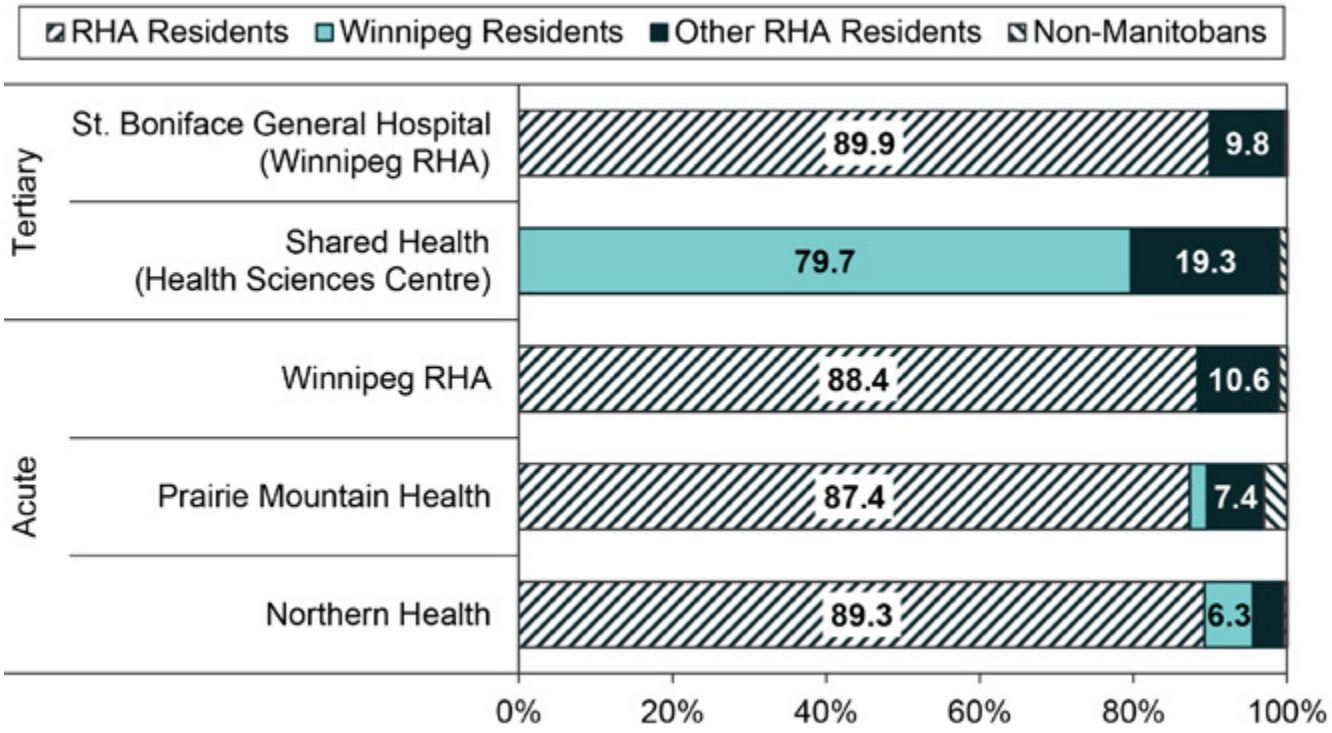
* Hospitals without designated psychiatric beds or wards.

Catchment (where patients came from)

Results for acute care and tertiary care hospitals are presented in Figure 3.20. The proportion of hospitalizations at acute hospitals located in the same region as the patient's residence was highest in the Northern Health Region (89.3%), followed by the Winnipeg RHA (88.4%), and then Prairie Mountain Health (87.4%). Approximately 6.3% of the hospitalizations at acute facilities in the Northern Health Region involved Winnipeg RHA residents (likely residents of Churchill). Among tertiary hospitals, 79.7% of the hospitalizations at HSC and 89.9% at SBGH involved patients from the Winnipeg RHA.

Figure 3.20: Where Patients Came from for Inpatient Psychiatric Hospitalizations by Hospital Type (Acute or Tertiary) and Region of Hospital Location, 2022/23

Percent of hospitalizations by individuals aged 15 years and older



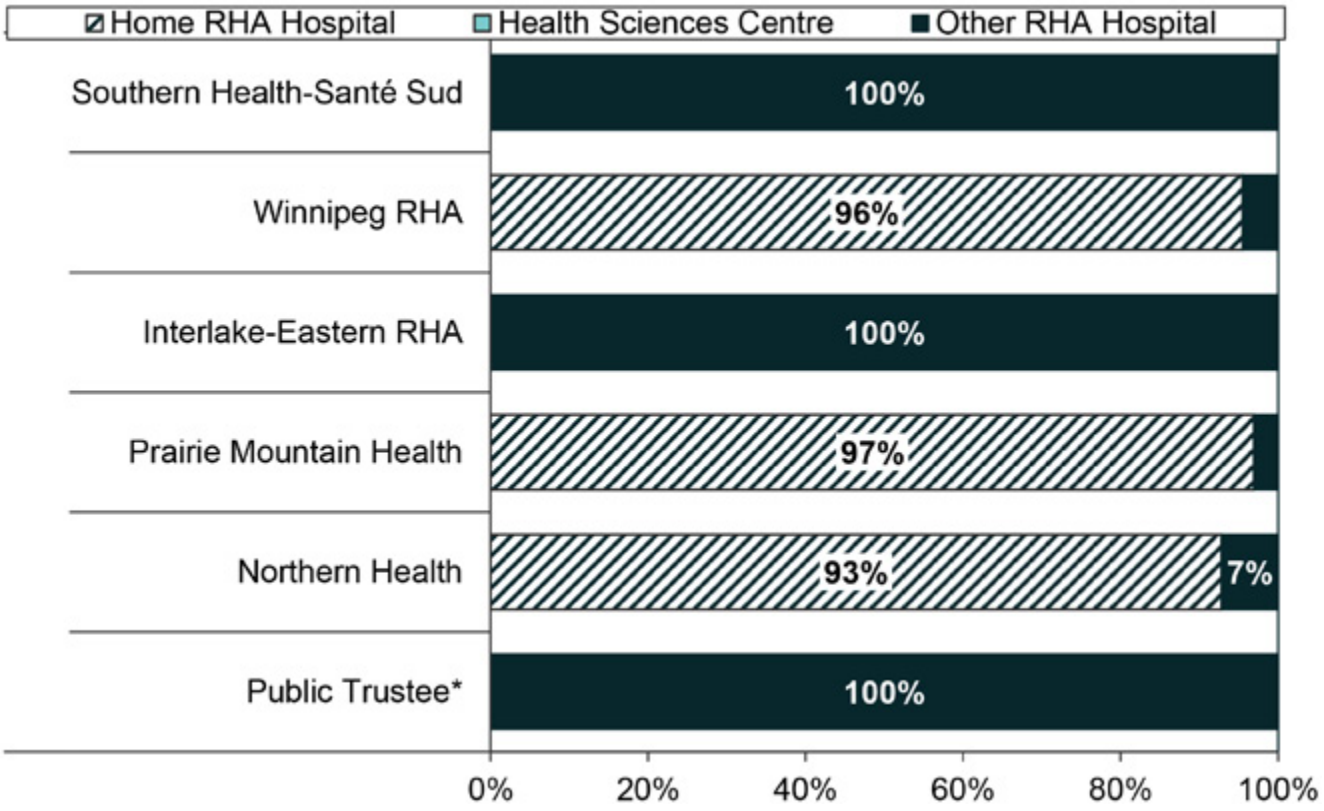
Location (where patients went)

