# Gap Analysis of Public Mental Health and Addictions Programs (GAP-MAP) Final Report

**T. Cameron Wild**
Professor
**Jody Wolfe**
Research Associate
**Jian Wang**
PhD student
**Arto Ohinmaa**
Associate Professor

Released February 2014

UNIVERSITY OF ALBERTA
SCHOOL OF PUBLIC HEALTH

# Table of Contents

# Table of Contents

# Table of Contents

# Table of Contents

Page

## List of Figures

# Table of Contents

# Table of Contents



## List of Tables

# Table of Contents

# Table of Contents

# Table of Contents

# 1 Acknowledgements

# 1 Acknowledgements

We gratefully thank the 6,000 randomly-selected Alberta adults and the many AHS managers and staff who shared their valuable time and information in contributing to GAP-MAP. We are also grateful to have received assistance received from the following individuals (and where applicable, their support staff) during the project:

## Project Advisory Panel Members

**Silvia Vajushi**
Executive Director, Addiction and Mental Health, Alberta Health

**Sarah Parkinson**
Manager, Addiction and Mental Health, Primary Health Care, Alberta Health

**Wayne Spychka**
Director, Addiction and Mental Health, Community Health Branch, Alberta Health

**Larry Svenson**
Director, Epidemiology and Surveillance, Alberta Health

**Kathy Huebert**
Acting Director, Knowledge & Strategy, Alberta Health Services

**Laurie Beverley**
Executive Director, Addiction and Mental Health, Alberta Health Services

**Dr. David Hodgins**
Professor, Department of Psychology, University of Calgary

**Dr. Michael Trew**
Senior Medical Director, Addiction and Mental Health, Alberta Health Services

## Alberta Health Services

Laurie Beverley (Executive Director, Community Treatment and Support)

Joan Campbell (Executive Director, Calgary Zone)

Shawn Currie (Calgary Zone)

Susan Gloster (Executive Director, South Zone)

Dwight Hunks (Executive Director, Central Zone)

Jesse Jahrig (Senior Clinical Analyst/Writer, Primary and Community Care)

Donna Koch (Executive Director, North Zone)

Sandy Patterson (Senior Application Analyst, Addiction and Mental Health)

Mark Snaterse (Executive Director, Edmonton Zone)

Liana Urichuk (Edmonton Zone)

Sam Sugawara (Alberta Health Services)

# 1 Acknowledgements


## Government of Alberta

Laura Alcock (Human Services)

Shelley Birchard (Alberta Health)

Pat Chemerys (Alberta Education)

Heather Dechant (Alberta Education)

Andrew Douglas (Alberta Health)

Terri Gerber (Alberta Health)

Fern Miller (Alberta Health)

Nav Sharma (Alberta Health)

Margaret Shim (Alberta Health)

## Additional project support

Yasmin Garad (University of Alberta)

Elaine Hyshka (University of Alberta)

Dustin Martin (University of Alberta)

Dr. Brian Rush (Centre for Addiction and Mental Health, Ontario)

Dr. Don Schopflocher (University of Alberta)

Kevin St. Arnaud (University of Alberta)

# 2 Note to Readers

# 2 Note to Readers

To our knowledge, GAP-MAP is the first project in Alberta's history that has attempted to produce a detailed, comprehensive, and systematic description of provincially funded addiction and mental health services in relation to population need.[1] Despite the many limitations associated with this project, we believe that the results presented here will be strategically valuable for multiple stakeholders, including Alberta Health Services (AHS), Alberta Health, other Government of Alberta (GoA) ministries and GoA-funded service providers, as well as a variety of addiction and mental health advocacy communities. We believe that these results should be made widely available, and that they provide important information with which to benchmark services and systems in this increasingly important area of health services and population health.

Like most jurisdictions around the world (Pirkis et al., 2007), Alberta's approach to determining priorities and allocating resources for addiction and mental health prevention, treatment, and aftercare services has traditionally emphasized (1) consultations and priority-setting exercises that attempt to balance available budgets with the stated priorities of various interest groups, service providers, and government stakeholders, combined with (2) comparisons of the services offered in Alberta with other jurisdictions thought to be providing 'good' services (usually by conducting one or more environmental scans).

The approach taken in GAP-MAP marks a sharp departure from these historical practices. Specifically, this report attempts to demonstrate the value of a planning approach that emphasizes *evidence-informed* discussions about priorities for organizing and delivering addiction and mental health services across the spectrum from prevention to aftercare. The term "evidence-informed" refers to the need for system managers and policy makers to inform strategic planning efforts by using reliable, current data that describe:

- the prevalence and severity of addictions and mental disorders in the community;
- levels of treatment need in various populations in the community and in service systems;
- the kinds of treatments and other services that are routinely provided to various client populations at the provincial level and at the operational level of AHS service zones
- financial resources received to deliver services in the community and the clinic

Our overall intention is to lay the groundwork for an Alberta-wide system planning model for addiction and mental health services. Due to the comprehensive scope of the project and the relatively brief timeline allotted for its completion, the deliverables for GAP-MAP, including this report, cannot be expected to provide all of the information necessary to make fully evidence-informed recommendations for programs and services in this area. However, we believe that a commitment to routine collection of such data is crucial to bring an evidence-informed perspective to future system-level service planning and resource allocation decisions.

[1] AHS routinely produces system-level performance reports for addiction and mental health services. These excellent reports present key system performance measures in relation to accessibility, acceptability, appropriateness, and effectiveness of services. At the present time, however, AHS performance reporting describes treated clients only, does not describe unmet population needs for care, nor does it examine how resources for providing services are distributed across the service system. All of these issues were of focal interest in GAP-MAP, and this report can therefore be understood as providing information that complements AHS performance reporting.

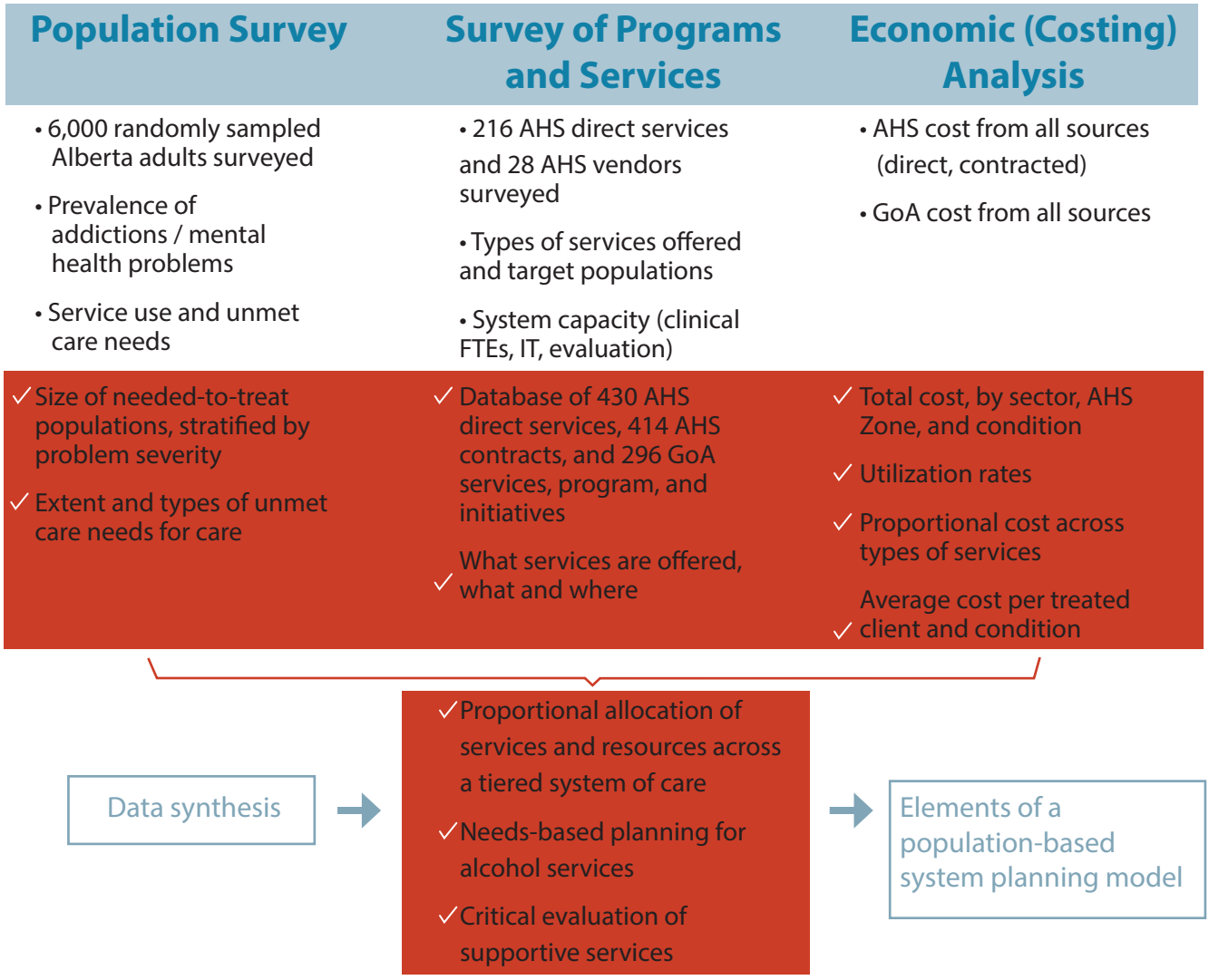
# 3 Synopsis of Facts and Findings

# 3 Synopsis of Facts and Findings

GAP-MAP was designed to inform Alberta's Addiction and Mental Health Strategy, which has as its stated aim, to "transform the addiction and mental health system in Alberta", with the goal of "...reducing the prevalence of addiction, mental health problems and mental illness in Alberta through health promotion and prevention activities and to provide quality assessment, treatment and support services to Albertans when they need them," (p. 3).

Results from the project are intended to lay the groundwork for building a population-based model for addiction and mental health service planning in Alberta. Although many of the project's conclusions echo longstanding concerns expressed by stakeholders about Alberta's system of care for addiction and mental health problems, GAP-MAP went beyond anecdotal observations to collect systematic empirical data on unmet population need, service capacity, and costs. In addition to providing a relatively fine-grained description of these topics, the project synthesized findings from these data sources to provide examples of how needs-based planning for addiction and mental health services could be undertaken.
Figure 1 provides an overview of the project.

Figure 1: Overview of GAP-MAP



# 3 Synopsis of Facts and Findings

## The Facts

- About 20% of Alberta adults experienced an addiction or mental health problem in 2012. This is equivalent to 614,861 people, or 1 in 5 Alberta adults.
- Total public spending for mental health and addiction programs, services, and initiatives in Alberta was estimated at $753.8 million in Fiscal Year ("FY") 2010–2011. Of this amount, 87.7% was accounted for by AHS direct services. Services contracted to third-party vendors via AHS accounted for 6.6% of the total costs, while the remaining costs (5.7%) were funding allocations and other initiatives undertaken by Health and other Government of Alberta ("GoA") ministries.
- A total of 426 distinct programs and services nested within 168 service clusters are offered directly by AHS in acute care and psychiatric hospitals, community health clinics, freestanding mental health and addiction facilities, and other locations. Many rural areas divide resources to offer the same program or service at multiple locations on an intermittent basis.
- Individual therapy/counselling for adult women and men are the most commonly offered treatment modalities. About 75% of AHS direct services surveyed indicated that they either partner with a psychiatrist or have one on staff.
- Managers participating in the survey of programs and services reported that 2,170 AHS direct care full time equivalents ("FTEs") provided care in 2012–2013. The system also has 2,859 dedicated public sector. The system also has 2,859 addiction and mental health beds, and en gaged 156 third-party vendors providing various services for the target population.

## The Findings

**1. Existing services do not provide sufficient care to meet the needs of Alberta adults**

- Of surveyed adults who met criteria for a past-year addiction or mental health problem, almost half (48.7%) reported unmet needs for one or more services – either they needed but didn't receive any services, or didn't receive enough service. This is equivalent to 311,355 people (about 1 in 10 Alberta adults), or more adults than the populations of Red Deer, Lethbridge, Wood Buffalo, and Medicine Hat combined.
- Unmet needs for counselling are most commonly reported. Although half of surveyed AHS direct and contracted services provide counselling, many qualified counsellors operate privately, outside the system of publicly-funded care. The second most common reason underlying perceived unmet need for care is inability to afford services.
- Most surveyed programs and services (49% and 67% of AHS direct and contracted services, respectively) indicated that more people sought services than they had resources to accommodate.
- Self-help support groups, may be an informal source of support in addition to, or instead of formal services; however, self-help participation was not assessed within GAP-MAP.

**2. Services are mainly operated on a reactive, acute-care model that requires Albertans to seek care at physician offices and specialty clinics**

- After counselling, the next most commonly reported unmet service need is for information about addiction and mental health problems, treatments, or available services. About one-quarter (24.6%) of surveyed Alberta adults with a past-year addiction or mental health problem reported unmet needs for information, which is equivalent to 157,276 people, or about 1 in 20 Alberta adults.
- Although 86% of AHS direct services surveyed indicate that they provide information to clients, accessibility of this service is generally limited to regular office hours: only 25% and 15% of sur veyed programs reported that they are open to Albertans after 5 pm on weekdays and on week ends, respectively.
- Technologies are underutilized for reaching target populations. Less than one-third of surveyed AHS direct programs report that they provide screening and assessment, treatment, peer support, and/or post-treatment follow-up using the telephone, and only 2% of these services reported using the internet for these activities.
- Over half (51.9%) of AHS direct and contracted programs surveyed reported that they use one or more criteria to refuse client entry, but less than 30% of surveyed programs indicated that they connect clients with another appropriate service on refusal.

**3. System resources are heavily invested in providing inpatient, residential, and crisis services**

- More than 80% of AHS direct service costs in 2010–2011 were accounted for by Tier 3–5 services (i.e., inpatient, residential, and crisis services), mainly delivered to patients with mood disorders, schizophrenia/other psychotic disorders, and substance-related disorders.
- These services appear to be functioning reasonably well: perceived unmet needs for hospital care and medication were estimated at 12% and 14% among adults with a past-year diagnosed mental health problem, respectively; these were low rates of unmet need relative to other services for this subgroup (e.g., unmet need for counselling).
- Physician visits accounted for about 17% of AHS direct costs, but screening, assessment, and brief intervention in primary care (Tier 2 activities) are underutilized: no more than 15% of Alberta adults who met screening criteria for past-year depression or alcohol problems reported that a health professional told them that they had an addiction or mental health problem in the same time period.
- Health promotion and disease prevention (Tier 1 services) accounted for 0.1% of total AHS direct service costs. Although some prevention and promotion initiatives were supported by other funding, there was no evidence that Tier 1 services were differentially supported by GoA funding allocations.

**4. There is wide variation in the costs of providing acute inpatient care for different conditions**

- Inpatient care accounts for the largest proportion of AHS spending, but average patient costs for providing hospitalization in acute care and psychiatric facilities varied widely by condition, from about $7,000 per treated patient for providing inpatient care for adjustment disorders to about $38,000 per treated patient for providing inpatient care for eating disorders. Further work is needed to account for condition-specific variation in costs of providing specialty addiction and mental health care.

**5. System resources are heavily invested in providing care for adults**

- In FY 2010–2011, about 10% of AHS direct service costs were consumed by children and youth under the age of 18, and services provided for children and youth accounted for less than 10% of patient days and physician visits.
- About half of AHS direct and contracted programs surveyed indicated that they exclude children and adolescents and/or refer them elsewhere, respectively.
- Less than 10% of AHS direct and contracted programs surveyed reported that they arrange for child care for clients if needed.
- The scope of the project precluded a systematic description of child and youth unmet needs for services. This information is required in order engage in system-level planning for child and youth services.

**6. Programs and services require assistance for continuous improvement**

- Although over 90% of surveyed programs indicated that they record client demographic information in a database, only 23.5% of surveyed AHS direct programs reported that they systematically record post-program outcome information.
- Over 78% of surveyed AHS direct and contracted service clusters agreed or strongly agreed that additional support or resources are needed to track client outcomes and to obtain information that can document program effectiveness.

**7. System resources are heavily invested in providing care for mental health problems and may be under-invested in addiction services**

- Of the estimated $753.8 million spent by the province in 2010–2011, mental health services consumed over 80% of the total costs; addiction services consumed about 13% of total provincial costs. Specialist addiction services provided in residential and detoxification units, outpatient, and opioid dependence programs account for about 7% of total patient encounters within AHS direct services.
- These proportional costs and service utilization rates are inconsistent with population-based service need. The past-year prevalence of diagnosed mental health problems and depression were 3% and 11.9%, respectively, representing about 91,000 and 360,000 adults. Past-year prevalence of diagnosed addictions and alcohol problems were almost as high at 1.9% and 8.5%, representing about 58,000 and 260,000 adults, respectively.

- Further work is needed to determine whether existing costing profiles are optimally distributed to serve the needs of Albertans with addictions, or whether additional resources are required for this purpose.

**8. Supportive services for people with addiction and mental health problems are not well-integrated into addiction and mental health care**

- Depending on problem severity, 13%–28% of surveyed Alberta adults with past-year addiction and mental health problems (~127,000 people) report unmet needs for social interventions (help to sort out practical issues such as housing or money problems), and skills training (help to improve ability to work, to care for oneself, to use one's time or to meet people).
- Less than half of surveyed AHS direct programs provide social interventions and skills training.
- Many supportive services are contracted to third-party providers outside of the AHS system, or are provided directly or via third-party contracts administered by a range of GoA ministries (e.g., Human Services, Education).
- Many providers offer these services incidentally (i.e., they provide supports to addiction and mental health clients but also to many other client populations), and therefore do not record specific information about clients with addiction and mental health issues. Thus, it is difficult to accurately estimate the magnitude and quality of supportive services provided for Albertans living with addiction and mental health problems.