Hospital location results were calculated separately for acute care (Figure 3.21) and tertiary care hospitals (Figure 3.22). Southern Health-Santé Sud and Interlake-Eastern RHA did not have a hospital that provided acute care for MH/SU disorder reasons, therefore, all acute hospitalizations for residents of those regions were made outside of their home region. Among the other three regions, between 92.8% and 97.0% of acute hospitalizations for their residents were in their home region. Among the two tertiary hospitals, 86.6% of hospitalizations for residents in the Southern Health-Santé Sud region and 82.0% in Interlake-Eastern RHA were at HSC (Figure 3.22). Among the other regions, 93.2% of the hospitalizations for Prairie Mountain Health residents, 91.8% for Northern Health Region residents, and 74.6% for Winnipeg RHA residents were in HSC. The remaining hospitalizations were at SBGH.

Combining all hospitalizations from both acute and tertiary hospitals, approximately 27.9% of hospitalizations among Northern Health Region residents were in Winnipeg RHA hospitals, while only 7.5% were for Prairie Mountain Health region residents (not shown). Among the hospitalizations by Winnipeg RHA residents, 51.2% were at HSC and 47.4% were at Winnipeg RHA hospitals (not shown).

Figure 3.21: Where Patient Went for Psychiatric Inpatient Hospitalizations (Acute) by the Patient's Region of Residence, 2022/23

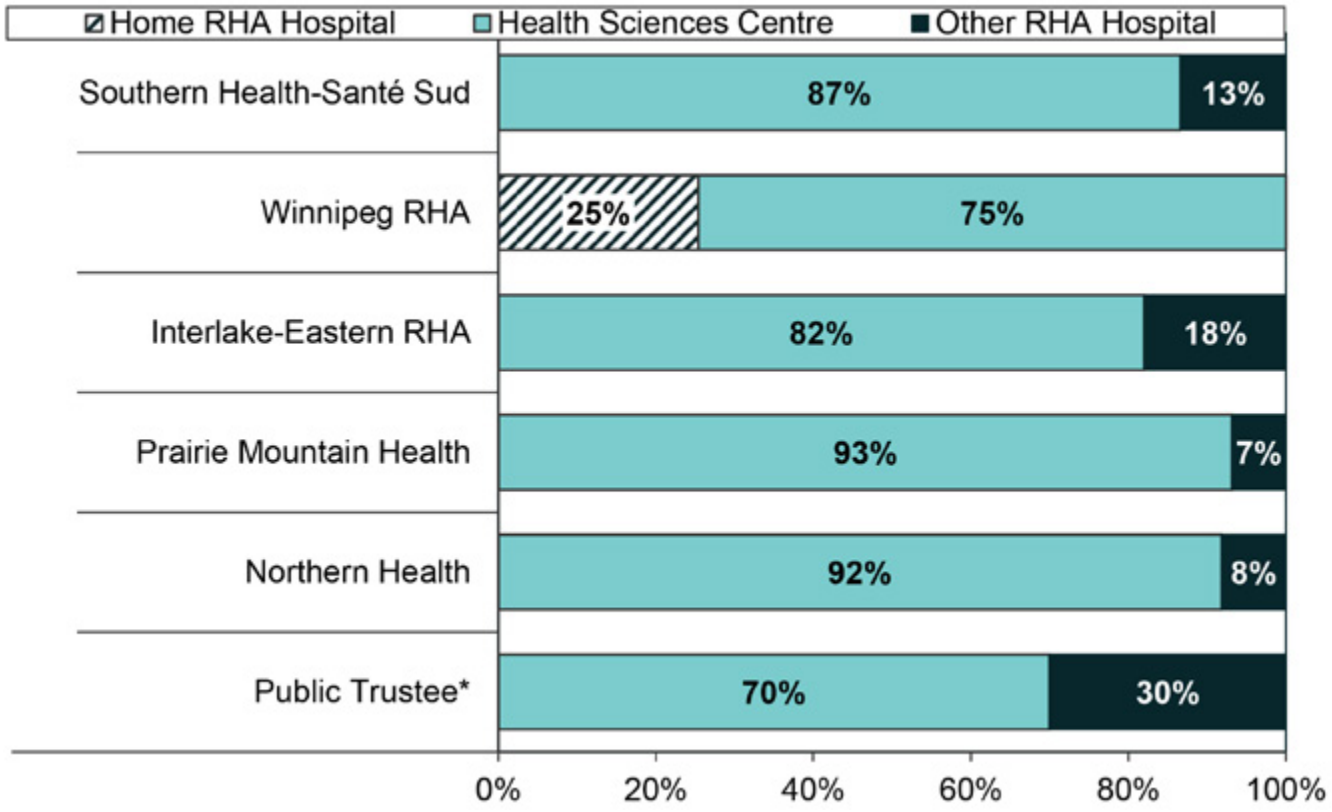
Percent of hospitalizations by individuals aged 15 years and older



* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Figure 3.22: Where Patient Went for Psychiatric Inpatient Hospitalizations (Tertiary) by the Patient's Region of Residence, 2022/23

Percent of hospitalizations by individuals aged 15 years and older



* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Chapter 4: Summary and Discussion

This report presents the findings from the administrative data analyses that were conducted during the implementation of a NBP model for MH/SU disorders in Manitoba. The information that is presented is descriptive and was not generated to assess changes over time. Comparisons across regions are also cautioned since differences in socio-demographic factors (e.g., age and sex) are not accounted for. Given the nature of this information, this report addressed two objectives: (1) to describe the burden MH/SU disorders in Manitoba and the extent of health services used by individuals living with an MH/SU disorder in 2022/23 and (2) to determine the utility of the administrative data held in the Repository to provide information that can be used in the NBP model.

For objective 1, the results show that the highest prevalences in the province and across the regions in 2022/23 are for anxiety and depression at approximately 20% and 15%, respectively. Among the substance use disorders, 1.8% of the province aged 15 years and older had received an alcohol use disorder diagnosis. While the prevalences were lowest for many of the mental health disorders in the Northern Health Region compared to the other regions, the prevalences of all substance use disorders were highest in that region. It should be noted that some Northern Health Region residents receive health services in nursing stations operated by the federal or provincial government (or through local agreements), which are not recorded in the provincial data files used in our analysis. For this reason, the MH/SU disorder prevalences in the Northern Health Region are likely underestimates. The same logic would suggest that the alcohol use disorders are also underestimated, a troubling concern given that they were still higher than in any of the other regions. The Northern Health Region has the highest number and proportion of First Nations people in the province and addressing the systemic and structural factors that contribute to MH/SU disorders among First Nations communities

is essential. A sustainable response requires a First Nations–centred, holistic health strategy that extends beyond clinical services to the social conditions underlying the health crisis.[15] Such a strategy should be grounded in self-governance and self-determination to ensure equitable resource distribution, organizational coherence, and culturally responsive care. Strengthening cultural safety within the health system is also critical. Health care providers must practice cultural respect and work to reduce barriers that prevent First Nations people from accessing care and pursuing careers in health. Best practices include offering a continuum of services, from traditional healing to mainstream health care. Finally, the strategy must address Indigenous determinants of health. Historic and ongoing experiences of marginalization, racism, and inequitable access to housing, education, income, food security, and health services continue to drive health disparities between First Nations and non-Indigenous populations.[32]

The highest rate of contact with the health care system for MH/SU disorders in the province was to primary care providers, who are often the first point of contact for care. The next highest rate of contact with the health care system in the province was for visits to psychiatrists, who specialize in diagnosing and treating individuals with mental health conditions. Emergency departments, hospitals, and urgent care centres followed. This pattern existed in each region except for the Northern Health Region, where emergency departments were the second most frequented service for MH/SU disorder reasons. Across the regions, the crude rate of visits to primary care providers was highest in Prairie Mountain Health, which is consistent with the observation that this region had the highest prevalences of anxiety and depression. The lowest rate was in the Northern Health region, which had the highest rate of emergency department visits.

There were 28,539 emergency department visits for MH/SU disorder reasons made by 14,501 individuals in the province. In each region, except Interlake-Eastern RHA, 75% or more of the residents made their emergency department visits in their home region with the remaining ones occurring mostly in Winnipeg. In Interlake-Eastern RHA, only 46% of their residents made their emergency department visits in their home region. This should not be surprising given their proximity to Winnipeg. The proportion of visits made in the region of the emergency department were mostly made by residents from the same region (85-90%). Again, Interlake-Eastern RHA had a slightly different distribution with only 75% of its emergency department visits made by residents of the region and approximately 22% by Winnipeg RHA residents. Therefore, it appears that individuals residing outside of Winnipeg who make emergency department visits for MH/SU reasons typically go to an emergency department in Winnipeg, while Winnipeg residents who make visits outside of Winnipeg most often go to the emergency department in Interlake-Eastern RHA (i.e., the Selkirk Regional Health Centre Emergency Department).

Only the Winnipeg RHA, Prairie Mountain Health, and Northern Health Region had hospitals with designated psychiatric beds or wards in 2022/23. There were just over 5,300 psychiatric hospitalizations identified with a little more than 75% of them occurring in Winnipeg, 15% in Prairie Mountain, and 9% in the Northern Health Region. Among all of the hospitalizations in acute care facilities, almost 90% were made by residents of the same region as the hospital. The remaining hospitalizations are patients outside of the region and are mostly residents from Southern Health and Interlake-Eastern RHA where there were no hospitals with psychiatric beds. In fact, more than 85% of the hospitalizations involving residents from the Southern Health-Santé Sud and Interlake-Eastern RHAs occurred in Winnipeg hospitals.

For objective 2, in addition to identifying the population size of Manitoba and each region, which contributed to the calculation of the NBP model projected need estimates, the administrative data was used to provide information for a small proportion of the total service capacity measures.