**9. Neither AHS nor the GoA uses standardized nomenclature to define specialty addiction and mental health programs and services**

- Each AHS Zone and GoA ministry defines activities delivered to people experiencing addiction and mental health problems using different terms and varying definitions. What "counts"as a program, service, initiative, and/or appropriate target population varies across regions and ministries, making it difficult to combine information across the province in a meaningful way.
- This is especially problematic for supportive services and target populations. Of the 415 third-party AHS contracts identified by GAP-MAP, over 60% were eliminated from costing estimates because they could not be specifically identified as providing services for GAP-MAP's target population. That is, they provided services intended for people with many disabilities and health challenges, in addition to those experiencing addiction or mental health problems.
- Consultations revealed concerns about the limited scope of the health conditions included in the project, and many stakeholders expressed misgivings about ambiguities in the system regarding where specialty addiction and mental health services begin and end in relation to generic supportive services for broad range of health and social problems.

# 4 Background

# 4 Background

The original Global Burden of Disease study was jointly conducted by the World Health Organization ("WHO") and the World Bank. In this landmark investigation, methodologies were developed to measure and compare disease burden across different health conditions. From the study's earliest publications, it was recognized that illness burden from psychiatric disorders generally (and depression in particular) was highly prevalent, exacted a large population burden around the world, but is typically under-recognized in most jurisdictions. Moreover, WHO projected that depression will be the second leading cause of disability by 2020, and recognized that other mental illnesses, such as schizophrenia, bipolar disorder and substance use disorders, are among the top ten causes of disability worldwide.

Recent Canadian data confirm the very high population burden of addiction and mental health problems. In Canada, mental illness is the most prevalent cause of disability, accounting for nearly 30% of all disability claims and 70% of the total costs. The total costs of mental illness to the Canadian economy, in terms of health care and loss of productivity is estimated to be $51 billion per year, accounting for 2.96% of the Canadian GDP in 2011. A recent report from Alberta's Institute of Health Economics concluded that more than $14.3 billion in public expenditures goes toward mental health services and supports in Canada (Jacobs et al., 2010). These figures are believed to be conservative estimates. Nationally, this amounts to 7.2% of total government health expenditures allocated to mental health services, including addiction services – several percentage points less than in other developed countries such as Sweden and the UK (Jacobs et al., 2010). In Ontario, the burden of addictions and mental illness is more than 1.5 times that of all cancers, and more than seven times that of all infectious diseases (Ratnasingham et al., 2012). Over the years, a number of social services and programs, targeting mental disorders and addiction issues, are provided by or funded through a range of health and non-health Ministries; however, the magnitude and expenditures for these societal sectors are seldom collected or estimated.

In considering how to best respond to these burdens, addiction and mental health service planning involves determining strategies, time frames, indicators, and targets, along with determining resources required to implement the vision and objectives articulated by policy makers (WHO, 2004).

Unfortunately, there are no consensually agreed-upon gold standards at the international or national level to guide addiction and mental health service planning, and in the absence of planning standards, two fundamentally different approaches have been taken (Harris et al., 2012). One approach emphasizes normative service planning. This approach assumes that service provision levels in place elsewhere, particularly in areas that exhibit "good" mental health services, or similar demographic and governance characteristics to the jurisdiction of interest, provide a sound basis to make recommendations for local planning needs. Alternatively, service planning can adopt a population health approach that relies extensively on empirical evidence. This evidence-informed approach to planning formulates priorities about how to organize and deliver services using reliable, current data on the prevalence and severity of mental disorders in the community, levels of addiction and mental health treatment need, treatments that are known to be effective in addressing such need, and the resources required to deliver these treatments (Andrews et al., 2001; WHO, 2004). Pirkis and colleagues (2007) reviewed mental health planning documents obtained from 32 developed nations and concluded that the vast majority of them adopted a "top down," normative planning approach, rather than a "bottom up," evidence-informed approach.

## 4.1 Alberta Context for GAP-MAP

September 2011, the Minister of Health and Wellness announced *Creating Connections: Alberta's Addiction and Mental Health Strategy* ("Strategy") and *Creating Connections: Alberta Addiction and Mental Health Action Plan 2011–2012* ("Action Plan"). The Strategy and its associated Action Plan lays out broad directions for addiction and mental health priorities within the province of Alberta and informs the overarching legislative, policy, strategic and performance management direction for addiction and mental health services in the province.

The Strategy explicitly states that its overall objective is to "transform the addiction and mental health system in Alberta," with the goal of "...reducing the prevalence of addiction, mental health problems and mental illness in Alberta through health promotion and prevention activities and to provide quality assessment, treatment and support services to Albertans when they need them," (p. 3). Key strategies identified to support this overall purpose include (1) building healthy and resilient communities; (2) fostering the development of healthy children, youth and families; (3) enhancing community-based services, capacity and supports; (4) addressing complex needs, and (5) enhancing assurance. The Strategy also identifies three priority populations, including clients/patients with complex needs; those living in rural and remote areas; and targeted sub-populations such as children and families, First Nations, Métis and Inuit peoples, seniors, individuals involved with justice, and families at risk.

### 4.1.1 Historical Context

The Strategy and Action Plan were created through a normative planning approach, and were predated by several similar initiatives undertaken by the GoA, including *Advancing the Mental Health Agenda: A Provincial Mental Health Plan for Alberta* (2004), *Children's Mental Health Plan for Alberta: Three Year Action Plan 2008-2011* (2008), and *Stronger Together: The Alberta Drug Strategy* (2005). These strategies were prepared when Alberta had nine geographically-based regional health authorities and three provincial entities working specifically in the areas of mental health (Alberta Mental Health Board; "AMHB"), addiction (Alberta Alcohol and Drug Abuse Commission; "AADAC") and cancer (Alberta Cancer Board; "ACB"). Regional health authorities were primarily responsible for the delivery of mental health services, while AMHB set a provincial policy framework for mental health, strategic data assessment and measuring progress of mental health plan implementation, providing consumer and advocacy support, and coordination and facilitation of select provincial mental health initiatives, such as forensic psychiatric services and research planning. AADAC was a Crown Agency accountable to the Minister of Health and Wellness, and was mandated by the Alcohol and Drug Abuse Act to operate and fund services that addressed alcohol, other drug and gambling problems. In addition, AADAC was charged with conducting related research and was responsible for coordinating and implementing the Alberta Tobacco Reduction Strategy.

[2] In fact, periodic reviews of Alberta's mental health and addiction services have been conducted since 1928. To our knowledge, none of them have adopted an evidence-informed approach to service planning in this area.

In 2009, the nine regional health authorities, as well as the AMHB, AADAC and the ACB, were brought together as Alberta Health Services (AHS). AHS has primary responsibility for the delivery of health services throughout the province, including addiction and mental health services. The role of Alberta Health has largely remained the same with regard to mental health and addictions functions through this transition.

### 4.1.2 Relevant Alberta-Based Research

In addition to the historical context described earlier, GAP-MAP and the 2011–2012 Strategy and Action Plan also need to be located in relation to recent Alberta-based addiction and mental health services and systems research. Key results from these studies are summarized below.

### Mental Health and Related Services

Cawthorpe et al. (2011) analyzed nine years of Calgary-area physician billing records and found that only 11% of patients who received physician care for a psychiatric disorder subsequently accessed mental health specialty services, suggesting that patients with psychiatric disorders may be underserved. A 34-year longitudinal study of 128 Albertans with schizophrenia (who received their first diagnosis in the 1960s) found that most patients' symptoms were exacerbated and that social functioning declined over the study period – even though there were dramatic changes in the organization and delivery of mental health services in Alberta during this time (e.g., increased [and now routine] use of medications, de-institutionalization of patients from psychiatric hospitals to community services; see Newman et al., 2012). Cherry et al. (2012) linked provincial worker compensation claim data from 1995–2004 with provincial administrative health records. These investigators found that affective disorders were the most common condition associated with worker mental ill-health (5.2% of male cases and 11.5% of female cases), and that substance use disorder was disproportionately higher in physically demanding occupations mainly located outside urban areas. Morrison and Laing (2011) reported that 60% of people who died by suicide in Alberta between 2003 and 2006 had a diagnosed mental disorder in the previous year, and 90% of them had seen a physician in the year prior to their death. Their results suggest that mental health problems were generally not identified during physician consultations.

Among youth, two Alberta-based studies documented high emergency room readmission rates for young patients presenting with affective disorders (Newton et al., 2010), and reported that Alberta youth with diagnoses of mood disorders and psychosis were most likely to return to the emergency department (29–37% returned within 72 hours) compared to other diagnoses. Aside from these readmission rates, substance abuse and misuse was the most common problem among Alberta youth presenting to emergency departments (Newton et al., 2009). Collectively, these results suggest that Alberta youth are not being appropriately screened, treated, and/or referred to specialist care for addiction and mental health issues following initial presentation to emergency departments. The same research group documented that, despite high comorbidity between alcohol/other drug (AOD) use and mental illness in children and youth presenting to Alberta emergency departments, most do not receive a subsequent mental health consultation or community service referral (Yu et al., 2010). These results suggest that continuity of care linking emergency services to specialist addiction and mental health services in Alberta could be improved. Ngwakongnwi and colleagues (2011) reported that only about half of all children with poor English language skills received

specialty mental health services after they were referred – a lower rate than children who were competent English speakers – suggesting that capacity of the mental health system to accommodate diversity in Albertan presenting for treatment may be problematic.

## Addictions and Related Services

Callaghan and Macdonald (2009) reviewed drug-related national and provincial hospital separation data between 1997 and 2005 and reported that Alberta rates for hospital separations related to all drugs of abuse studied (alcohol, cocaine, cannabis, methamphetamine, and opioids) were above the national average – these results were consistent across all time points studied. Plitt et al. (2010) reported a 23.9% HIV+ prevalence rate for injection drug users in Edmonton, which was the highest of all Canadian cities participating in the federal government's surveillance program for injection drug use (the national rate was 13.2%; Calgary does not currently participate in this program). Martin and colleagues (2011) found that Albertan Aboriginal patients had higher all-cause, and HIV-related mortality rates, compared to other HIV patients. Injection drug use was the most common source of exposure in this group, and Aboriginal patients were significantly more likely to have been infected with HIV through injection drug use. Not withstanding these results, the current provincial Strategy and Action Plan mention, but do not specify, how harm reduction services fit into the overall addiction and mental health service system as a focal area of programming. Wild et al. (2004) recruited a large random sample (> 10,000) of Alberta adults and reported that 15% of drinkers met criteria for alcohol problems. However, these problem drinkers were significantly more likely than those without alcohol problems to be interested in accessing brief self-help interventions, suggesting that there may be a large, unserved group of drinkers who would be interested in accessing these self-help interventions. This is important, given that most problem drinkers in Alberta report not receiving any alcohol-related health services (Wild et al., 2004), and that brief alcohol interventions delivered to the general drinking public are effective strategies for reducing alcohol consumption (Wild et al., 2007; Wild et al., 2013; Cunningham et al., 2010).

## Economic Costs of Providing Services

Mental health and addiction service use and costs have been analysed in several Alberta-based studies. Block et al. (2005) estimated that the direct 2002 FY costs for mental health services in Alberta were $573 million, an estimated 8.4% of costs for all provincial health services. Regional inpatient and psychiatric inpatient care accounted for 22% and 21% of these total costs, respectively, while physician visit costs accounted for 22% of all costs. Block et al. (2008) analysed the impact of the 2003 integration of mental health services into other health care and showed that the absolute dollar-value of the services continued to increase and the percentage of the mental health service costs increased overall from FY 2000 (7.6%) to FY 2003 (8.2%). However, costs returned to pre–FY 2003 levels in the three years after the transfer (7.6%). In a national comparative study, Jacobs et al. (2010) estimated that in 2007 – 2008, Alberta spent $832 million for provincially funded mental health services, including $339.3 million for inpatient care (41% allocated to psychiatric hospitals), $134 million on physician visits, $19.2 million on outpatient and emergency room visits, $103.8 million on community mental health services, $102 million on addiction services, and $133.7 million for publicly funded pharmaceuticals. Depression-specific mental health service costs in 2007–2008 were analysed by Slomp et al. (2012), who reported that 208,167 patients made at least one health care visit for depression (5.9% of Albertans) and the total cost for depression treatment services was $114.5 million,

an average $550 per treated person. Per-person unit costs were highly skewed, with those in the first decile having an average cost of $29 and by the ninth decile, the cost per person rose to about $400. The highest 1% of patients cost $25,826 per person, mainly due to high inpatient costs.

Collectively, the published research findings reviewed above confirm that (a) there are longstanding issues and problems in the organization and delivery of Alberta-based addiction and mental health services that require creative solutions and careful strategic planning, and (b) it is timely to undertake a comprehensive empirical description of the provincially funded addiction and mental health specialty service system.

## 4.2 Approach and Scope of the Conditions Included in this Report

Like most jurisdictions around the world (Pirkis et al., 2007), Alberta's approach to determining strategic priorities and allocating resources for addiction and mental health services has traditionally emphasized (1) consultations, discussions, and priority-setting exercises that focus on balancing available budgets with the stated priorities of various interest groups, service providers, and government stakeholders, combined with (2) comparing services in Alberta with other jurisdictions thought to be providing good services (usually by conducting one or more environmental scans).

The approach taken in GAP-MAP marks a sharp departure from these historical practices. Our intention in conducting this project was to demonstrate the value of a planning approach that emphasizes *evidence-informed* discussions about priorities for organizing and delivering addiction and mental health services. The term "evidence-informed" refers to the need for system managers and policy makers to inform their strategic planning efforts by using reliable, current data that describe:

- the prevalence and severity of addictions and mental disorders in the community,
- levels of treatment need in various populations in the community and in service systems,
- what kinds of treatments and other services are routinely provided to various client populations at the provincial level and at the operational level of service zones, and
- financial resources received to deliver services in the community and the clinic.

**Thus, the scope of the project included data collected from:**

- a large, randomly sampled group of Alberta adults
- programs, services, and initiatives funded and operated by AHS and its subcontractors
- programs, services, and initiatives (exclusive of AHS) funded and operated by the Government of Alberta (GoA) and its subcontractors,
- programs, services, and policies that receive partial or full funding from the GoA for their mental health or addiction-related activities, but who are administered by a non-governmental organization.

**The project specifically excluded:**

- programs, services, and/or initiatives that incidentally[3] serve those with addictions, mental health problems and/or mental illness, including concurrent disorders, but which are not explicitly designed to serve these populations' needs.

In order to describe the costs of publicly-funded addiction and mental health services, we focused on cost estimates for the FY 2010–2011, as this reporting period was determined through consultation with Alberta Health and AHS to provide the most recently available information that was considered complete and reliable. Alberta Health grants allocated to the addiction and mental health area include all programs starting prior to or during 2010–2011. GAP-MAP also included programs such as Safe Communities, the Alberta Children's Mental Health Plan, as well as CASA Child, Adolescent and Family Mental Health programs; readers should note that some of these programs may extend to 2014 or 2015.

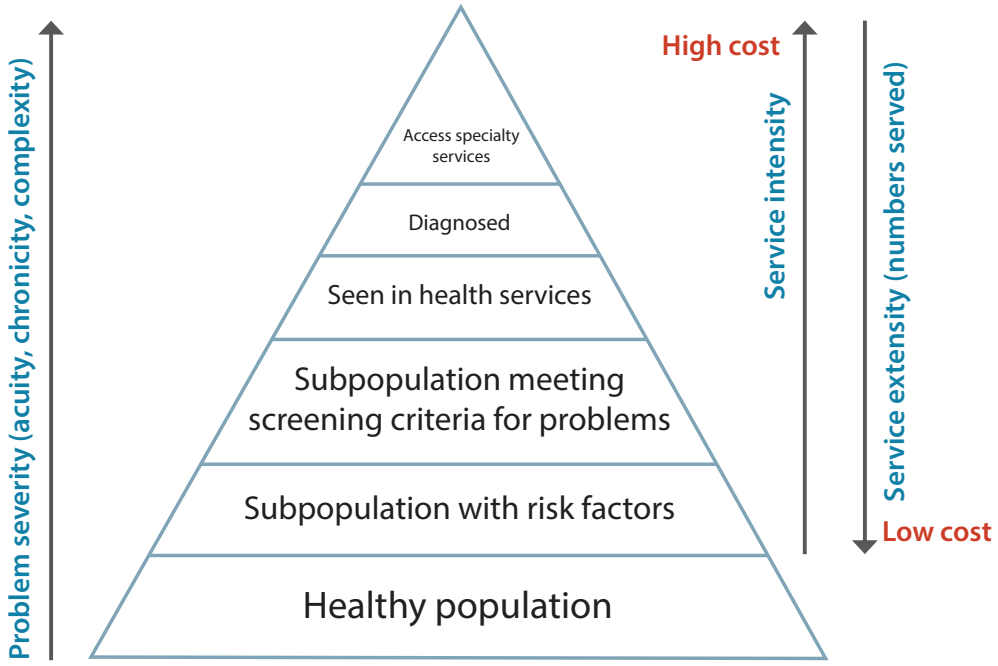
### 4.2.1 A Population Health Perspective

The scope of the addiction and mental health problems covered in GAP-MAP was deliberately intended to provide coverage across a broad range of problem severity. A wide scope was necessary, given that the parameters of the project were set to include the full spectrum of relevant programs, services and initiatives in Alberta, ranging from prevention through to engagement with specialty addiction and mental health care and aftercare services. This spectrum reflects the heterogeneity that exists in the general population along dimensions such as acuity (i.e., short duration and/or urgent risks such as accidents, overdoses) associated with an index addiction and mental health problem, chronicity (i.e., development or worsening of long term symptoms, such as depression), and complexity (i.e., degree of co-occurrence of the acute or chronic index addiction and mental health problems with health and social problems such as homelessness, unemployment, and other health issues; see Rush, 2010). System-level planning for addiction and mental health services increasingly recognizes that problem severity represents the cumulative impact of acuity, chronicity, and complexity, as well as efforts designed to prevent symptoms and/or index problems from occurring in the first place.