The administrative data-based prevalence of the MH/SU disorder estimates were, not surprisingly, different from the NBP team's pre-set estimates. Administrative data approaches measure the diagnostic prevalence and do not include information on people who are experiencing significant challenges and may be considered in need of services, but do not meet the criteria for a formal diagnosis. The NBP model recognizes

that many MH/SU disorder services do not require a formal diagnosis to qualify for the provision of services and support (e.g., crisis services, many community mental health services). As such, the approach used to calculate the NBP model prevalence estimates was able to take those individuals into account through their detailed analysis of the CCHS mental health survey data. Furthermore, many of the MH/SU disorder administrative data definitions require a multi-year time frame to ensure enough cases are accumulated for a reliable estimate. This yields a period prevalence based on several years of data, which is then compared with one-year service capacity data and may not be ideal for system planning. For these reasons, the pre-set prevalence estimates were chosen in favour of the administrative data estimates in the application of the NBP model. However, it should be recognized that a strength of the administrative data is the ability to identify the prevalence for each region, rather than applying the national-level NBP prevalences uniformly across the regions. Indeed, the differences in the NBP pre-set and the administrative data estimates will result in different projected need estimates and subsequently the size of the calculated service capacity gaps. Having accurate numbers of people with an MH/SU disorder is extremely important for planning services; planners would need to include local knowledge to decide which of the estimates best reflects their area's needs.

The NBP model includes a small number of person-based measures in its assessment of the current capacity of the system to provide services. The majority of system capacity measures are related to bed numbers and provider FTEs. The administrative data was able to contribute two person-based measures: the count of unique people who visited emergency departments for an MH/SU disorder reason and the count who visited a primary care provider for an MH/SU disorder reason. When an individual presents to the emergency department or visits a primary care provider, a record is initiated and captured in the administrative data. Therefore, we can be confident that the individuals captured are people who used these services specifically for MH/SU disorder reasons. The administrative data was also used to produce full-time equivalents (FTEs) for primary care providers and psychiatrists to be used in the NBP model. The total FTE for primary care providers and psychiatrists providing MH/SU disorder care in the province was estimated at 113.1 and 137.0 FTE, respectively.

Limitations

There are limitations to using the administrative data that should be considered when interpreting the MH/SU disorder prevalence and the health services use indicators measures, as well as when assessing its usefulness in supporting the implementation of the NBP model. These limitations have direct implications on the interpretation of the projected need and service capacity gaps.

As it pertains to prevalence, the administrative data do not identify all adults with MH/SU disorders as they only include patients who sought help from the public health system and received a diagnosis from a primary care physician, nurse practitioner or psychiatrist. Clinical psychologists also provide diagnoses in Manitoba, and individuals may only seek their care, but those data are not currently available within the Repository. There may also be situations in which an individual has more than one disorder at a given time, but only one is diagnosed or available in the data. The data do not include patients who moved into the province but were not yet eligible for coverage at the time of the study period, military personnel (insured federally), members of the Royal Canadian Mounted Police (insured federally), or Indigenous patients living and accessing services "on reserve" (insured federally).[16,33,34] Collectively, these limitations are likely to result in underestimating prevalence, and subsequently an underestimation of the projected need if used in the NBP model.

It should be noted that the rates of health service use may also be affected by the completeness of shadow billing, in which alternative-funded physicians (e.g., specialists) submit medical claims for record-keeping purposes. Visits for which claims are not submitted are not captured in the Repository data, potentially leading to undercounting. Although this remains a limitation, existing evidence has not shown systematic differences in billing rates between alternative-funded and fee-for-service

primary care providers.[35] Alternatively, there may be an overestimation of contacts (e.g., visits) by individuals with an MH/SU disorder when using a single diagnosis code on a medical claim. For example, patients may present with a lower mood (secondary to grief/loss) related to a normal reaction to a situation and be prescribed medication. A physician may use an ICD code that is included in our list on their billing claim, even if the patient does not meet the criteria for a clinical diagnosis. Finally, the FTE measure derived from administrative data may not be a true reflection of the workload. Given the complexity of care and the time required to provide care for individuals with MH/SU disorders, treating each medical claim equally, regardless of the reason for the visit, may underestimate the FTE using this approach and lead to an inflated gap analysis deficit.

Conclusion

Mental health and substance use (MH/SU) disorders impact a substantial proportion of the population across the province. Of the health services studied, Manitobans' use of primary care services is followed by psychiatry, emergency departments, hospitals, and then urgent care centres. There is some variation in the utilization rates across the province as individuals can only use services that are available to them, which is not the same across the regions. Given the breadth of disorders and the varying degrees of severity, whole-system approaches to planning and providing appropriate levels of prevention and treatment services have been suggested alongside addressing the structural drivers of MH/SU disorders such as embedded colonial policies and racism that also play critical roles in shaping MH/SU disorder service provision in the province.

A needs-based planning model may help to identify where service gaps may exist but requires information about the current system. The administrative data was used to provide only a small proportion of that information and only includes information for those who seek services from a portion of the system. For example, many services offered in the community, such as psychologist services, are not captured in the data. Therefore, the administrative data can provide important information for planners to better understand the burden of MH/SU disorders and the volume of health services they use, however, its ability to produce NBP model information is limited.

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Appendix 1: Administrative Data Definitions for Mental Health and Substance Use Disorders Prevalence

Mental Health Disorders

Anxiety Disorders

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F40, F41, F42, F43.0, or F43.1; OR
- At least two physician visits with an ICD-9-CM diagnosis code 300.0, 300.2, 300.3, 300.7, 308, or 309.81

Attention Deficit Hyperactivity Disorder

One-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F90; or
- At least one physician visit with an ICD-9-CM diagnosis code 314; or
- At least two drug dispensation for ATC N06BA without a diagnosis in the previous three years; or
- One medical claim in the previous three years with an ICD-9-CM diagnosis code F90, and one drug dispensation for ATC N06BA

Depression

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F32, F33, F34.1, F38, F43.2, or F53.0; or
- At least two physician visits with an ICD-9-CM diagnosis code 296.2, 296.3, 296.82, 300.4, 309 (except 309.81), or 311; or
- One physician visit with an ICD-9-CM diagnosis code 296.2, 296.3, 296.82, 300.4, 309 (except 309.81), or 311 AND at least one drug dispensation for ATC N06A

Personality Disorder

One-year and five-year prevalence rates based on:

- One hospitalization with an ICD-10-CA diagnosis code F60, F61, F62, F68, or F69; or
- One physician visit with an ICD-9-CM diagnosis code 301

Schizophrenia and Psychosis

One-year and 12-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F20, F21, F22, F23, F24, F25, F28, or F29; or
- At least one physician visit with an ICD-9-CM diagnosis code 295, 297, or 298

Schizophrenia

12-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F20, F21, F23.2 or F25; or
- At least one physician visit with an ICD-9-CM diagnosis code 295

Bipolar Disorder

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F30, F31, or F34.0; or
- At least one physician visit with an ICD-9-CM diagnosis code 296.0, 296.1, 296.4, 296.5, 296.6, 296.7, 296.80, 296.81, or 296.89

Eating Disorders

One-year and seven-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F50; or
- At least one physician visit with an ICD-9-CM diagnosis code 307.1, or 307.5

Intellectual Disability

One-year and lifetime prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F70, F71, F72, or F73; or
- At least one physician visit with an ICD-9-CM diagnosis code 317 or 318

Substance Use Disorders

Alcohol Use Disorder

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F10, Z50.2, Z71.4, or Z72.1; or
- At least one physician visit with an ICD-9-CM diagnosis code 291, 303, or 305.0

Cannabis Use Disorder

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F12 or T40.7; or
- At least one physician visit with an ICD-9-CM diagnosis code 304.3 or 305.2

Cocaine Use Disorder

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F14 or T40.5; or
- At least one physician visit with an ICD-9-CM diagnosis code 304.2 or 305.6

Use of Stimulants (Except Cocaine)

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F15 or T43.6; or
- At least one physician visit with an ICD-9-CM diagnosis code 304.4, 305.7, or 969.7

Opioid Use Disorder (includes fentanyl and heroin)

One-year and five-year prevalence rates based on:

- At least one hospitalization with an ICD-10-CA diagnosis code F11, T40.1, T40.2, or T40.4; or
- At least one physician visit with an ICD-9-CM diagnosis code 304.0, 304.7, 305.5, or 965.0; or
- At least one drug dispensation for any of ATC N07BC01, N07BC02, or N07BC51

Appendix 2: ICD-9-CM and ICD-10-CA Diagnosis Codes

Used to Identify Health Services Use Visits and Hospitalizations for MH/SU Disorder Reasons

Mental Health Disorders

Anxiety Disorders

- ICD-10-CA: F40, F41, F42, F43.0, F43.1
- ICD-9-CM: 300.0, 300.2, 300.3, 300.7, 308, 309.81

Depression

- ICD-10-CA: F32, F33, F34.1, F38, F43.2, F53.0
- ICD-9-CM: 296.2, 296.3, 296.82, 300.4, 309 (except 309.81), 311

Attention Deficit Hyperactivity Disorder

- ICD-10-CA: F90
- ICD-9-CM: 314

Personality Disorder

- ICD-10-CA: F60, F61, F62, F68, F69
- ICD-9-CM: 301

Schizophrenia (includes Psychosis)

- ICD-10-CA: F20, F21, F22, F23, F24, F25, F28, F29
- ICD-9-CM: 295, 297, 298

Bipolar Disorder

- ICD-10-CA: F30, F31, F34.0
- ICD-9-CM: 296.0, 296.1, 296.4, 296.5, 296.6, 296.7, 296.80, 296.81, 296.89

Eating Disorders

- ICD-10-CA: F50
- ICD-9-CM: 307.1, 307.5

Intellectual Disability

- ICD-10-CA: F70, F71, F72, F73
- ICD-9-CM: 317, 318

Substance Use Disorders

Alcohol Use Disorder

- ICD-10-CA: F10, Z50.2, Z71.4, or Z72.1
- ICD-9-CM: 291, 303, 305.0

Cannabis Use Disorder

- ICD-10-CA: F12 or T40.7
- ICD-9-CM: 304.3, 305.2

Cocaine Use Disorder

- ICD-10-CA: F14 or T40.5
- ICD-9-CM: 304.2, 305.6

Use of Stimulants (except cocaine)

- ICD-10-CA: F15 or T43.6
- ICD-9-CM: 304.4, 305.7, 969.7

Opioid Use Disorder (includes fentanyl and heroin)

- ICD-10-CA: F11, T40.1, T40.2, or T40.4
- ICD-9-CM: 304.0, 304.7, 305.5, 965.0

Appendix 3: Emergency Departments, Urgent Care Centres, and Hospitals with Mental Health and Substance Use Disorder Encounters

2022/23

Emergency Departments

Interlake-Eastern RHA

- Selkirk Regional Health Centre

Northern Health

- Flin Flon General Hospital
- St. Anthony's General Hospital
- Thompson General Hospital

Southern Health-Santé Sud

- Bethesda Regional Health Centre
- Boundary Trails Health Centre
- Portage District General Hospital

Prairie Mountain Health

- Brandon Regional Health Centre
- Dauphin Regional Health Centre

Winnipeg RHA

- Grace Hospital
- Health Sciences Centre (provincially run by Shared Health)
- St Boniface General Hospital

Urgent Care Centres

Winnipeg RHA

- Concordia Hospital
- Seven Oaks General Hospital
- Victoria General Hospital

Hospitals with Designated Psychiatric Beds or Wards

Northern Health

- St. Anthony's General Hospital
- Thompson General Hospital

Prairie Mountain Health

- Brandon Regional Health Centre
- Dauphin Regional Health Centre

Winnipeg RHA

- Health Sciences Centre (tertiary hospital provincially run by Shared Health)
- St. Boniface General Hospital (tertiary hospital)
- Victoria General Hospital