From this perspective, the distribution of problem severity of addiction and mental health problems across the general population, can be described using the population health pyramid concept. This concept is depicted in Figure 2 below. On this view, "The highest levels of severity are associated with the fewest number of people whose need is for the most specialized and/or intensive care. Those with lower levels of problem severity are more numerous and their needs can be met by less intensive or less specialized care more widely available in a variety of health and social service contexts, as well as more informal community and/or family networks" (Rush, 2010, p. 619). The bottom of the pyramid reflects people at low risk – the target population for primary and secondary prevention services. Increasingly, treatment system planning acknowledges that programs and services must be planned in such a way as to respond effectively and efficiently to this full spectrum of acute, chronic and complex needs (Rush, 2010).

[3] For example, many programs and initiatives funded and operated by the Alberta Ministries of Human Services and Education and their subcontractors provide services to clients who experience addiction and mental health problems. However, almost none of these programs and initiatives are specifically designed to change clients' addictive behaviours or mental health status. Instead, they do (incidentally) provide general supportive services (e.g., activities to improve housing, life skills, employment prospects, social support) for clients with addiction and mental health problems as well as many others who do not experience these problems. Section 5.2.2 and Appendix A provide further discussion of this issue.

Figure 2
Problem severity in relation to population size, service intensity/extensity and costs




The population health pyramid concept depicted in Figure 2 was used to structure the scope of conditions included in this project. Thus, GAP-MAP considered not only Alberta adults who were diagnosed with an addiction and/or mental health problem and who may have accessed specialty services for these conditions, but also adults in the general population who may not have been seen by a health care provider or speciality service, but who met screening criteria for common addiction and mental health problems. This scope was required in order to properly locate Alberta's systems of primary and specialty health care services for these conditions in relation to population need. This approach is also consistent with a large international literature demonstrating that only a relatively small proportion of people with addiction and mental health problems ever access specialty treatment for those problems (Andrews, Henderson, & Hall, 2001; Bijl & Ravelli, 2000; Wang et al., 2005; see Urbanoski, Rush, Wild, et al., 2007 for Canadian data on this point).

Throughout GAP-MAP, we used the term addiction problems with reference to misuse of licit or illicit substances, or engagement in substance-related behaviours, in a way that is excessive, uncontrolled, risky, or harmful to oneself or others. As shown in Table 1, for GAP-MAP's general adult population survey, diagnosed addiction problems were identified when respondents reported that they were told by a health professional that they have an addiction problem, as well as responses to a structured clinical screening instrument designed to detect alcohol problems. For GAP-MAP's survey of programs and services, addiction services were identified by relying on each program, service, or initiative's labelling of itself as attempting to change addictions and addictive behaviours. For GAP-MAP's costing analyses, we relied on the definitions of substance abuse and substance dependence proposed by the American Psychiatric Association for the Diagnostic and Statistical Manual (4th Edition), i.e., "maladaptive patterns of substance use leading to clinically significant impairment or distress".

Mental health problems were used in GAP-MAP with reference to a variety of common and rare mental disorders. As shown in Table 1, for GAP-MAP's general adult population survey, diagnosed mental health problems were identified when respondents reported that they were told by a health professional that they have a mental health problem, as well as responses to a structured clinical screening instrument designed to detect depression. For the purposes of GAP-MAP's survey of programs and services, mental health services were identified by relying on each program, service, or initiative's labelling of itself as providing activities to change mental health status. For GAP-MAP's costing analyses, we relied on the definition proposed by the American Psychiatric Association for the Diagnostic and Statistical Manual (4th Edition): "a mental disorder is a health condition characterized by significant dysfunction in an individual's cognitions, emotions, or behaviours that reflects a disturbance in the psychological, biological, or developmental processes underlying mental functioning." For the purposes of this project, treatment of underlying neurological disorders such as dementia and traumatic brain injury were not included as eligible mental health problems.[4] Table 2 provides an overview of the conditions that were included and excluded in the GAP-MAP project.

## 4.3 Toward a Needs-Based Planning Approach

Specialized addiction and mental health services and supports have traditionally been funded without comprehensive systems-level, needs-based planning models to inform decisions about how to allocate resources by the types of services that can be delivered, taking into account the service needs of various target populations. Funding for treatment programs is often determined on the basis of past-year budget allocations, which can perpetuate gaps and imbalances in services relative to actual population needs. Occasionally, new resources for addiction and mental health programs, services, and initiatives are made available as a result of government strategies or targeted funding opportunities (e.g., expanding services for youth or for people experiencing co-occurring addiction and mental disorders). However, there are many factors that underlie funding decisions (e.g., stakeholder advocacy, other government priorities) and new resources and funding may not be allocated equitably within a jurisdiction on the basis of population needs. It is widely acknowledged across Canada that a substantial gap exists between population needs for specialty addiction and mental health services and current availability (e.g., National Treatment Strategy Working Group, 2008). Unfortunately, due to a lack of comprehensive data on addiction and mental health treatment information systems and routine collection of data on population need for services, the exact size and nature of this gap is unknown across Canada.

An additional challenge is that planning efforts for addiction and mental health services and supports usually emphasizes specialty care, without taking into account the population health pyramid concept described in the previous section. Thus, strategic planning for addiction and mental health services often focuses on patients who are identified and/or diagnosed in health care systems and who may receive specialist addiction and mental health services. This is problematic, since only a relatively small proportion of people in the community who experience addiction and/or mental health problems seek assistance from the specialized sector of services that has been set up to provide treatment and support to people with these problems.

[4] This decision was made by GAP-MAP's project steering committee and was endorsed by Alberta Health.

From this broader perspective, needs-based planning models involve conducting systematic gap analyses to inform planning and resource allocation decisions for service systems. Using the population health pyramid concept, this includes a consideration of specialist addiction and mental health care as well as unmet need for services at the population level. Gap analyses take into account several critical elements in planning and decision making about how to optimally allocate resources across a system of services, including: (1) treatment service utilization and current capacity, and (2) estimates of population-based service delivery requirements (i.e., need). These elements form the basis for a population-level, needs-based gap analysis to inform resource allocation efforts, as depicted in Figure 3.

Figure 3
Elements of an idealized gap analysis


The relatively brief timeline allotted for GAP-MAP, and the fact that no previous work has attempted to comprehensively describe Alberta's system of publicly-funded addiction and mental health services in a detailed manner, precluded the GAP-MAP study group from executing the idealized gap analysis depicted in Figure 3 and creating a comprehensive needs-based planning model for the entire Alberta addiction and mental health service system. Instead, GAP-MAP sought to collect initial data that would lay the foundations for an Alberta needs-based planning approach for addiction and mental health services. Thus, this report describes (a) unmet need at the population level (i.e., how many Albertans need versus receive various types of services at different levels of severity?), (b) organization of services (i.e., what services are offered proportionally, by service tier, diagnosis, geography, etc.)?, and (c) capacity (i.e., how much capacity does the system have by clinical FTEs, psychiatrist access, waitlists, within vs. outside AHS direct services, etc.)? In addition, the project synthesized findings from these data sources to provide examples of how needs-based planning for addiction and mental health could be undertaken in the future.

[5] A relatively detailed needs-based planning model was executed as part of GAP-MAP for alcohol services, as a demonstration of the utility of this approach (see Chapter 7 of this report).

## 4.4 Corresponding Tables for Background

### Table 1

Definitions of addiction and mental health problems in each GAP-MAP data source

| GAP-MAP data source | Addiction problems | Mental health problems |
|---|---|---|
| General adult population survey | Diagnosed by a health professional<br>Met screening criteria for alcohol problems | Diagnosed by a health professional<br>Met screening criteria for depression |
| Survey of programs and services | Program/service self-identifies as providing care for addictions | Program/service self-identifies as providing care for mental health problems |
| Costing analyses | ICD 9 and 10 criteria for substance use disorder | ICD 9 and 10 criteria for mental disorders |

### Table 2

Included and excluded addiction and mental health conditions for GAP-MAP

| Included | Excluded |
|---|---|
| Substance misuse & substance disorders | Alzheimer's disease |
| Tobacco | Learning disorders |
| Alcohol problems & alcohol use disorders | Mental retardation/cognitive disabilities |
| Affective disorders (e.g., depression, mood disorders) | Developmental disorders (e.g., speech/ language disorders, Autism, ADD, ADHD, ODD, etc.) |
| Anxiety disorders | |
| Personality disorders | |
| Psychoses (e.g., schizophrenia) | |
| Eating disorders | |
| Gambling disorders | |
| FASD (prevention only) | |
| Mental health services for those with traumatic brain injury (Centennial Centre program only) | Medical treatment and physical or speech therapy of traumatic brain injury |

# 5 How the Research Was Carried Out

## 5.1 Population Survey

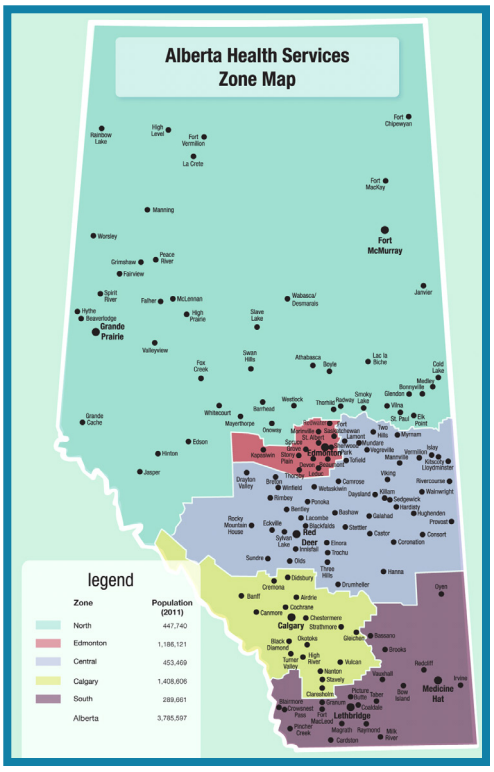
### 5.1.1 Overview

A key element of a gap analysis is to document the level of need that exists for the programs and services of interest. One way to estimate need is to describe the number and composition of those who seek and receive services (e.g., Slomp et al., 2009). This approach is valuable because it focuses on clients currently receiving services, and the use of administrative records can reduce biases associated with self-reported prevalence rates. However, it fails to capture the proportion of the population who would benefit from exposure to some form of service or programming but who do not access the program or service as a result of individual or system-level barriers. Consequently, we determined that a population survey of a randomly-selected, representative sample of Alberta adults would be an appropriate method to document the number and composition of Albertans who needed addiction or mental health services in the previous year, and who accessed those services within the previous year, as well as those who needed these services in the previous year but did not access them.

### 5.1.2 Sampling

The target population for the population survey was Alberta adults age 18 years or greater. The survey used a random probability design. Specifically, the 2012 Alberta Addiction and Mental Health Service Needs Opinion Survey employed a single-stage, stratified (region) cluster sample design. Alberta was divided into five regions based on AHS Zones, including Calgary, Edmonton, South, Central, and North regions. The adjacent figure provides a visual display of the regions.

In November and December of 2012, Ipsos Reid was subcontracted to conduct 6,000 computer-assisted telephone interviews (CATI) with randomly-selected Albertans aged 18 years and older. In order to ensure a random sample, most interviews were conducted via random digit dialing (RDD). RDD ensures that all interviewees are selected completely randomly, that is, all Alberta households have an equal chance of being contacted to complete the survey. In addition to RDD sampling, age targeted sampling was also used to ensure an adequate number of completed surveys among younger Albertans aged 18 to 34. The final data were weighted to ensure the sample's regional and age/gender composition reflects that of the actual Alberta population aged 18 years or older according to 2012 Alberta Health population estimates. In 42 cases where age data was not provided, respondents were grouped in the weight category with the highest frequency – that is the 45 to 64 years category.



### 5.1.3 Procedure

The survey protocol was approved by the University of Alberta Health Research Ethics Board.

#### Pilot Test

The survey procedures included a formal pilot test among 22 Albertans across the province on November 19th, 2012. After a review of the pilot test results (i.e., listening to interviews, reviewing interviewer feedback and analyzing initial results), a few revisions, jointly agreed upon by the University of Alberta and Ipsos Reid, were made to the survey instrument. The average interview length was 15.5 minutes.

#### Consent Procedures

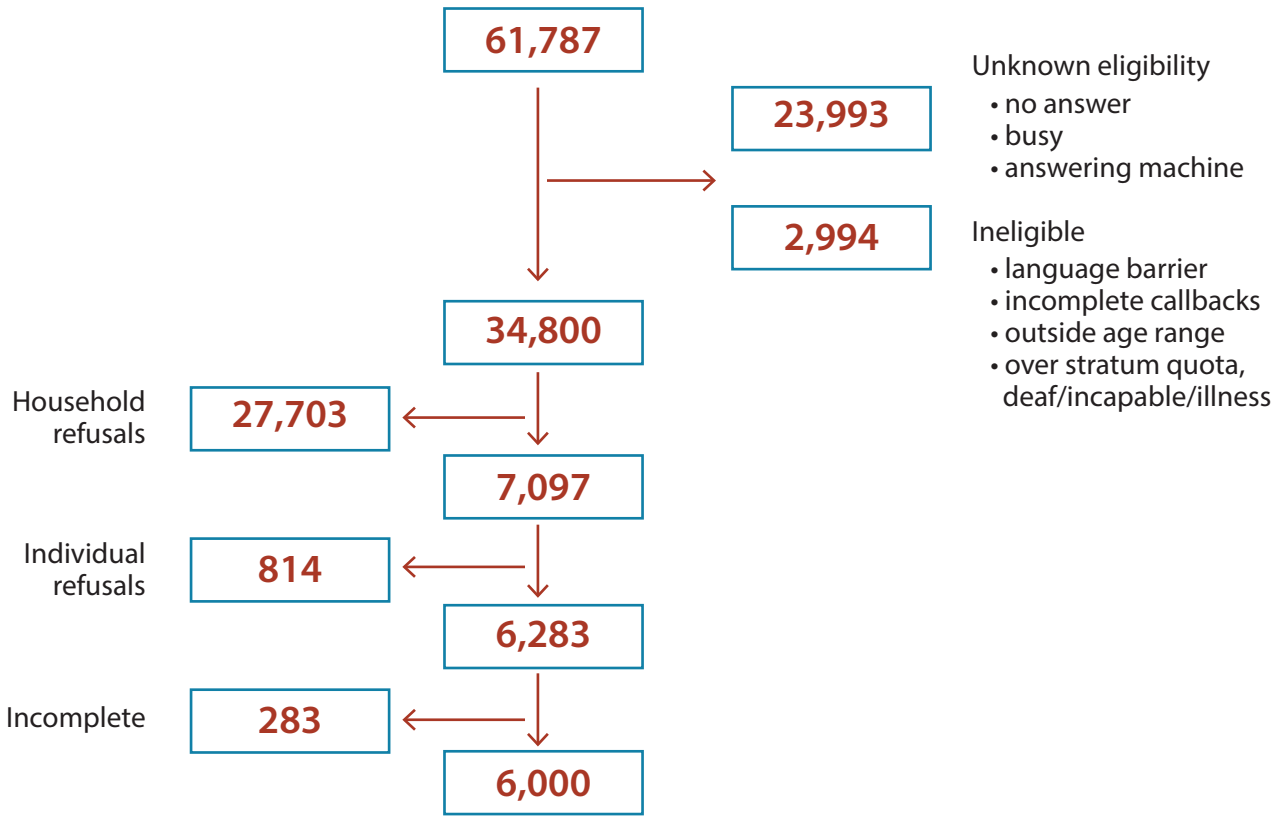
Potential respondents were told that they had an opportunity to participate in the Addiction and Mental Health Service Needs Opinion Survey on behalf Dr. Cameron Wild of the School of Public Health at the University of Alberta. Phone contacts were informed that 6,000 randomly selected Albertans were being interviewed about their opinions about and experiences with mental health and addiction services in the past year. Potential respondents were told that the survey was voluntary, that they could skip any questions that they did not wish to answer, and that they had the right to end the interview at any time. They were also informed that their names were not needed, that no one would be able to identify them personally, that their survey responses will be kept private, and that data would be stored in a locked cabinet at the University of Alberta and on secure servers at the University for five years. Finally, potential respondents were informed that they could be provided with assistance for any issues that arose during their participation via the Addiction and Mental Health 24-hour Helpline.

#### Response Rates

The disposition of the RDD phone calls is provided in Figure 4. During the sampling, a total of 61,787 telephone numbers were called. Eligibility to participate in the survey was unknown for 23,993 of these calls (11,789 did not answer, 11,769 reached an answering machine, and 435 lines were busy). A total of 2,994 calls were classified as ineligible for the following reasons: 1,045 reached households in which no English-speaking members answered, 1,357 were incomplete call-backs, 140 reached those outside of the eligible age range (18 – 65 years), 194 were over stratification quotas, and 258 reached people who were incapable of proceeding (e.g., being ill).

Of the remaining 34,800 calls, 27,703 were household refusals (e.g., hang ups, refusals to consider participation prior to determining whether a household member qualified for the survey). A further 814 individuals refused at the consent phase of the survey, and a final 283 failed to complete the entire survey. If household refusals are incorporated into the calculation of response rate, the survey response rate was 17.2%. However, it is reasonable to assume that the extent to which current addiction and mental health problems influence refusal rates is the most important influence on sample selection bias. From this perspective, this may be more likely to occur at the level of individual, rather than household, refusals. Thus, the best response rate estimate is probably the individual level rate, calculated as 84.5%. This individual level response rate is comparable to response rates obtained in other surveys of mental health services received by the Alberta general public (e.g., Esposito et al., 2007).

Figure 4
Disposition of random digit dialling telephone calls



### 5.1.4 Measures

Table 3 provides an overview of the domains assessed during the survey, as well as the number of items and variables computed or derived from the items administered.

The CATI procedures administered the following items and scales to respondents who consented to participate in the study.