Appendix 4: Counts and Crude Rates of Health Service Use for Mental Health and Substance Use Disorders

Appendix Table 4.1: Emergency Department Visits for Mental Health or Substance Use Disorder Reasons by Region of Residence, 2022/23

Number of visits and crude rate of visits per 1,000 people aged 15 and older

Health Region	Number of People	Number of Visits	Crude Rate Average per 1,000	Crude Rate 95% Confidence Interval per 1,000
Southern Health-Santé Sud	171,038	3,282	19.2	18.5-19.9
Winnipeg RHA	683,474	13,412	19.6	19.3-20.0
Interlake-Eastern RHA	112,489	1,780	15.8	15.1-16.6
Prairie Mountain Health	142,984	3,417	23.9	23.1-24.7
Northern Health Region	55,233	5,420	98.1	95.6-100.8
Public Trustee*	4,387	1,228	279.9	264.7-296.0
Manitoba	1,169,605	28,539	24.4	24.1-24.7

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Appendix Table 4.2: Urgent Care Visits for Mental Health or Substance Use Disorder Reasons by Region of Residence, 2022/23

Number of visits and crude rate of visits per 1,000 people aged 15 and older

Health Region	Number of People	Number of Visits	Crude Rate Average per 1,000	Crude Rate 95% Confidence Interval per 1,000
Southern Health-Santé Sud	171,038	178	1.0	0.9-1.2
Winnipeg RHA	683,474	4,427	6.5	6.3-6.7
Interlake-Eastern RHA	112,489	160	1.4	1.2-1.7
Prairie Mountain Health	142,984	44	0.3	0.2-0.4
Northern Health Region	55,233	195	3.5	3.1-4.1
Public Trustee*	4,387	259	59.0	52.3-66.7
Manitoba	1,169,605	5,263	4.5	4.4-4.6

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Appendix Table 4.3: Family Physician Visits for Mental Health or Substance Use Disorder Reasons by Region of Residence, 2022/23

Number of visits and crude rate of visits per 1,000 people aged 15 and older

Health Region	Number of People	Number of Visits	Crude Rate Average per 1,000	Crude Rate 95% Confidence Interval per 1,000
Southern Health-Santé Sud	171,038	44,885	262.4	260.0-264.9
Winnipeg RHA	683,474	276,164	404.1	402.6-405.6
Interlake-Eastern RHA	112,489	35,566	316.2	312.9-319.5
Prairie Mountain Health	142,984	59,683	417.4	414.1-420.8
Northern Health Region	55,233	5,724	103.6	101.0-106.4
Public Trustee*	4,387	3,434	782.8	757.0-809.4
Manitoba	1,169,605	425,456	363.8	362.7-364.9

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Appendix Table 4.4: Nurse Practitioner Visits for Mental Health or Substance Use Disorder Reasons by Region of Residence, 2022/23

Number of visits and crude rate of visits per 1,000 people aged 15 and older

Health Region	Number of People	Number of Visits	Crude Rate Average per 1,000	Crude Rate 95% Confidence Interval per 1,000
Southern Health-Santé Sud	171,038	1,177	6.9	6.5-7.3
Winnipeg RHA	683,474	5,933	8.7	8.5-8.9
Interlake-Eastern RHA	112,489	2,304	20.5	19.7-21.3
Prairie Mountain Health	142,984	3,572	25.0	24.2-25.8
Northern Health Region	55,233	400	7.2	6.6-8.0
Public Trustee*	4,387	179	40.8	35.2-47.2
Manitoba	1,169,605	13,565	11.6	11.4-11.8

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Appendix Table 4.5: Psychiatrist Visits for Mental Health or Substance Use Disorder Reasons by Region of Residence, 2022/23

Number of visits and crude rate of visits per 1,000 people aged 15 and older

Health Region	Number of People	Number of Visits	Crude Rate Average per 1,000	Crude Rate 95% Confidence Interval per 1,000
Southern Health-Santé Sud	171,038	8,930	52.2	51.1-53.3
Winnipeg RHA	683,474	102,542	150.0	149.1-151.0
Interlake-Eastern RHA	112,489	6,799	60.4	59.0-61.9
Prairie Mountain Health	142,984	7,229	50.6	49.4-51.7
Northern Health Region	55,233	1,712	31.0	29.6-32.5
Public Trustee*	4,387	2,280	519.7	498.8-541.5
Manitoba	1,169,605	129,492	110.7	110.1-111.3

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

Appendix Table 4.6: Inpatient Psychiatric Hospitalizations for Mental Health or Substance Use Disorder Reasons by Region of Residence, 2022/23