#### Life Satisfaction

The Personal Wellbeing Index ("PWI;" International Wellbeing Group, 2006) consists of nine items assessing self-reported satisfaction across a variety of life domains, including health, personal relationships, community affiliation, and perceived safety. A composite PWI score was computed as the average of these domain-specific items, multiplied by 10 to produce a score that can range from 0 to 100, with higher scores representing greater perceived life satisfaction. Respondents who skipped one or more items, or who score 0 or 100 (indicating that they had responded to all of the items with either a maximum or minimum score) were not given a scale score.

#### General Mental Health Symptoms

The General Health Questionnaire-12 (GHQ-12; Goldberg & Williams, 1988) consists of 12 items assessing how frequently respondents have experienced a variety of symptoms (e.g., feeling under strain, losing sleep, lost confidence, feeling unhappy, etc.). Each item was rated on a scale ranging from 0 (more so than usual) to 3 (much less than usual). Items 2, 5, 6, 9, 10 , 11 were reverse scored and then all 12 items were summed, resulting in a composite score ranging from 0 through 36, with higher scores representing poorer self-rated mental health in the month preceding the survey. Respondents who skipped one or more items were not given a scale score.

#### Psychological Distress

The Kessler-6 instrument measures how frequently respondents have experienced six common symptoms of mental ill-health, (e.g., hopelessness, nervousness, and feeling sad) in the past four weeks on a scale ranging from 0 (none of the time) to 4 (all of the time; see Kessler, Andrews, Colpe, Hiripi, Mroczek, Normand, Walters, & Zaslavsky, 2002). A composite score measuring psychological distress was computed by summing all six items to produce scores ranging from 0 through 24 with higher scores representing greater psychological distress. Respondents who skipped one or more items were not given a scale score.

#### Physical and Mental Health Well Being

Two single-item measures, previously included in the Canadian Community Health Survey (Mental Health Supplement), were administered. One item assessed physical health status ("In general would you say your physical health is…"); the other item assessed mental health ("And, in general would you say your mental health is…"). Respondents used a five-point Likert-type scale to respond (excellent, very good, good, fair, poor).

## Diagnosed and Undiagnosed Addiction and Mental Disorders

Two items were used to assess diagnosed problems: "Has a health professional ever told you that you have an addiction?" and "Has a health professional ever told you that you have a mental disorder?" Two additional items were used to assess undiagnosed problems: "Do you think you have ever had an addiction problem that has not been diagnosed by a professional? By addiction problem I mean misuse of things like alcohol, street drugs, or prescription medications to get high, or engaging in behaviours like gambling, video gaming, exercise, sex, shopping, or work in a way that creates problems in life." and "Do you think you have ever had a mental health problem that has not been diagnosed by a professional?"

**For each of these items, participants used the following response scale:**

- Yes, in the past 12 months
- Yes, but not in the past 12 months
- Yes (only used if the respondent preferred not to specify the time period)
- No
- Don't know
- Prefer not to say/ do not wish to answer

**Responses to these questions were used to derive the following measures:**

- **Diagnosed addiction problems:** Proportion of respondents who reported that a health professional had told them that they have an addiction problem. Lifetime and past 12 month proportions were calculated; only past-year estimates are provided in this report.
- **Diagnosed mental disorder:** Proportion of respondents who reported that a health professional had told them that they have a mental disorder. Lifetime and past 12 month proportions were calculated; only past-year estimates are provided in this report.

## Depression

Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001) is a nine item measure that assesses symptoms of depression. Scores were recoded to reflect a scale ranging 0 (not at all) to 3 (nearly every day). Items are summed to create a composite score with a range of 0 to 27, with higher scores reflecting greater depressive symptomology. Those who skip one or more items were not given a scale score. To estimate prevalence rates, we used a cut score of 10 or greater on the scale to categorize respondents as meeting criteria for depression; those with lower scores were categorized as not depressed. This cut score has demonstrated 88% sensitivity and specificity for detecting major depression in international research (Kroenke et al., 2001).

## Alcohol Problems

Problem drinking was assessed using the Alcohol Use Disorders Identification Test (AUDIT), a 10-item self-report measure used to identify hazardous and harmful drinking (Allen et al., 1997; Conigrave et al., 1995; Reinert & Allen, 2002; Saunders et al., 1993). Full-scale AUDIT scores exhibit excellent sensitivity and specificity for detection of alcohol problems (Conigrave et al., 1995; Seppa, Makela, & Sillanaukee, 1995), and excellent reliability and validity (Maisto et al., 2000). Following standard scoring procedures, respondents exhibiting a score of 8 or greater were classified as "problem drinkers."

## Help-Seeking and Unmet Need for Services

To assess these constructs, GAP-MAP used a combination of items drawn from the Canadian Community Health Survey and the Perceived Need for Care Questionnaire ("PNCQ"), a validated instrument that has been previously used in community mental health surveys to assess help-seeking and unmet need for mental health services (Meadows et al., 2000). Participants were initially asked the following question stem, previously used in the 2011 Canadian Community Health Survey (Mental Health Supplement): "In the past 12 months, have you received [INSERT SERVICE] …because of problems with your emotions, mental health, or use of alcohol or drugs?" The question stem was repeated, inserting one of seven types of service each time. The types of services that could have been accessed and/or needed were adapted for GAP-MAP from a short form of the Perceived Need for Services Questionnaire (McNab et al., 2005), and included:

1. Information about these problems, treatments, or available services (information)
2. Medication or tablets to help you with these problems (medication)
3. Hospital care – overnight or longer – because of these problems (hospital care)
4. Counselling outside of a hospital including any kind of help to talk through your problems (counselling)
5. Help to sort out practical issues such as housing or money problems (social interventions)
6. Help to improve your ability to work, to care for yourself, to use your time or to meet people (skills training)
7. Help to reduce the risk of harm related to using drugs, such as needle exchanges, testing for diseases that can be passed on through drug use, and so on (harm reduction)

**For each of the 7 iterations of the question stem, respondents indicated their service use and unmet needs for care using a response scale with the following options:**

- Yes, in the past 12 months
- No, but I think I needed this kind of help in the past 12 months
- No, I did not need this kind of help in the past 12 months
- Don't know
- Prefer not to say/ do not wish to answer

Note. Participation in self help groups were excluded from the modified PNCQ we used.

Participants endorsing the "Don't know" and "Prefer not to say/do not wish to answer" responses were coded as missing for analytic purposes.

When participants indicated that they had received one or more of the seven services in the past 12 months, the survey funnelled them to a set of questions assessing adequacy of service provision. Specifically, participants were asked: "Do you think you got as much [INSERT CORRESPONDING SERVICE TYPE] as you think you needed?" Response options were: "Yes", "No", "Don't know", and "Prefer not to say/do not wish to answer." Participants endorsing the "Don't know" and "Prefer not to say/do not wish to answer" responses were coded as missing for analytic purposes.

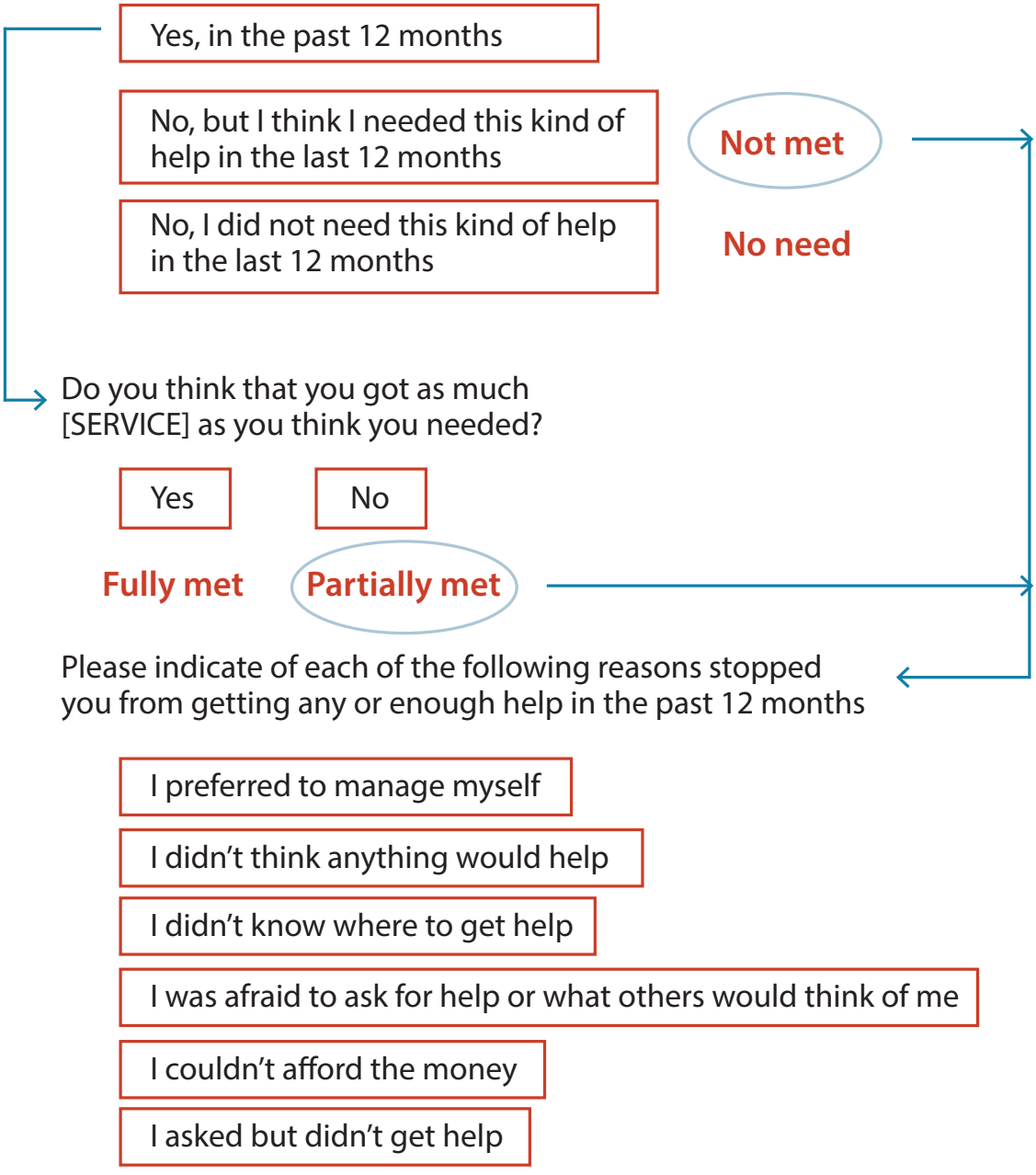
Finally, when participants indicated that they needed but did not receive one or more of the seven services in the past 12 months, or who indicated that they did not receive as much help as they needed for one or more of the seven services, the survey funnelled them to a set of questions asking them to "Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months." Respondents answered "yes" or "no" to each of the following response options:

- I preferred to manage myself
- I didn't think anything would help
- I didn't know where to get help
- I was afraid to ask for help or what others would think of me
- I couldn't afford the money
- I asked but didn't get help

Figure 5 summarizes the core survey items and skip patterns used by GAP-MAP to assess help-seeking and unmet need for services.

Figure 5
Survey items and skip patterns used to assess help-seeking and unmet need for services

In the past 12 months, have you received [SERVICE] because of problems with your emotions, mental health, or use of alcohol or drugs? [information, medication, hospital care, counseling, social intervention, skills training, harm reduction]



Using these items, we used the approach reported by Meadows et al. (2000) to calculate the following variables:

- **No need for services:** proportions of respondents who indicated that they did not need one or more services in the past 12 months. Proportions were calculated individually for each of the seven services and also across all service types.
- **Not met (unserved):** proportions of respondents who indicated that they needed one or more services, but did not receive it/them in the past 12 months. Proportions were calculated individually for each of the seven services and also across all service types.
- **Partially met (underserved):** proportions of respondents who indicated that they received one or more services in the previous 12 months, but who indicated that they did not receive as much help as they needed for services received in the past 12 months. Proportions were calculated individually for each of the seven services and also across all service types.
- **Fully met:** proportions of respondents who indicated that they received enough help as they needed for all services received in the past 12 months. Proportions were calculated individually for each of the seven services and also across all service types.

Following the procedures described in Meadows and colleagues (2000), we derived three additional variables from respondents' scores on these items:

- **Any perceived need:** proportions of respondents who reported needing one or more services in the past 12 months (i.e., those who indicated that service needs were not met, partially met, or fully met). Proportions were calculated individually for each of the seven services and also across all service types.
- **Received services:** proportions of respondents who reported receiving one or more services in the past 12 months (i.e., those who indicated that service needs were partially or fully met). Proportions were calculated individually for each of the seven services and also across all service types.
- **Unmet need for services:** proportions of respondents who reported that their service needs were either not met or only partially met. Proportions were calculated individually for each of the seven services and also across all service types.

## Sociodemographics

Respondents were asked to provide information on their age, sex, employment status, educational attainment, marital status, the number of children less than 12 years of age living in their household, and the number of youth aged 12-17 living in their household.

### 5.1.5 Description of the Sample

The weighted sample (see Table 4) included 3,015 men and 2,985 women, with 7.4%, 38.1%, 11.8%, 32.0%, and 10.8% representing the South, Calgary, Central, Edmonton, and North AHS Zones, respectively. The sample respondents were 64.1% married (including both legal and common-law marriages), 8.9% separated or divorced, 4.4% widowed, and 22.2% single (never married). When asked about their highest level of education, 6.9% reported less than high school graduation, 14.2% reported high school graduation, 20.8% reported some postsecondary education but without completion of a degree, diploma, or certificate, 22.5% reported completion of a college or technical school diploma, and 25.2% reported completion of a university degree with or without additional higher education, such as a graduate degree. About half (56.1%) of the sample reported that they were employed 30 hours a week or greater, while 9.5% indicated part-time employment less than 30 hours per week, 14.9% indicated that they were retired, 5.9% were students, 3.7% reported unemployment, and 3.4%. indicated that they were not working due to disability. With regard to youth, 68.8% and 84.5% of the sample indicated that there were no children less than 12 years of age or 12-17 years living in their household, respectively. Table 4 presents key descriptive statistics for the sample.

## 5.2. Mapping Provincially Funded Programs, Services, and Initiatives

### 5.2.1 Overview

In order to systematically describe the number, types, and costs of publicly funded addiction and mental health programs, services, and initiatives operating in the province, it was necessary to initially identify and map relevant activities across Alberta. Because no comprehensive listing or inventory of Alberta-based publicly funded specialty addiction and mental health programs, services, and initiatives was available prior to GAP-MAP (either from AHS or from the GoA), a special sub-project was required to map these activities across the province in order to provide comprehensive information on services and managers for GAP-MAP's Survey of Programs and Services.

The scope of the mapping sub-project included all AHS activities providing direct care for addiction and mental health problems. In addition, third-party programs and services receiving AHS funding via contracts to provide programs and services were identified and included. Finally, beyond AHS direct and contracted services, all GoA Ministries providing direct services, block grants to service organizations, or funding for addiction and mental health initiatives were identified and included in GAP-MAP. Results of this mapping exercise are contained in the database accompanying this report, which provides, to our knowledge, the first reasonably complete and comprehensive listing of Alberta-based specialty addiction and mental health programs, services, and initiatives.

### 5.2.2 Inclusion and Exclusion Criteria for Determining Eligible Programs, Services, and Initiatives

GAP-MAP focused on publicly-funded specialty addiction and mental health programs or services offered to residents of Alberta. Thus, a program, service, or initiative was eligible for inclusion in GAP-MAP if it (a) explicitly identified individuals with an addiction or mental health problem (or both), or people at risk of

addiction or mental health problems, as its target population; and/or (b) explicitly intended to prevent, treat, or ameliorate the effects of an addiction or mental health problem; or (c) both a and b (see Table 5). As such, GAP-MAP excluded programs, services, or initiatives that incidentally serve those with addictions, mental health problems and/or concurrent disorders, or those who may be at risk for addiction or mental health problems, but which are not explicitly intended to target these populations' needs.[6]

In order to operationalize the inclusion and exclusion criteria above for any particular program, service, or initiative, we devised a series of standardized screening interview questions to assess eligibility for inclusion in GAP-MAP. Eligible programs, services, and initiatives were identified when AHS and/or GoA representatives were able to answer affirmatively to one or more of the following questions:

- Does the program, service, or initiative explicitly target people because they are at risk of developing an addiction or mental health problem?
- Does the program, service, or initiative explicitly intend to impact one or more effects caused by an addiction or mental health problem?
- Does the program, service, or initiative explicitly intend to impact one or more of the potential determinants of an addiction or mental health problem for the stated purpose of reducing the prevalence of the addiction or mental health problem?
- Does the program, service, or initiative explicitly intend to treat or eliminate the addiction or mental health problems of its target population?

### 5.2.3 Mapping Eligible AHS Activities (Direct and Contracted Services)

### AHS: Consultation Process for AHS Direct Services

The procedure to identify eligible addiction and mental health programs offered or funded by each AHS Zone began by collating lists of programs and services available from multiple administrative data sources within AHS, including services using the HoNOS outcome assessment tool, ASSIST, the AHS website, and lists or reports that were created for alternate purposes. These lists were cross referenced and consolidated into a preliminary listing of AHS direct programs and services in each Zone. Next, GAP-MAP staff engaged in over 25 face-to-face consultative meetings with each of the AHS Zones (Calgary, Edmonton, North, Central, and South) and also with staff representing the AHS provincial portfolio to individually review each Zone's array of programs, services, and initiatives.

[6] During the mapping subproject, many stakeholders expressed concerns about the limited scope of the programs, services, and initiatives included in GAP-MAP. For example, concerns were heard from two GoA Ministries (Human Services, Education) about how the GAP-MAP inclusion/exclusion rules may not accurately reflect the full breadth of mental health and addiction services as perceived by key stakeholders in this system. Please refer to Appendix A for a detailed review of these concerns.

# 5 How the Research Was Carried Out

During the consultation process with each Zone, GAP-MAP staff provided further detail about the project's eligibility criteria, and oriented AHS staff from each Zone to the task of reviewing GAP-MAP's preliminary listings of programs and services. Over a five-month period, Zones were asked to review their listing of AHS programs and services and contracted programs and services in order to ensure completeness and accuracy, and to describe the administrative organization of the programs and services. Some Zone representatives revised their lists independently, while others used a guided process with the GAP-MAP study group and added contact information for respondents assigned to complete GAP-MAP's Survey of Programs and Services. Throughout this process, the GAP-MAP study team identified substantial inconsistencies and inaccuracies within the AHS source databases used for formulating the preliminary lists of programs and services, as well as the issue of a lack of standardization within and across Zones regarding the definition of discrete programs or services. Each Zone was advised to identify their activities by considering (i) the names currently in use, and (ii) the activities that naturally occur together to serve a common purpose or address a particular client base. AHS personnel involved in this task were reminded that an additional purpose of the listing was to create a permanent registry that could be used by administrators and consumers to search for needed services. Some Zones reported informally that the process of reviewing and, in some cases, renaming, programs and services was helpful for creating greater consistency across the Zone in how programs and services are labelled.

The GAP-MAP study group made all revisions to each Zone's list of eligible programs and services requested by AHS, clustered programs along facility, parent program, or, in some cases, regional or managerial lines, and returned the lists to AHS Zone representatives for final approval. In the course of finalizing all Zone listings, decisions about the appropriate level of aggregation often required further discussion and consultation within Zones and with the GAP-MAP study team. Several principles guided this final mapping phase:

1. As much as possible, the lowest level of service aggregation was encouraged that was consistent with the actual administration of activities, taking into consideration available budget information, allocation of staff (e.g., if job positions were explicitly split across programs, services, or delivery sites, an assumption was made that these were functionally clustered), managerial oversight, and potential respondent burden.
2. When a program/service was identified as operating in exactly the same way at multiple locations, a single listing was used to represent all locations.

Examination of GAP-MAP's provisional list and input from Zone consultations revealed that AHS currently does not use a standardized nomenclature to define its addiction and mental health programs and services across the province (i.e., each AHS Zone defines what it regards as relevant programs and services using different terms). Despite considerable Zone-level variability in the organization and classification of programs and services, GAP-MAP consultations discovered three ways that Zones typically organize relevant care:

- As a set of varied programs/services offered within a particular facility (e.g., psychiatric services and units within the University of Alberta Hospital);
- As a single "parent" program offered at different locations throughout a sub-region within a Zone

(e.g., addiction counselling for adults in the North Zone coordinated out of the High Prairie AHS office, but also offered in other locations within that Zone)

- a hybrid of these two models.

In order to accommodate significant Zone-level variability in service organization, the mapping subproject identified two levels of analysis to facilitate administration of the Survey of Programs and Services (see Table 6). A cluster was defined as a higher level organization of programs, services, and activities along thematic or sub-regional lines, often administered by senior AHS managers. Within service clusters, we identified and mapped the individual programs and services offered by AHS, along with line-level managers administering these activities.

As shown in Table 6, the urban AHS Zones identified very specific clusters based primarily on the program or service's purpose. In contrast, the rural Zones tended to cluster programs and services around large sub-regions within the Zone, including programs and services that were offered in multiple satellite locations.

## Process for Identifying Eligible AHS Contracted Services

To identify eligible AHS contracted services, a comprehensive list of contracts for funded services was also obtained from the AHS central financial database and cross referenced with funded programs and services enumerated by each Zone. GAP-MAP consultations determined that the financial database had the greatest likelihood of providing the most consistent and comprehensive information for the 2010–2011 FY and was therefore used as the primary source for the listing of contracted services.

As shown in Table 7, review of AHS administrative data identified 415 contracts provided to 306 unique vendors. The GAP-MAP study group reviewed the brief summary statement about each contract's scope as provided by AHS and sought additional information as necessary (e.g., by making additional queries) to confirm eligibility in the project. Each contract was individually reviewed for eligibility in GAP-MAP and was categorized as being eligible for (a) participation in the survey of programs and services (n = 101 contracts provided by 79 unique vendors), (b) inclusion in the Costing Analysis (n = 156 contracts), and (c) inclusion in a supplementary analysis of all contracts identified by AHS as part of their addictions and mental health programming (N = 415 contracts).

Contracts were excluded from GAP-MAP's costing analyses and the survey of programs and services if they were primarily associated with activities not in the scope of the current project (e.g., contracts for generic housing and supported living, peer support, family interventions) intended to serve a broad target group that included people with an addiction or mental health problem but also people with people with other kinds of disabilities or challenges. Using this criterion reduced the number of contracts eligible for the costing analysis by 62.4%, from 415 to 156.

Contracts were excluded from GAP-MAP's survey of programs and services if the vendor was a solo practitioner or single individual, or if surveying the vendor would require additional levels of

administrative approval or review incompatible with project timelines (e.g., vendors providing school-based services that would have required additional approvals from the education system to contact). These last two criteria were introduced as a result of practical considerations related to the project's relatively short timelines. Using this criterion reduced the number of contracts eligible for the survey of programs and services from 156 to 101 contracts awarded to 79 unique vendors.

The complete listing of 415 AHS contracts was coded using the data elements described in Table 8.

### 5.2.4 Mapping Eligible GoA Programs, Services, and Initiatives

GAP-MAP staff engaged in over 20 consultative meetings with eight Government Ministries (Health, Human Services, Education, Justice and Solicitor General, Municipal Affairs, Aboriginal Relations, Culture, Enterprise and Advanced Education), the Alberta Gaming and Liquor Commission ("AGLC"), and other stakeholders (e.g., the Mental Health Patient Advocate office). These consultations revealed that the GoA currently does not use a standardized nomenclature to define its addiction and mental health programs, services, and initiatives across the province (i.e., each ministry defines what it regards as relevant programs, services, and initiatives using different terms). Also, due to wide differences across each ministry with respect to quality and completeness of administrative data describing potentially relevant activities, as well as substantial variability within Ministries' capacity to access relevant information, the process GAP-MAP used to identify allocations from ministry sources for addiction and mental health services was complex and was individually tailored to each GoA ministry.

The procedure to identify eligible addiction and mental health programs, services, and initiatives offered or funded by the GoA began by presenting a description of GAP-MAP's project's scope and aims to Assistant Deputy Ministers (ADMs) within each GoA ministry. ADMs then provided contact information for executive directors and directors who are responsible for branches relevant to the project. Those contacts were then asked to assemble a group of managers or other staff who would be knowledgeable about relevant initiatives, programs or contracts. GAP-MAP staff met with key stakeholders from each ministry to provide further detail about GAP-MAP's eligibility criteria and the project's need to access relevant administrative data. These meetings initiated discussions about what information would be available from each ministry and the procedures that would be necessary to collect that information. Table 9 describes the disposition of these consultations for each GoA minsitry.

Information maintained by different GoA branches within each ministry differed widely with respect to the type and completeness of information available and the accessibility of that information for FY 2010–2011. In some cases only paper records were available, which required a file-by-file review to extract information. In other cases, branches maintained one or more electronic databases, which reduced the time and effort to provide the requested data. In all cases, when GAP-MAP staff determined that a GoA ministry offered programs, services, or initiatives that met the study inclusion criteria, a standardized data capture form was used to record relevant ministry administrative information. Table 10 provides a description of the data elements used in this data capture form.

## 5.2.5 Database Development

As a final step in the mapping process, a comprehensive database was created to summarize all eligible AHS (direct and contracted) and GoA programs, services and initiatives that met the project inclusion criteria. This database is available as a separate deliverable for the project. Table 11 describes the content of this database.

The database combines information from three sources (presented separately): (1) the finalized listings of direct AHS programs and services from all five Zones; (2) the AHS list of contracted addiction and mental health services (including those excluded from the GAP-MAP costing analysis and the survey of programs and services); (3) a compilation of expenditures reported by the Ministries of Culture, Education, Health, and Human Services.

**Where available, the following information is included for AHS contracted services:**

- Zone
- Cluster
- Program or Service Name
- Site/Facility
- Cluster Manager
- Cluster Manager Email
- Program/Service Manager
- Address - Community
- Address - Street
- Address - Postal Code

**Where available, the following information is included for AHS contracted services:**

- Zone
- Program or Service Name
- Site or Facility (Vendor)
- Vendor Administrator
- Vendor Administrator Email
- Community
- Address - Street
- Address - Postal Code
- Phone
- Included in GAP-MAP Survey 2012–2013
- Contract Number
- Requestor
- Annual Value
- Contract Start Date
- Contract End Date (original)
- Fully Executed Expiry Date

**Where available, the following information is included for Government contracts, grants and funding agreements:**

- Zone/Region
- Ministry
- Contract Cluster
- Program or Service Name
- Site or Facility
- Community
- Allocation
- Start Date
- End Date
- Contract Number

## 5.3 Survey of Programs and Services

### 5.3.1 Overview

Another key element of a gap analysis is to acquire data documenting the types of relevant services, programs, and initiatives that are offered in a jurisdiction. GAP-MAP's survey of provincially funded addiction and mental health programs and services identified during the mapping subproject described in the previous section allowed us to estimate the numbers, types, and characteristics of programs and services provided to the Alberta population.

GAP-MAP developed, pilot tested, and implemented a cross-sectional, web-based survey of programs and services to describe the organization, funding, and clinical capacity of publicly funded programs and services, assess their target populations, and measure activities they provided for clients. Invitations to complete the survey were delivered to all AHS direct and AHS contracted services identified during the mapping subproject (see section 5.2).

### 5.3.2 Survey Development and Design

Early consultation with AHS Zone representatives revealed that many programs and services operate as a group and may not be able to disentangle budgets and staffing for individual service activities. In addition, concerns were expressed to the GAP-MAP study group about the burden faced by managers if considerable information was required for every program and service. Thus, to facilitate collection and reporting of the most accurate information available and to allow for distribution of the workload, the survey was separated into two parts, both delivered via an online interface.

Part A of the survey was designed to capture information about a related cluster of programs/services, including the organizational structure, budget and provincial allocations, clinical personnel, continuous improvement needs, and potential for participation in research. This section was designed to be completed by the manager overseeing the cluster of programs/services who would have access to financial and human

resource information. Part B of the survey was designed to capture more detailed information about each individual program or service. A single response was allowed for a program or service that was functionally the same, despite being offered in multiple locations. This was primarily used to reduce respondent burden (in some cases, a program manager would have had to complete a survey for 10 or more locations at which a single program was offered, providing almost identical responses each time). Note, however, that a consequence of this choice is that caseload and waitlist information for that Part B survey conflates information across multiple locations, making it difficult to identify variations in service usage and availability.

For AHS contracted services, review of the contract information provided by AHS resulted in GAP-MAP identifying 79 unique vendors deemed eligible to participate in the survey.

### 5.3.3 Survey Measures

The survey collected organizational information, specialization in terms of populations or problems of focus, classification of activities, provision of specific activities, record keeping and assessment, program/service limitations, use of assessments, annual program/service utilization and capacity, and waitlists (see Table 12).

The measures used in the survey were primarily derived for this study through review of similar instruments used to describe addiction and mental health service systems (e.g., Texas Christian University [TCU] Survey of Structure and Operations, TCU Organizational Readiness for Change, and the BC Alcohol and Other Drug Monitoring Project Addiction Treatment Survey, 2009).

For AHS direct services, senior managers were asked to complete Part A information about the cluster of services and programs under their governance, and these individuals were asked to delegate Part B respondents to provide information about characteristics of individual programs and services.

For AHS contracted services, a slightly modified version of the survey was used. Specifically, each vendor was asked to complete a Part A survey with reference to their specific AHS contract, and to complete a single Part B survey encompassing all contracted actiivities, with an additional question added to describe the complete number of programs and services offered by the agency.

### 5.3.4 Recruitment

Leading up to the survey launch date, the rationale for conducting a survey of programs and services, as well as information about survey logistics was shared in a variety of venues within AHS. A few days prior to the survey's launch, the Executive Director for Addiction and Mental Health in each AHS Zone disseminated a notice of support for participating in the Survey and approval for devoting work time for survey completion to all managers and staff relevant to the project. In addition, each Zone sent an electronic notice to all funded agencies announcing the Survey and encouraging participation. AHS contracted vendors were informed about the survey by AHS; this was followed up by a direct invitation to complete the survey by the GAP-MAP study group.

For each survey launch, an email invitation was distributed to all of the managers assigned to complete one or more Part A surveys. Each Part A respondent received instructions for participating, and a unique link, enabling tracking of responses, to access the survey. A generic link was also provided to provide an opportunity for delegation, if necessary. Part A respondents were also asked to consult the listing of programs/services for their Zone and distribute a second email to delegated Part B respondents. The email template provided to Part A managers include instructions and a generic link to the online survey. Part A and Part B surveys could be completed concurrently and respondents were initially encouraged to complete the surveys within a two-week time frame. Additional time, and reminders by supervisors and the GAP-MAP study team, were provided to optimize participation rates.

### 5.3.5 Procedure

Launch of the survey was staggered to pilot test the instrument and procedures (in the Edmonton AHS Zone) prior to roll-out across the province, and to ensure adequate resources for managing the data collection process. The remaining Zones were rolled out in the following order: Central, Calgary, North, South. The launch in Calgary and South Zones was delayed due to exigent circumstances that required the primary attention of the managers in those regions. Surveys were completed between April, 2013 and September, 2013.

Participants used a link to access the survey. They were first directed to indicate the clusters (Part A) or programs and services (Part B) about which they would be responding. The survey then automatically personalized the content to reflect those specific referents throughout. When more than one referent was identified, the set of questions looped or repeated sequentially for each referent. Paper versions of the survey and Excel templates for budget and personnel or admissions and waitlist information were provided upon request. The GAP-MAP study group was available by email or phone to provide clarifications and support as needed.

### 5.3.6 Description of the Sample

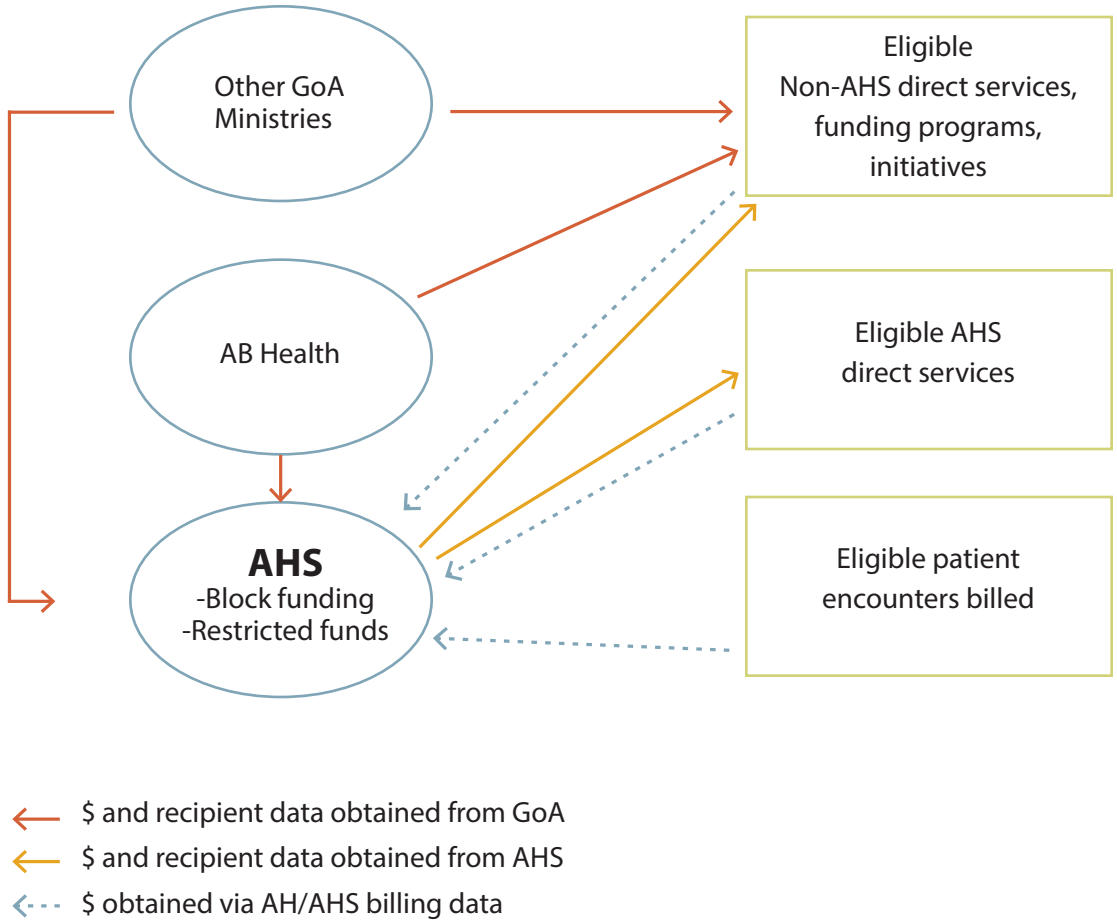
As shown in Table 13, overall response rates for Part A of the survey were 70.4% for AHS direct services and 39.4% for AHS contracted services. For Part B surveys, the overall response rate was 50.7%. Lower response rates for Calgary and South Zones are accounted for by a natural disaster that occurred in southern Alberta during GAP-MAP field work; this disrupted many routine AHS activities.

## 5.4 Economic (Costing) Analyses

### 5.4.1 Overview

A final key element of a gap analysis is to document the level of resources that have been allocated to addiction and mental health programs, services, and initiatives. Figure 6 and Table 14 display the different sources of data that were acquired and combined for the costing analyses, including: AHS block and restricted funding for direct and contracted services, billing data, and contributions from Health and five other GoA ministries to fund non-AHS direct services, funding programs, and other eligible initiatives.