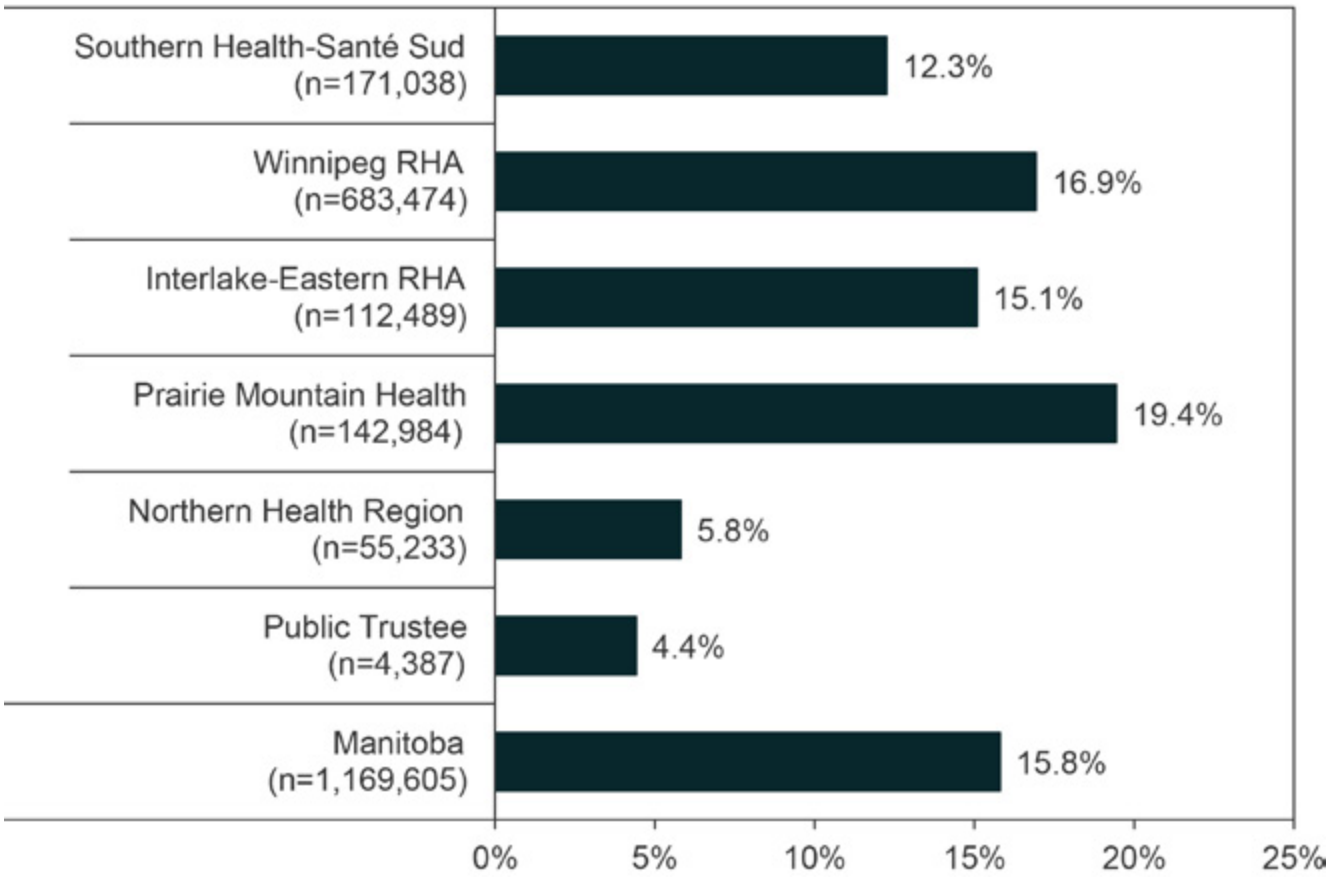
Number of hospitalizations and crude rate of hospitalizations per 1,000 people aged 15 and older

Health Region	Number of People	Number of Visits	Crude Rate Average per 1,000	Crude Rate 95% Confidence Interval per 1,000
Southern Health-Santé Sud	171,038	218	1.3	1.1-1.5
Winnipeg RHA	683,474	3,288	4.8	4.6-5.0
Interlake-Eastern RHA	112,489	214	1.9	1.7-2.2
Prairie Mountain Health	142,984	734	5.1	4.8-5.5
Northern Health Region	55,233	569	10.3	9.5-11.2
Public Trustee*	4,387	280	63.8	56.8-71.8
Manitoba	1,169,605	5,303	4.5	4.4-4.7

* Individuals whose estate or trust money is managed by the Public Guardian and Trustee of Manitoba.

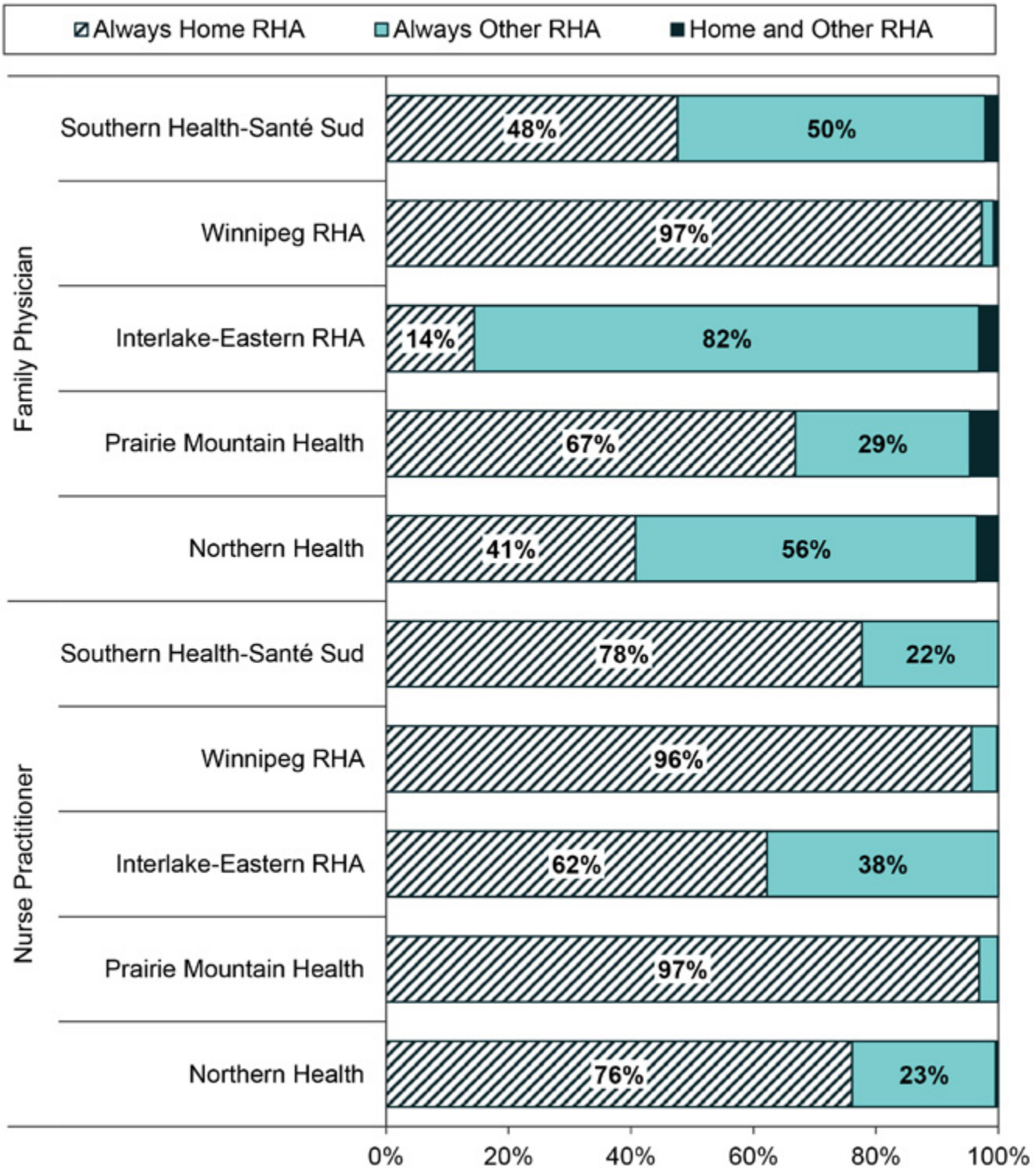
Appendix 5: Supplementary Health Services Use Figures

Appendix Figure 5.1: Percent of Health Region Residents Who Visited a Primary Care Provider for a Mental Health or Substance Use Disorder Reason, 2022/23
Percent of region population aged 15 years and older



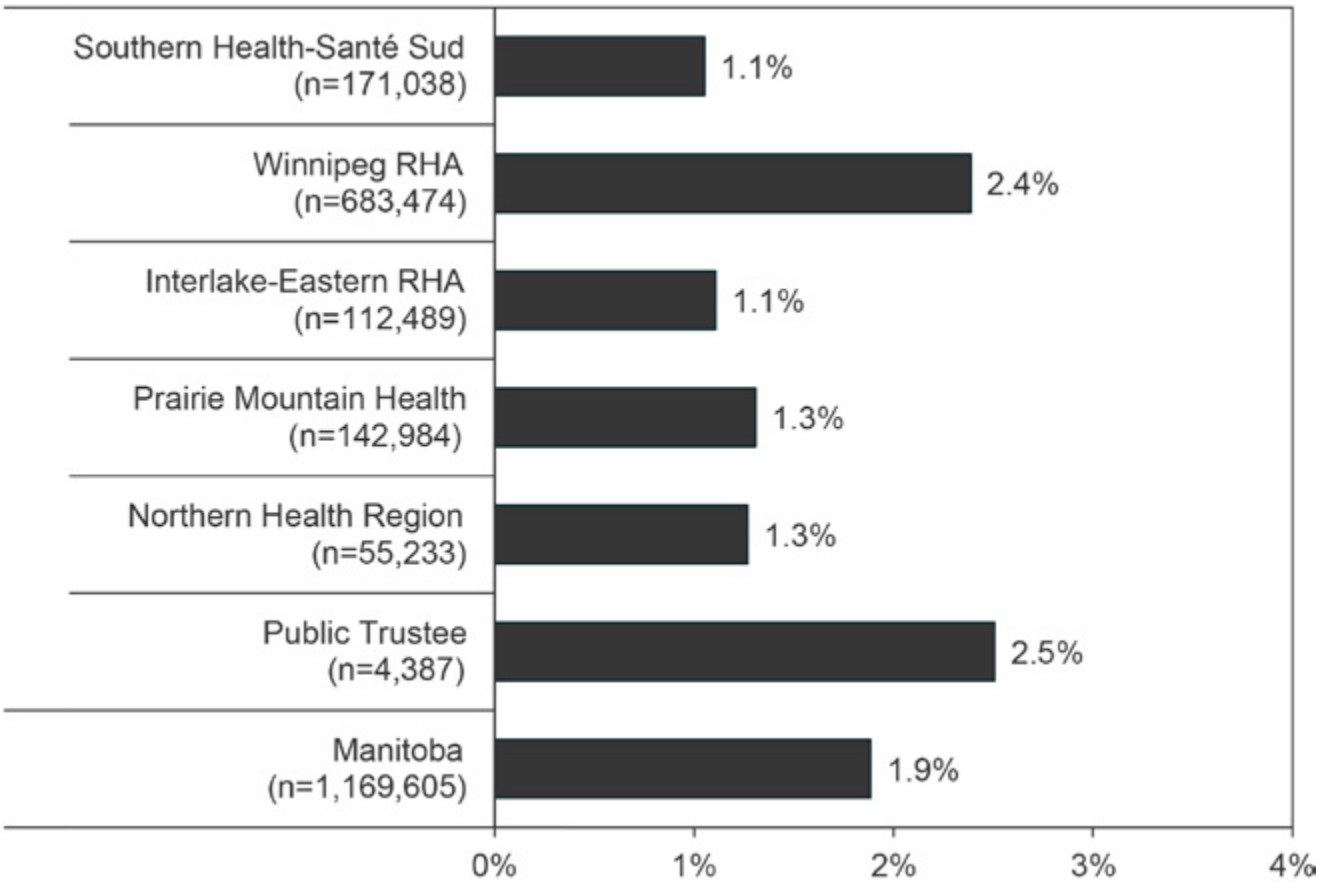
Appendix Figure 5.2: Location of Family Physician and Nurse Practitioner Visits for a Mental Health or Substance Use Disorder Reason by Region of Residence, 2022/23

Percent of visits made by residents aged 15 years and older



Appendix Figure 5.3: Percent of Health Region Residents Who Visited a Psychiatrist for a Mental Health or Substance Use Disorder Reason, 2022/23

Percent of region population aged 15 years and older



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