Figure 6
Overview of data sources for GAP-MAP costing analyses



## 5.4.2 Data Sources and Procedures GoA

### Programs and Funding Allocations

When initial consultation with each GoA ministry indicated that they had funded one or more programs, services, or initiatives that met the inclusion criteria in FY 2010–2011 or more recently, we arranged follow up consultations with ministry personnel to secure access to appropriate administrative documents that described them. We systematically reviewed all the program files or project lists provided by each ministry and extracted relevant project information using a standardized data capture form developed for this study. The standardized form included data fields describing: program site, on-site managers' information, total funding, start date/end date, and demographic characteristics of the population targeted for funding. In cases where detailed program files were not available, some authorities provided us with a list of programs and their funding allocations. Readers should note that the GoA data sources outlined in Table 15 include data on addiction and mental health prevention, promotion and wellness activities captured via grant funding across programs and initiatives funded from five different Ministries.

### Alberta Health Services Direct Services

Patient record data constituted another main source of cost information for this report. Five administrative data sources maintained by AHS were used to compile relevant cost information, including:

- AHS Repository, Practitioner Claims Database (2009–2010)
- AHS Repository, Discharge Abstract Database (2010–2011)
- AHS Repository, Alberta Ambulatory Care Reporting System (2009–2010)
- Alberta Regional Mental Health Information System (2010–2011)
- Addiction System for Information and Service Tracking, Treatment Service Research View (2010–2011)

### Alberta Health Services Contracted Services

To identify AHS contracted services, a comprehensive list of contracts for funded services was also obtained from the AHS central financial database and cross referenced with funded programs and services enumerated by each Zone. As described in section 5.2.3, 156 of 415 (38%) of AHS vendors were eligible for the costing analyses.

## 5.4.3 Patient Billing Data – Methodology for Costing Estimates

Provincial costing estimates include persons with home addresses from outside the province or persons whose addresses were unknown. [7] The following cost estimation methods were reviewed and approved by AHS Primary & Community Care. All data extraction was performed by this unit; however, integration and interpretation of the costing data were performed by the GAP-MAP study group.

[7] Readers should note that methods of estimating costs are under review by AHS. Consequently, the costing estimates provided in this report may change as methods are refined.

**For the estimation of costs, two principles were used:**

1. costs for each sector of the patient service continuum were calculated separately, except where the sector shared data sources (e.g., Inpatient/Psychiatric Facilities and Outpatient/ER)
2. addiction and mental health cases from each data source were determined by determining whether the primary diagnosis (except for practitioner claims) met GAP-MAP inclusion criteria.

## Physician Claim Costs

A two stage procedure was used to calculate costs for these services. First, administrative data were queried to identify Albertans who consulted a physician between April 01, 2009 and March 31, 2010 for mental health problems. Practitioner claims data includes three possible diagnostic fields, with no field identified as containing the primary diagnosis. Typically, mental health physician records are extracted using ICD-9-CM codes 290-319 plus selected V-Codes, by examining each of the three available diagnosis fields. To code the diagnoses fields for GAP-MAP inclusion, the same method was used to match GAP-MAP diagnosis code criteria. ICD codes that met GAP-MAP inclusion criteria are provided in Table 16. The first diagnosis field was searched for a matching GAP-MAP code, and when a match was found, the field was populated with the diagnosis. When no match was found in the first diagnosis field, the same procedure was carried out on the second diagnosis field, and then the third. Only records with a populated GAP-MAP code field were included in the analysis. Second, we reviewed each record in the physician claims dataset to determine the associated claim amount submitted by the physician according to Alberta fee schedule information. These data also include shadow billing information, although it is likely that some of that information is missing. Costs were calculated by summing the total claim amount. Our analyses of these data calculated costs for different individuals across ICD codes, mean cost per individual, number of visits, and cost per visit. These results are presented by Zone, and for Alberta, using both the Zone of the provider (physician) and the home address of the recipient.

## General and Psychiatric Hospitalization Costs

Costs for inpatients receiving services from these service providers were computed using a three-step method. First, all individuals with a most responsible diagnosis of an addiction and/or mental health problem upon discharge from the hospital from April 01, 2010 to March 31, 2011 were identified. ICD codes that met GAP-MAP inclusion criteria (see Table 16) were coded into a new field (GAP-MAP = 1). All records that met the GAP-MAP inclusion criteria were selected for analysis. Second, each inpatient discharge record was grouped using the CIHI Case Mix Grouper (CMG) methodology that classifies acute inpatient cases into clinically relevant and statistically homogeneous groups. Finally, using CMG tables for Alberta provided by AHS Finance, the average cost of each CMG (cost per case) was identified, and then multiplied by the number of cases with the same CMG. These results are presented separately for acute hospital and psychiatric hospital inpatients, and include total costs, number of individuals treated, cost per treated individual, number of patient days, and cost per patient day. These results are presented by Zone using both the Zone of the provider (hospital) and the home address of the recipient.

## Ambulatory Care Costs

Costs for these services were grouped with the Alberta-developed Ambulatory Care Classification System (ACCS) grouping classification, provided by AHS Finance. Albertans who accessed emergency room or outpatient services for an addiction and/or mental health problem between April 1, 2009 and March 31, 2010 were extracted. ICD codes that met the GAP-MAP inclusion criteria (see Table 16) were coded into a new field (GAP-MAP = 1). Records that met the GAP-MAP inclusion criteria were then selected for this analysis. Total costs were calculated by identifying the average cost of each ACCS grouping classification, and multiplying the average cost by the number of cases with the same grouping classification.

## Community Mental Health Clinic Costs

Costs for these services were computed for Albertans who accessed these services between April 01, 2010 and March 31, 2011 and who had an appointment during the fiscal year. This method is different from previous methods for calculating community clinic costs, as individuals are typically included if they have an open or active enrolment at the community clinic (individuals can enrol in a program during the fiscal year or have an active enrolment from previous fiscal years). In the past, appointments (events) were included in the costs if they occurred during the fiscal year and were not linked to specific clients. The community mental health clinic data have been modified to ensure that diagnoses are included with the records and that the data reflects client events only. Costing of clinic visits was computed using the 2010 budget information provided by AHS Finance. All community mental health budgets were summed to produce a total dollar amount. This total amount was then divided by the total number of events regardless of diagnosis to return a cost per visit. Patient records were then selected if the GAP-MAP inclusion criteria were met (using the new field created to code GAP-MAP diagnoses). Using the base cost of an overall mental health visit, costs were calculated based on the number of visits in the province and by Zone. Costs vary only depending on the number of visits in the Zone, because the cost per visit remains the same.[8]

[8] Caution must be exercised when interpreting results from community mental health clinics, since 12% of patient records do not have a corresponding diagnosis attached to the file. Consequently, results reported in GAP-MAP may underestimate the true costs.

## 5.5 Corresponding Tables for How the Research Was Carried Out

### Table 3

Overview of items, measures and derived variables for GAP-MAP general population survey

| Measurement Domain | Number of Items | Derived Variables |
|---|---|---|
| Life satisfaction | 9 | Composite score |
| Psychological distress | 6 | Composite score |
| General mental health symptoms | 12 | Composite score |
| Diagnosed/undiagnosed addiction and mental health problems | 2 | Diagnosed addiction problems<br>Diagnosed mental health problems<br>Any addiction problems<br>Any mental health problems |
| Help seeking and unmet need for services | 7 core items<br>Up to 14 additional items, depending on initial responses | No need for services<br>Need not met<br>Partially met need<br>Fully met need<br>Any perceived need for services<br>Received services<br>Unmet need for services |
| Sociodemographics | 7 | |

## Table 4

Sociodemographic characteristics of the sample

| Variable | Unweighted (%) | Weighted (%) |
|---|---|---|
| **Region** | | |
| South | 441 (7.4) | 442 (7.4) |
| Calgary | 2,263 (37.7) | 2,285 (38.1) |
| Central | 701 (11.7) | 705 (11.8) |
| Edmonton | 1,907 (31.8) | 1,917 (32.0) |
| North | 688 (11.5) | 651 (10.8) |
| **Sex** | | |
| Male | 2,704 (45.1) | 3,015 (50.2) |
| Female | 3,296 (54.9) | 2,985 (49.8) |
| **Age** | | |
| 18 – 34 | 1,043 (17.4) | 1,993 (33.2) |
| 35 – 54 | 2,462 (41.0) | 2,111 (35.7) |
| 55+ | 2,495 (41.0) | 1,896 (31.6) |
| **Marital status** | | |
| Married, common law | 1,043 (17.4) | 1,993 (33.2) |
| Separated, divorced | 2,462 (41.0) | 2,111 (35.7) |
| Widowed | 2,495 (41.0) | 1,896 (31.6) |
| Single (never married) | 1,030 (17.2) | 1,333 (22.2) |
| **Educational attainment** | | |
| Grade 9 or less | 134 (2.2) | 123 (2.1) |
| Some high school | 297 (5.0) | 288 (4.8) |
| Completed high school | 863 (14.4) | 851 (14.2) |
| Some university, college | 1,188 (19.8) | 1,246 (20.8) |
| College/tech school diploma | 1,370 (22.8) | 1,348 (22.5) |
| Undergraduate degree | 1,099 (18.3) | 1,140 (19.0) |
| Graduate degree | 1,014 (16.9) | 973 (16.2) |
| **Number of household members < 12 years** | | |
| 0 | 4,510 (75.2) | 4,127 (68.8) |
| 1 | 600 (10.0) | 735 (12.2) |
| 2 | 611 (10.2) | 779 (13.0) |
| 3 or more | 274 (4.6) | 354 (5.9) |
| **Number of household members 12 – 17 years** | | |
| 0 | 5,064 (84.4) | 5,072 (84.5) |
| 1 | 617 (10.3) | 615 (10.3) |
| 2 | 246 (4.1) | 245 (4.1) |
| 3 or more | 70 (1.3) | 64 (1.1) |

## Table 5

Programs, services, and initiatives that were included and excluded in GAP-MAP

| Included | Excluded |
|---|---|
| Services delivered to people with addiction and/or mental health problem, or who are at risk of developing an addiction/mental health problem and which aim to impact these health conditions directly | Supportive programs and services which happen to be delivered to people with addiction and/or mental health problems but are not specifically intended to directly address underlying mental health or addiction problems themselves (e.g., AISH, Child, Youth and Family Enhancement Act funds, Education [Complex Needs], FSCD) |
| Services aimed at preventing or reducing harms associated with the individual's use of substances (e.g., drug prevention activities, harm reduction) | Services delivered to address the risk of harm to others associated with exposure to drugs or drug trafficking (e.g., programs and services supporting the Drug Endangered Children Act) |
| Justice-based programs aimed at reducing addiction and mental health-related recidivism by treating the underlying addiction and/or mental health problem in a diversion program (e.g., mental health courts, drug courts) | |
| | EFAP and Disability Management for government employees and family members affected by addiction and mental health problems |
| Specialist mental health services performed by publicly-funded psychologists, psychiatrists, psychiatric nurses, mental health workers, etc, regardless of whether the target of the service had an eligible diagnosis or not. | |

## Table 6

Summary of AHS direct programs and services identified during the mapping process

| AHS Direct Services | Alberta | Calgary | Edmonton | South | Central | North |
|---|---|---|---|---|---|---|
| Number of service clusters mapped | 168 | 85 | 34 | 16 | 11 | 22 |
| Number of programs/services nested within service clusters | 426 | 121 | 101 | 38 | 34 | 132 |
| Basis on which service clusters were defined and organized | Variable | By purpose of the program or service | By purpose of the program or service | By subregion or facility; program/ service purpose | By subregion and addiction vs. mental health focus | By subregion and addiction vs. mental health focus |
| Number of service cluster managers | 76 | 40 | 7 | 13 | 5 | 11 |
| Average number of programs per service cluster | 2.5 | 1.4 | 3.0 | 2.4 | 3.1 | 6.0 |
| Average number of service clusters per manager | 2.2 | 2.1 | 4.9 | 1.2 | 2.2 | 2.0 |

## Table 7

Summary of AHS contracted programs and services identified during the mapping process

| AHS Contracted Services | Alberta |
|---|---|
| Total number of contracts identified | 415 |
| Number of contracts included in GAP-MAP costing analysis | 156 |
| Number of vendors eligible for inclusion in GAP-MAP survey of programs and services | 79* |

Note. *101 individual contracts were eligible, representing 79 unique vendors.

## Table 8

Data elements captured by GAP-MAP for AHS contracted services

| Data Element | Description |
|---|---|
| Vendor | |
| Description of activities | Short description of contractor's activities |
| Rationale | Rationale for including or excluding from (a) GAP-MAP survey of programs and services and (b) GAP-MAP costing analyses |
| Targets people with addiction and/or mental health problems | Yes or no. As determined from publicly available documentation |
| Goal is to prevent or treat addiction and/or mental health problems | Yes or no. As determined from publicly available documentation |
| Include in financials | Whether or not vendor is included in GAP-MAP costing analyses |
| Include in survey | Whether or not vendor is included in GAP-MAP survey of programs and services |
| Contract # | |
| Target population | |
| Service tier | |
| Zone | |
| Requestor | |
| Annual value | |
| Contract start date | |
| Contract end date | |
| Fully executed expiry date | |
| Email address | |
| Site/facility manager | |
| Phone | |
| Street address | |
| City | |
| Postal code | |
| Reference | Other identifying information (e.g., website for vendor) |

## Table 9
Disposition of GAP-MAP consultations with GoA Ministries

| GoA Ministry | Approached? | Outcome | Comments |
|---|---|---|---|
| **Health** | | | |
| Mental Health and Addiction Branch | Yes | Grant files reviewed | All eligible grant files were reviewed. |
| Primary Care Network Unit | Yes | Annual reports reviewed | Only 11 of 45 PCNs reported costing information on programs, services, initiatives for addiction and mental health. Reasons: (1) mental health and addiction is not a local priority, or (2) the PCN is newly established and costing information does not yet exist. |
| Public Health Agency of Canada – Alberta Community HIV Fund | Yes | Cost information received | Costing information was received for programs that operated during 2010–2011. |
| Continuing Care Branch | Yes | No eligible programs, services, or initiatives identified | |
| Residential Treatment Services | Yes | Cost information received | Information received from the Director of Mental Health and Addiction. |
| Family Care Clinics | Yes | No eligible programs, services, or initiatives identified | Did not fund any mental health and addiction services during 2010–2011. |
| Mental Health Patient Advocate Group | Yes | No eligible programs, services, or initiatives identified | |

## Table 9
Continued

| GoA Ministry | Approached? | Outcome | Comments |
|---|---|---|---|
| **Education** | | | |
| Early Child Development Branch (age 0–6 yrs) | Yes | Costing information obtained | All programs and costing information reviewed. |
| Inclusive Learning Supports | Yes | No relevant costs | Due to the way administrative data are collected, no breakdown for mental health and addiction costs is available. [9] |
| Cross-Ministry Services Branch | Yes | Annual report provided | No costing information was provided in the annual report. |
| School Research & Improvement | Yes | None | Alberta Initiative for School Improvement (AISI) was identified as an eligible project. |
| Strategic Financial Services | Yes | No eligible programs, services, or initiatives identified | |
| **Culture** | | | |
| Lottery Fund Grants | Yes | Costing information received | Spent $1,357,000 in mental health & addiction programs in FY 2010–2011. |
| **Human Services** | | | |
| Child and Family Services Authority | Yes | Costing information received | Four out of nine service regions provided detailed costing information. Expenditures for mental health related services for FY 2010–2011 were $13,949,189, allocated to client counseling, therapy services, and client assessment services. |

[9] Supportive services are provided to all children and youth who require them, including those with addiction and mental health problems. Administrative data in this ministry provides a record of provision of these supportive services, but not whether recipients either present to service providers (or are otherwise diagnosed with) with addiction and mental health problems.

## Table 9
Continued

| GoA Ministry | Approached? | Outcome | Comments |
|---|---|---|---|
| **Municipal Affairs** | | | |
| Homeless Unit | Yes | Partial information received | Cost files received. However, due to the way administrative data are collected, no breakdown for mental health and addiction costs is available. |
| **Justice and Solicitor General** | | | |
| | Yes | Partial information received | All eligible services contracted through AHS. No other funding allocations. |
| **Enterprise and Advanced Education** | | | |
| | Yes | No eligible programs, services, or initiatives identified | |
| **Aboriginal Relations** | | | |
| | Yes | No eligible programs, services, or initiatives identified | |

## Table 10

Data elements captured by GAP-MAP for GoA contracts, transfers, and grants

| Data Element | Description |
|---|---|
| Recipient program name | |
| Alternate program name | If applicable |
| Funding ministry or agency | |
| Government administrator responsible for funding allocation | |
| Address of administrator responsible for funding allocation | |
| Email of administrator responsible for funding allocation | |
| Document number | |
| Recipient program street address | Program's primary address |
| Recipient program community | Program's primary town or city |
| Recipient program postal code | Program's primary postal code |
| Recipient program manager name | Administrator responsible for program's operations |
| Recipient program manager title | |
| Recipient program manager phone number | |
| Recipient program manager email | |
| Recipient program manager mailing address | If different than program's address |
| Recipient program manager mailing community | If different than program's mailing community |
| Recipient program manager mailing postal code | If different than program's mailing postal code |
| Start date for funding | |
| End date for funding | |
| Total funding ($) | Total amount of contract |

## Table 10
Continued

| Data Element | Description |
|---|---|
| 2010–2011 funding ($) | Amount allocated for FY 2010–2011 (if not specified, divide the total contract amount by the number of years of contracted work) |
| Zone or provincial | Is the funding designated for a particular Zone or is it to be used province-wide? |
| If Zone, which one | |
| Addiction or mental health target | |
| Age category of target audience | |
| Sex of target audience | |
| Service type of prevention/care | |
| Ethnic population of target audience | |

## Table 11
Contents of GAP-MAP database describing eligible programs, services, and initiatives

| Source | Description |
|---|---|
| AHS direct services | 406 direct programs and services nested within 168 service clusters |
| AHS contracted services | 415 contracts awarded to third-party vendors |
| GoA | 296 contracts, grants, or funding agreements |
| Calgary | 29 contracts or grants |
| Edmonton | 35 contracts or grants |
| South | 22 contracts or grants |
| Central | 17 contracts or grants |
| North | 29 contracts or grants |
| Provincial | 15 contracts or grants |
| Unspecified | 149 contracts or grants |

## Table 12

Measures used in the survey of Alberta programs and services

| Part A: Cluster-Level Survey | Part B: Program/Service-Level Survey |
|---|---|
| **Organizational structure and budget** | **Program/service organization** |
| **Operator (AHS, contracted, or neither)** | **Program/service start date** |
| **Service setting of cluster activities** | **FY 2013–2014 operational status** |
| **Fiscal year for financial reporting** | **Communities where program/service is offered** |
| **Total annual budget for the cluster (dollars spent, from all sources)** | **Hours of service available per week** |
| **Total amount of funding received from AHS and other provincial sources** | **Availability of service during evenings** |
| **Percentage of total annual budget derived from provincial funding** | **Availability of service on weekends** |
| **Personnel** | **Service setting of program/service** |
| Current number of full-time clinical staff individuals (.4 FTE or more) | **Specialization of relevant populations and problems** |
| Current number of part-time clinical staff individuals (less than .4FTE) | Populations targeted, accepted, and excluded |
| Current number of clinical FTE positions allocated to the cluster | Type of addiction and/or mental health problem addressed |
| Current number of clinical FTE positions that are vacant | **Availability of service in a language other than English** |
| Number of FTE positions split across multiple programs/services | **Use and purpose of client assessment at start of service/program participation** |
| Embedding of a psychiatrist within the cluster | **Program/service activities** |
| Embedding of general physician within the cluster | Best tier representing program/service |
| **Continuous improvement needs (11 items)** | General classification of activities |
| **Interest in participating in future research** | "Core service" activities of the program/service |
| **Previous participation in formal research** | Counselling and therapy activities |
| **Open ended questions** | Medical activities |
| Specify 3 actions deserving of highest priority to improve Alberta's addiction and mental health system | Supportive activities |
| Identify whose needs are currently not being met by the system | Screening and testing activities |
| | Harm reduction activities |
| | Prevention activities |

## Table 12
Continued

| Part A: Cluster-Level Survey | Part B: Program/Service-Level Survey |
|---|---|
| | **Use and purpose of client assessment at discharge** |
| | **Provision of after-care and/or transition planning** |
| | **Record keeping** |
| | Client demographics |
| | Screening/assessment scores |
| | Program participation or completion |
| | Post-program client outcomes |
| | New or returning client status |
| | **Criteria for entry refusal** |
| | **Type of redirection for refusals** |
| | **Criteria for termination** |
| | **Admissions and waitlists** |
| | Number of admissions in FY 2010–2011 |
| | Maximum number of clients that could be served/registered for the program per day |
| | Number of people waiting to enter program/receive service as of today |
| | Average number of days on waitlist |
| | **Adequacy of resources for population need** |
| | **General comments** |

## Table 13
Survey response rates

| Data Source | Total Number of Programs and Services Eligible to Receive GAP-MAP Survey of Programs and Services | | Number of Services and Programs Who Responded (% of total within rows) | |
|---|---|---|---|---|
| | **Service Clusters (Part A)** | **Programs/Services (Part B)** | **Part A** | **Part B** |
| AHS direct services | | | | |
| Alberta | 168 | 426 | 119 (70.8%) | 216 (50.7%) |
| South | 16 | 38 | 5 (31.3%) | 4 (10.5%) |
| Calgary | 85 | 121 | 54 (63.5%) | 21 (17.4%) |
| Central | 11 | 34 | 10 (90.9%) | 33 (97.1%) |
| Edmonton | 34 | 101 | 30 (88.2%) | 76 (75.2%) |
| North | 22 | 132 | 20 (90.9%) | 82 (62.1%) |
| AHS contracted services | | | | |
| Alberta | 71* | | 28 (39.4%) | |
| Provincial | 36 | | n/a** | |
| South | 16 | | n/a** | |
| Calgary | 18 | | n/a** | |
| Central | 7 | | n/a** | |
| Edmonton | 10 | | n/a** | |
| North | 13 | | n/a** | |

Notes. *As described in section 5.2.3 of this report, 79 unique vendors were identified as eligible to participate in the survey of programs and services during the mapping subproject. Contact information for 8 vendors was not available; these were eliminated from eligibility, leaving 71 vendors eligible to receive a survey. The 28 responding vendors completed a single survey containing Part A and Part B items for all relevant programs and services delivered. **Only provincial totals reported are for contracted services, because (a) low sample size (N = 28 vendors) precluded meaningful regional analyses, and (b) some vendors received contracts in multiple AHS service zones, also precluding regional analyses.

## Table 14
Overview of data sources for GAP-MAP's costing substudy

| Government of Alberta | AHS Direct Services | AHS Contracted Services |
|---|---|---|
| Health | Physician billing data | GAP-MAP staff collated and coded financial information obtained from 156 eligible contracts contained in the vendor database |
| Education | Inpatient data | |
| Culture | Ambulatory care data | |
| Human Services | Community Mental Health Clinic patient data | |
| Municipal Affairs | Addiction clinic service data | |
| | AHS contracted mental health and addiction program cost data not included in the AH and AHS patient registries | |

## Table 15

GoA data sources for GAP-MAP's costing analyses

| Administrative Unit | Program Information Obtained (i.e., program content, target population, on-site contacts) | Costing Information Obtained |
|---|---|---|
| **Health** | | |
| Mental Health and Addiction Branch | ✓ | ✓ |
| Primary Care Networks | ✓ | ✓ |
| Public Health Agency of Canada Alberta – Community HIV Fund | ✓ | ✓ |
| Continuing Care Branch | ✗ | ✗ |
| Residential Treatment Services | ✓ | ✓ |
| Family Care Clinics | ✗ | ✗ |
| Mental Health Patient Advocate Group | ✗ | ✗ |
| **Education** | | |
| Early Child Development Branch (age 0-6 yrs) | ✓ | ✓ |
| Inclusive Learning Supports | ✗ | ✗ |
| Cross-Ministry Services Branch | O | ✗ |
| School Research & Improvement | ✗ | ✗ |
| Strategic Financial Services | ✗ | ✗ |
| **Culture** | | |
| Lottery Fund Grants | O | ✓ |

## Table 15
Continued

### Human Services

| | | |
|---|---|---|
| Child & Family Service Authority (CFSA) | O | O |
| Persons with Developmental Disabilities (PDD) | X | X |

### Municipal Affairs

| | | |
|---|---|---|
| Homeless Unit | O | O |

✓ Full information received  O Partial information received  X No information received

## Table 16

Included and excluded ICD codes for calculating costs from physician claims, general and psychiatric hospitalization, and ambulatory care

| Diagnosis Category | Subcategory | ICD-9 Codes | ICD-10 Codes | Included in costing analyses? |
|---|---|---|---|---|
| **Organic disorders** | Organic Disorders: senile and pre-senile psychotic conditions | 290.0-290.9 | F00-F09, G30 | No |
| | Transient organic psychotic conditions | 293.0, 293.1, 293.8, 293.9 | | No |
| | Other organic psychotic conditions | 294.0, 294.1, 294.8, 294.9 | | No |
| **Substance-related disorders** | Alcoholic psychoses | 91.0-291.9 | F10-F19, F55 | Yes |
| | Drug psychoses | 292.0-292.9 | | Yes |
| | Alcohol dependence | 303.0-303.9 | | Yes |
| | Drug dependence | 304.0-304.9 | | Yes |
| | Non-dependent use of dugs | 305.0-305.9 | | Yes |
| **Schizophrenic and psychotic disorders** | Schizophrenia | 295.0-295.9 | F20–F29 | Yes |
| | Psychotic | 298.8, 298.9 | | Yes |
| | Paranoia, delusional disorders, other psychoses | 297.1-297.3, 297.0-297.3, 297.8-297.9, 298.0-298.4 | | Yes |
| **Mood disorders** | Bipolar | 296.0-296.1, 296.4-296.8 | F30, F31, F34.0 | Yes |
| | Depression | 296.2, 296.3, 300.4, 311 | F32, F33, F34.1, F38.1 | Yes |
| | Other | 296.9 | F34.8, F34.9, F38.0, F38.8, F39 | Yes |
| **Anxiety disorders** | Anxiety | 300.0, 300.2, 300.3, 309.8 | F40, F41, F42, F93.0-F93.2 | Yes |
| | Acute stress | 308.3 | F43.0, F43.1, F43.8, F43.9 | Yes |

## Table 16
Continued

| Diagnosis Category | Subcategory | ICD-9 Codes | ICD-10 Codes | Included in costing analyses? |
|---|---|---|---|---|
| **Personality disorders** | Personality disorders | 301.0-301.9 | F60, F61, F62, F68, F69 | Yes |
| **Other disorders** | Adjustment disorders | 309.0-309.4, 309.9 | F43.2, F99 | Yes |
| | Physiological malfunction arising from mental disorders | 306.0-306.9 | F45, F59 | Yes |
| | Sexual disorders | 302.0-302.9 | F52, F64, F65, F66 | Yes |
| | Dissociative and factitious disorders | 300.1, 300.6 | | Yes |
| | Somatoform disorders | 300.7, 300.8, 307.8 | | Yes |
| | Eating disorders | 307.1, 307.50, 307.51, 307.54 | | Yes |
| | Disorders of infancy, childhood and adolescence and developmental disorders | 299.0, 299.1, 299.8, 299.9, 307.0, 307.2, 307.3, 307.6, 307.7, 307.9, 312.0, 312.1, 312.2, 312.4, 312.8, 312.9, 313.0-313.3, 313.8, 313.9, 314.0-314.2, 314.8, 314.9, 315.0-315.2, 315.3, 315.4, 315.5, 315.9, 317-319 | F63, F80-F89, F91, F92, F95 | No |
| | Sleep disorders | 307.4 | | Yes |
| | Impulse control disorders | 312.30-312.35, 312.39 | | Yes |

## Table 16
Continued

| Diagnosis Category | Subcategory | ICD-9 Codes | ICD-10 Codes | Included in costing analyses? |
|---|---|---|---|---|
| | Mental disorders due to a general medical condition not elsewhere classified | | | No |
| | All other psychiatric disorders | 300.5, 300.9, 308.0-308.2, 308.9, 310, 316 | | Yes |
| | | 310, 316 | | No (310 Specific disorders due to brain damage or 316 Psychic factors associated with disease) |
| | | | | |

# 6 Main Findings

## 6.1 Need for Addiction and Mental Health Services in Alberta

"Need" for services has been defined using two different research approaches in psychiatric epidemiology. A normative approach to defining need is frequently used in population surveys, and emphasizes formal diagnostic criteria. This approach prioritizes expert clinical and research opinion about who requires addiction and mental health services. Target population members (usually assessed via community surveys) meeting criteria for one or more mental disorders, including substance use disorders, are considered to be in need of treatment (e.g., Cunningham & Blomqvist, 2006; Drummond et al., 2005; Regier et al., 1984; Wang et al., 2005). "Met need" is assumed when these same respondents report that they have used one or more relevant services (note that there are many different operational definitions of met need), and "unmet need", or a treatment gap, is identified when diagnostic criteria are met and services have not been accessed. Using this approach, a ubiquitous finding in the international literature is that only a minority of people with addictions and/or other mental disorders seek formal health services for their problems (Andrews, Henderson, & Hall, 2001; Bijl & Ravelli, 2000; Wang et al., 2005). For example, Kohn et al. (2004) reviewed studies defining the treatment gap using this normative approach and reported that across 37 studies conducted in 25 countries, the median percentage of people determined to be in need but not accessing mental health services was about 76%.

Another approach to defining need for services emphasizes perceived need for care. This approach prioritizes consumer perspectives and acknowledges the importance of beliefs (e.g., lay construals about what constitutes an addiction or mental health "problem"; about perceived effectiveness of treatment and related services), awareness that help is available or accessible, and feelings of embarrassment, fear, or stigmatization concerning seeking help (Sareen et al., 2007; ten Have et al., 2010). Several studies using survey data on perceived need report that those who have other co-occurring conditions and higher severity of mental disorder in question, including substance abuse, are more likely to perceive needs for treatment and other services (e.g., Codony et al., 2009; Mojtabai, Olfson, & Mechanic, 2002). One limitation of this approach is that severe impairment may result in lack of insight into the severity of one's symptoms, with a corresponding low level of perceived need for services. In fact, among those who meet diagnostic criteria for a mental disorder, including substance use disorders, a significant number also report that they do not need treatment or related services. Conversely, many people who report perceived need for services for emotional, mental or alcohol/drug problems do not meet the full set of diagnostic criteria for mental or substance use disorders (so-called 'sub-threshold' cases; see Druss et al., 2007); still others who report needs for services do not meet any of the diagnostic criteria at all.

Recent Canadian research supports the utility of combining normative and perceived approaches to identify need for addiction and mental health services. Urbanoski et al. (2008) conducted a secondary analysis of Cycle 1.2 of the Canadian Community Health Survey (data collected in 2002). In this study, the authors reported that 22% of respondents who met past-year criteria for one or more mental disorders, including substance use disorder (normative approach to assessing need), reported that they needed, but didn't receive, help for emotions, mental health, or use of alcohol or drugs in the 12 months preceding the survey (perceived need for services). GAP-MAP adopted this dual approach that combined normative and perceived needs, and the subsections below summarize key findings using this approach.

### 6.1.1 Prevalence of Past-Year Addiction and Mental Health Problems Subgroup Definitions and Analytic Strategy

In order to describe the prevalence of addiction and mental health problems among Alberta adults, we constructed four variables to define subgroups for comparative purposes from the GAP-MAP Addiction and Mental Health Service Needs Opinion Survey. First, using the customary cut-scores of 10 or greater on the PHQ and 8 or greater on the AUDIT, we identified respondents who did and did not meet criteria for past-year depression and alcohol problems, respectively; results are presented separately for these subgroups of respondents.[10] Second, we calculated prevalence estimates for diagnosed addiction and mental health problems (i.e., proportions of respondents who indicated that a health professional had informed them that they have an addiction or mental health problem, respectively). Finally, we identified respondents who did and did not meet criteria for 'any disorders,' i.e., they did or did not report that in year preceding the survey, they had either been diagnosed by a health professional with an addiction or a mental health problem, and/or met screening criteria for depression, and/or alcohol problems, and/or screening criteria for concurrent depression and alcohol problems. Readers should note that depression, alcohol problems, and comorbid depression and alcohol problems are not mutually exclusive. After defining these subgroups, we calculated separate prevalence estimates for respondents meeting GAP-MAP criteria for no disorders, any disorder, depression, alcohol problems, as well as diagnosed mental health and addiction problems. In a second set of analyses, we calculated prevalence estimates for each of these subgroups, stratified by sex, age group, and AHS service Zone. 95% confidence intervals for all prevalence estimates were computed using the following formula: $p \pm \frac{1.96\sqrt{p(1-p)}}{n}$ [11] In a final step, we multiplied the GAP-MAP prevalence estimates by the size of the Alberta population in 2012 in order to estimate the total number of adults who could be considered 'in need' of receiving services using a normative approach.

## Prevalence of Addiction and Mental Health Problems

Table 17 presents prevalence estimates for the 6 subgroups of Alberta adults. We estimate that 79.1% of respondents exhibited no addiction or mental problems in the year preceding the survey and that 20.9% met one or more criteria of having a diagnosed addiction or mental health problem, and/or scoring positive on one or both of the depression and alcohol problem screening scales. A total of 11.9% of respondents met PHQ criteria for major depression, while 8.5% of them met AUDIT criteria for alcohol problems. When considering diagnosed addiction and mental health problems in the past year, i.e., respondents who indicated that a health professional had told them that they have a problem, 3.0% of Alberta adults were diagnosed with a mental health problem (over 91,000 people) and 1.9% were diagnosed with an addiction (over 51,000 people).

[10] Depression and alcohol problems were chosen for special emphasis in GAP-MAP for two reasons. First, they are among the most common addiction and mental health conditions. Second, they are the focus of targeted service planning efforts by AHS' Strategic Clinical Network on Addiction and Mental Health.

[11] Readers should interpret 95% confidence intervals presented in this report with caution. Due to the relatively brief timeline allotted for GAP-MAP, 95% CIs were not adjusted for nonresponse and weighting. Further data analyses will be undertaken to compute bootstrapped confidence intervals, which will result in slightly larger and/or asymmetric CIs in subsequent GAP-MAP publications.

Using a normative approach to estimating need for services, the prevalence rates reported in Table 17 indicate that the size of the needed-to-treat population of Alberta adults experiencing past year addiction and mental disorders was 639,333. A total of 364,022 and 260,016 Alberta adults would be "in need" of addiction and mental health services for depression and alcohol problems, respectively.

It is important to note that the GAP-MAP prevalence estimates presented in Table 17 almost certainly underestimate the true prevalence of past-year addiction and mental health problems in the Alberta adult population, due to selection biases in sampling. The GAP-MAP Addiction and Mental Health Service Needs Opinion Survey used random digit dialling methods, and this method does not provide adequate coverage of marginalized populations, which are known to bear a disproportionate burden of addiction and mental disorders (e.g., Galea, Nandi, & Vlahov, 2004). Wild, Cunningham, and Adlaf (2001) studied selection biases in population surveys of alcohol misuse and found that they under-represent men, weekly drinkers, and heavier drinkers. Extrapolating from their results, the estimated population sizes of the 'in need' populations presented in Table 17, as defined by a normative approach to assessing need for treatment, should be properly viewed as the minimum population sizes of Alberta adults in each subgroup.

Despite these limitations, the GAP-MAP prevalence estimates reported in Table 17 are generally consistent with previously available Alberta data. For example, Slomp et al. (2009) analyzed physician billing data and reported that the past-year physician-treated prevalence rate of mental disorders, including substance use disorders, in the Alberta adult population was 18%. The 2010 Canada Alcohol and Drug Use Monitory Survey (CADUMS) reported an 8.9% problem drinking rate using the AUDIT among Albertans aged 15 years or older. Patten and Schopflocher surveyed randomly sampled Alberta adults and reported an 8.4% prevalence rate for depression using the PHQ and an identical cut score as used in GAP-MAP.

## Prevalence of Addiction and Mental Health Problems by Sex, Age, and Zone

Table 18 presents GAP-MAP prevalence estimates for any disorders, alcohol problems, and depression separately by sex, age group (18 - 34, 35 - 54, 55+) and AHS Zones (South, Calgary, Central, Edmonton, and North Zones).[12] With regard to sex differences, males were more likely to meet GAP-MAP criteria for alcohol problems (12.6%) compared to females (4.3%). Conversely, females were more likely to meet criteria for depression (14.0%) compared to males (9.7%). Prevalence of both depression and alcohol problems were highest among 18 to 34 year olds, and declined across the age range, with the lowest estimates for both conditions obtained for respondents 55 years of age or older. With respect to AHS Zones, the North Zone exhibited the highest prevalence rates of any disorders. There were no Zone differences observed with respect to depression and alcohol problems alone.

## Validity of GAP-MAP Disorder Subgroups

We compared respondents with and without any disorder, alcohol problems, depression, and diagnosed distress included in the GAP-MAP Addiction and Mental Health Service Needs Opinion Survey. Table 19 confirms that Alberta adults with past year addiction and mental health problems reported poorer life

[12] Due to low cell sizes for diagnosed mental health and diagnosed addiction problems (Ns = 180 and 115, respectively), we did not conduct stratified analyses for these subgroups.

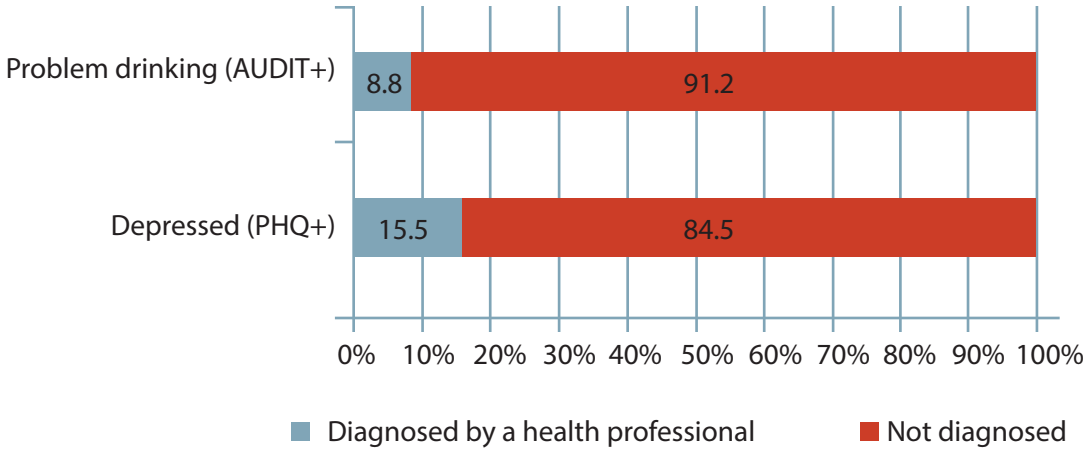
satisfaction and consistently greater mental health symptoms and more psychological distress, compared to respondents not meeting GAP-MAP criteria for addiction and mental health problems. These results were consistently obtained, regardless of which subgroup was being compared, i.e., when comparing respondents with and without any disorders, depression, alcohol problems, or diagnosed addiction and mental health problems.

## Relationship Between Problem Drinking, Depression, and Receiving a Diagnosis

In a separate analysis, we examined the association between the presence or absence of past year addiction and mental health problems and the presence or absence of a diagnosed addiction or mental health problem received from a health professional.

As shown in Figure 7, a large majority (85–91%) of Alberta adults in the general population who met GAP-MAP screening criteria for past-year problem drinking or major depression reported that they had not been told that they had an addiction or mental health problem, respectively, by a health professional in the previous 12 months. These results suggest that health services generally have not implemented screening and assessment procedures to detect alcohol problems and depression in the Alberta population seeking care as part of routine services.

Figure 7
Proportion of Alberta adults who screened positive in the past year for alcohol problems or major depression who received an addiction or mental health diagnosis from a health professional



## 6.1.2 Help-Seeking and Perceived Unmet Need for Services

Many international studies indicate that only a minority of people with addiction and mental health problems seek professional help (Andrews, Henderson, & Hall, 2001; Bijl & Ravelli, 2000; Wang et al., 2005). Even after adjusting for illness severity, the proportion of individuals with addiction and mental health problems who report service use usually varies between 50%-65% (WHO Mental Health Survey Consortium, 2004 ). Urbanoski et al. (2007) conducted a secondary analysis of the Canadian Community Health Survey (Mental Health Supplement) and found that only about 39% of those meeting criteria for substance-related and mental disorders received services. Further analyses of these data, adjusting for sex, age, education, distress, and number and type of substances used, revealed that the association between substance dependence and help-seeking was smaller than the association between mental disorders and help-seeking. GAP-MAP population survey data allowed for an opportunity to replicate and extend these findings.

### Variables

Results are reported for the following four variables used in the GAP-MAP Addiction and Mental Health Service Needs Opinion Survey. For each of these variables, we present proportions across all of the services investigated, and also for each of the seven types of services that could have been received or needed by respondents.

- **No need for services:** proportions of respondents who indicated that they did not need one or more services for addiction and mental health problems in the past year
- **Not met (unserved):** proportions of respondents who indicated that they needed one or more services for addiction and mental health problems in the past year, but did not receive it/them
- **Partially met (underserved):** proportions of respondents who indicated that they received one or more services for addiction and mental health problems in the past year, but who indicated that they did not receive as much help as they needed for services received
- **Fully met:** proportions of respondents who indicated that they received enough help as they needed for all services they received in the past year

Three additional variables were derived from respondents' scores on the four variables described above (refer to Meadows et al., 2000). For each of these derived variables, proportions are presented individually for each of the 7 types of services that could have been received or needed, and also across all service types.

- **Any perceived need:** proportions of respondents who reported needing one or more services for addiction and mental health problems in the past year (i.e., respondents who indicated that service needs were not met, partially met, or fully met).
- **Received services:** proportions of respondents who reported receiving one or more services for addiction and mental health problems in the past year (i.e., respondents who indicated that service needs were partially or fully met).
- **Unmet need for services:** proportions of respondents who reported that their service needs for addiction and mental health problems in the past year were either not met or only partially met.

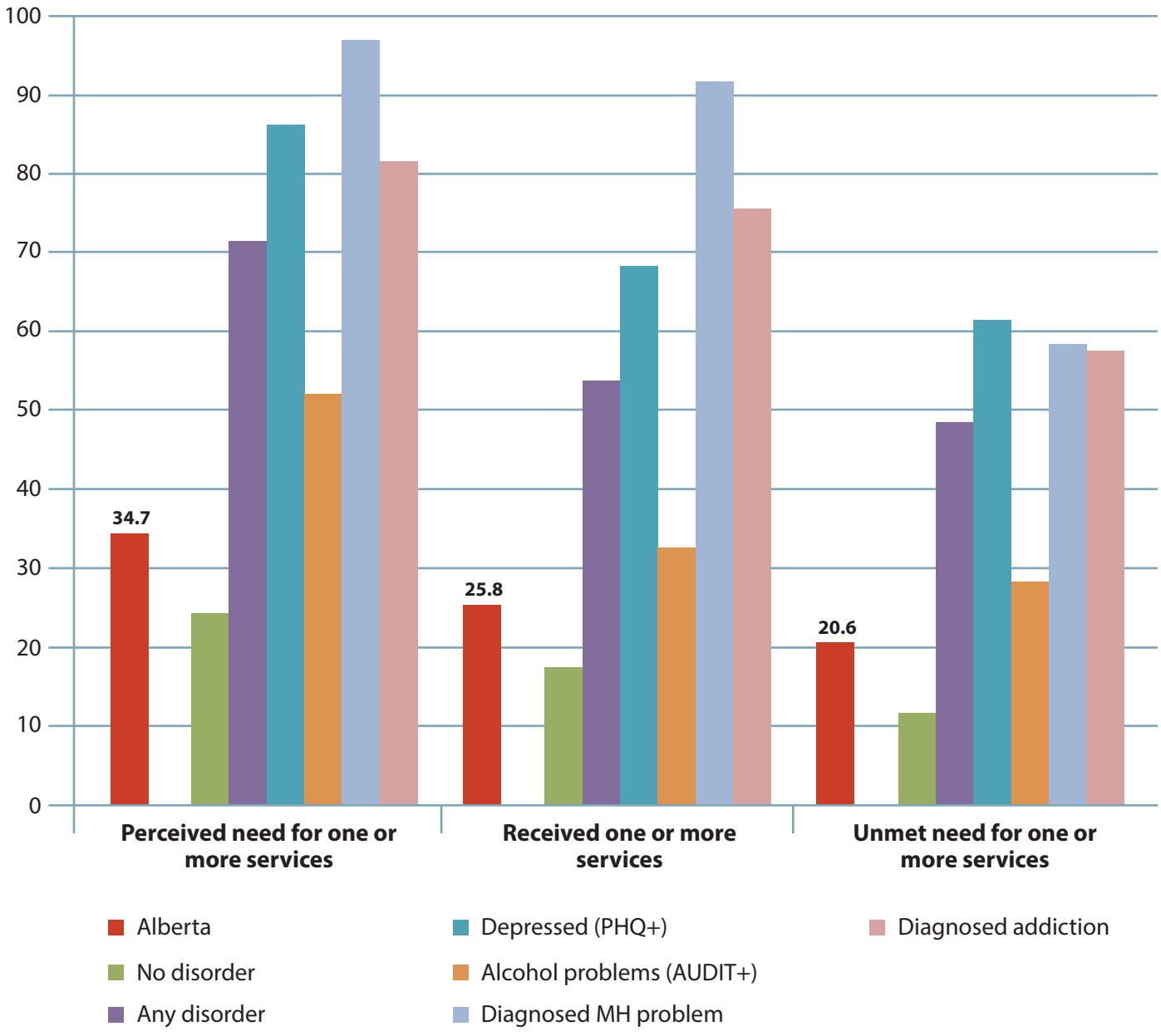
Finally, we report frequencies with which respondents who reported unmet service needs endorsed each of 6 possible reasons that prevented them from receiving needed services, and/or not receiving enough services. Readers should note that these barriers are not mutually exclusive, i.e., respondents could endorse more than one reason underlying unmet needs for services.

## Analytic Strategy

In order to describe differences in help-seeking and unmet need for services in relation to addiction and mental health problems, exactly the same sub-populations were compared as in the previous section describing prevalence, i.e., we examined help-seeking and unmet need for services for the entire sample, and then separately for respondents meeting criteria for no disorders, any disorder, depression, alcohol problems, and diagnosed addiction and mental health problems. In a second set of analyses, we computed help-seeking and unmet need for services for the sample stratified by sex, age group, and AHS service Zone.[13] In order to be consistent with international research using the Perceived Need for Care Questionnaire (e.g., Meadows et al., 2000), we computed estimated population sizes for each of the help-seeking and unmet need for service variables described above, but did not compute 95% CIs. Results are presented in Table 20.

[13] Due to low cell sizes for diagnosed mental health and diagnosed addiction problems (Ns = 180 and 115, respectively), we did not conduct stratified analyses for these subgroups.

Figure 8
Perceived need, help-seeking, and unmet needs for one or more services because of problems with emotions, mental health, or use of alcohol or drugs in the past year, Alberta adults



# 6 Main Findings

As shown in Figure 8, GAP-MAP estimated that over a million Alberta adults (34.7%) reported a perceived need for addiction and mental health care in the past year. Those who met criteria for past-year depression, any disorder, alcohol problems, or diagnosed addiction and mental disorders reported substantially higher perceived needs for these services (86.4%, 71.4%, 51.8%, 96.8% and 86.2%, respectively), compared to the Alberta average, and to adults not meeting criteria for any addiction or mental health disorders.

Survey respondents who indicated that they had been diagnosed with a mental disorder or an addiction in the past year reported the highest rates of receiving one or more services as assessed by the PNCQ (91.9% and 76.2%, respectively). Over two-thirds of respondents who met screening criteria for depression received one or more relevant services. This is more than double the service access rate of respondents who met GAP-MAP screening criteria for alcohol problems (32.6%).

Unmet needs for services were greatest among Alberta adults experiencing depression, followed by respondents with diagnosed mental disorders and addiction problems (61.3%, 59.0%, and 58.3%, respectively). For these conditions, this translates into population estimates of between 34,000 to 223,000 Alberta adults who reported that they either didn't receive enough services, or did not receive any services at all.

Figure 9
Perceived need, help-seeking, and unmet needs for one or more services because of problems with emotions, mental health, or use of alcohol or drugs in the past year, Alberta adults (2)

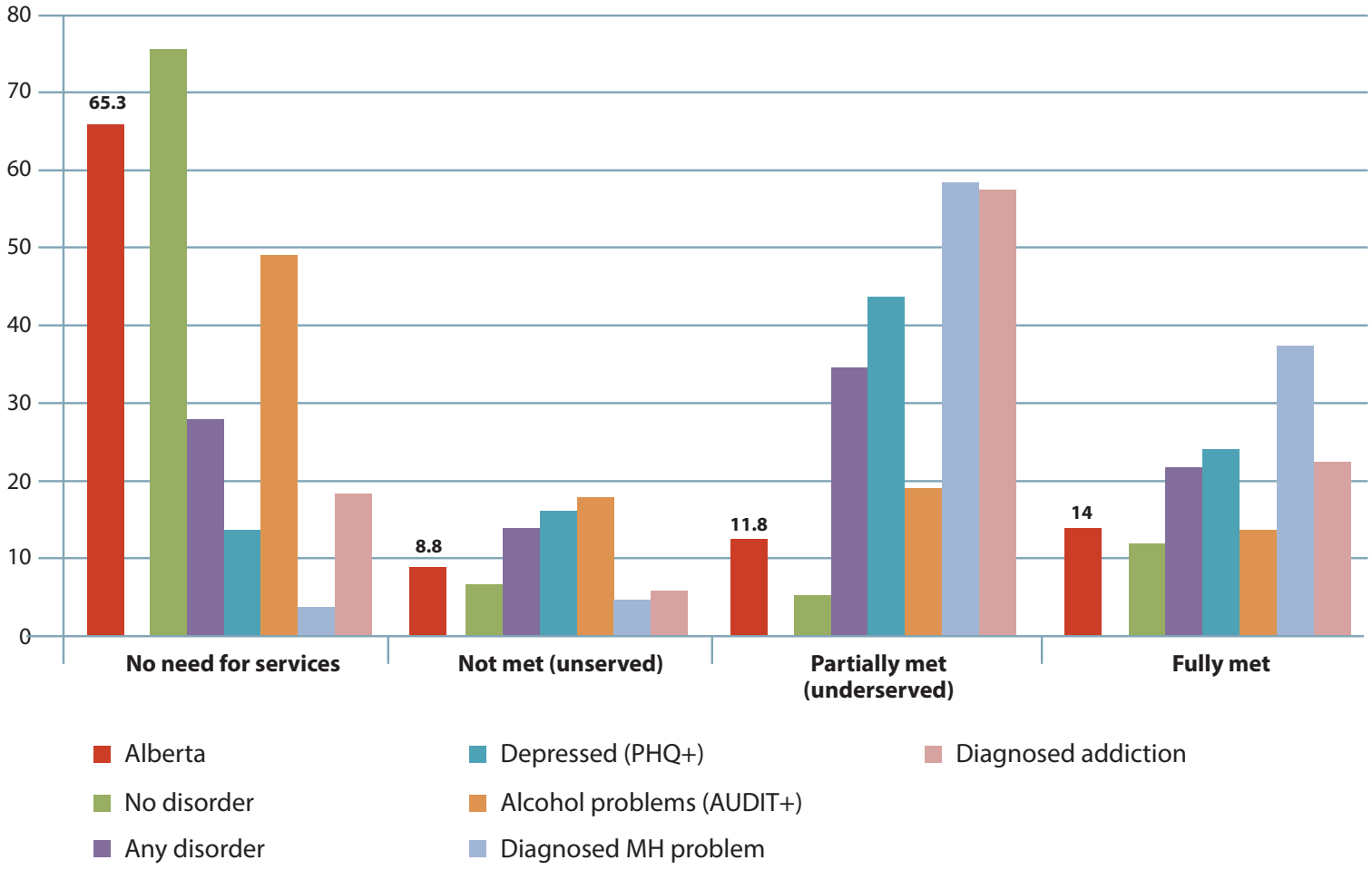



Figure 9 indicates that perceptions that services are not needed vary substantially by condition. Specifically, those with diagnosed mental disorders and those meeting screening criteria for depression were much less likely to believe that they had no need for services (3.2% and 13.9%, respectively), compared to Alberta adults with diagnosed addictions (18.8%) and those meeting screening criteria for alcohol problems (48.6%).

As shown in Figure 9, there is a noticeable gap in unserved rates when comparing adults with diagnosed addiction and mental disorders to those who met population screening criteria for depression and alcohol problems. Alberta adults who meet screening criteria for these common problems are over three times more likely to be unserved (i.e., needing but not receiving any of the 7 services assessed in the GAP-MAP population survey; about 18% for these conditions), compared to those who have been diagnosed by a health professional with an addiction or mental disorder (about 5% of these adults reported being

unserved). Finally, rates of being underserved (i.e., not receiving enough of the 7 services assessed by the PNCQ) were highest among respondents with diagnosed mental disorders and diagnosed addictions (54.0% and 53.3%), which translates into approximately 30,000 – 50,000 Alberta adults with diagnosed addiction and mental health problems who reported being underserved.

Figure 10
Percentage of Alberta adults who reported needing different types of services because of problems with emotions, mental health, or use of alcohol or drugs in the past 12 months

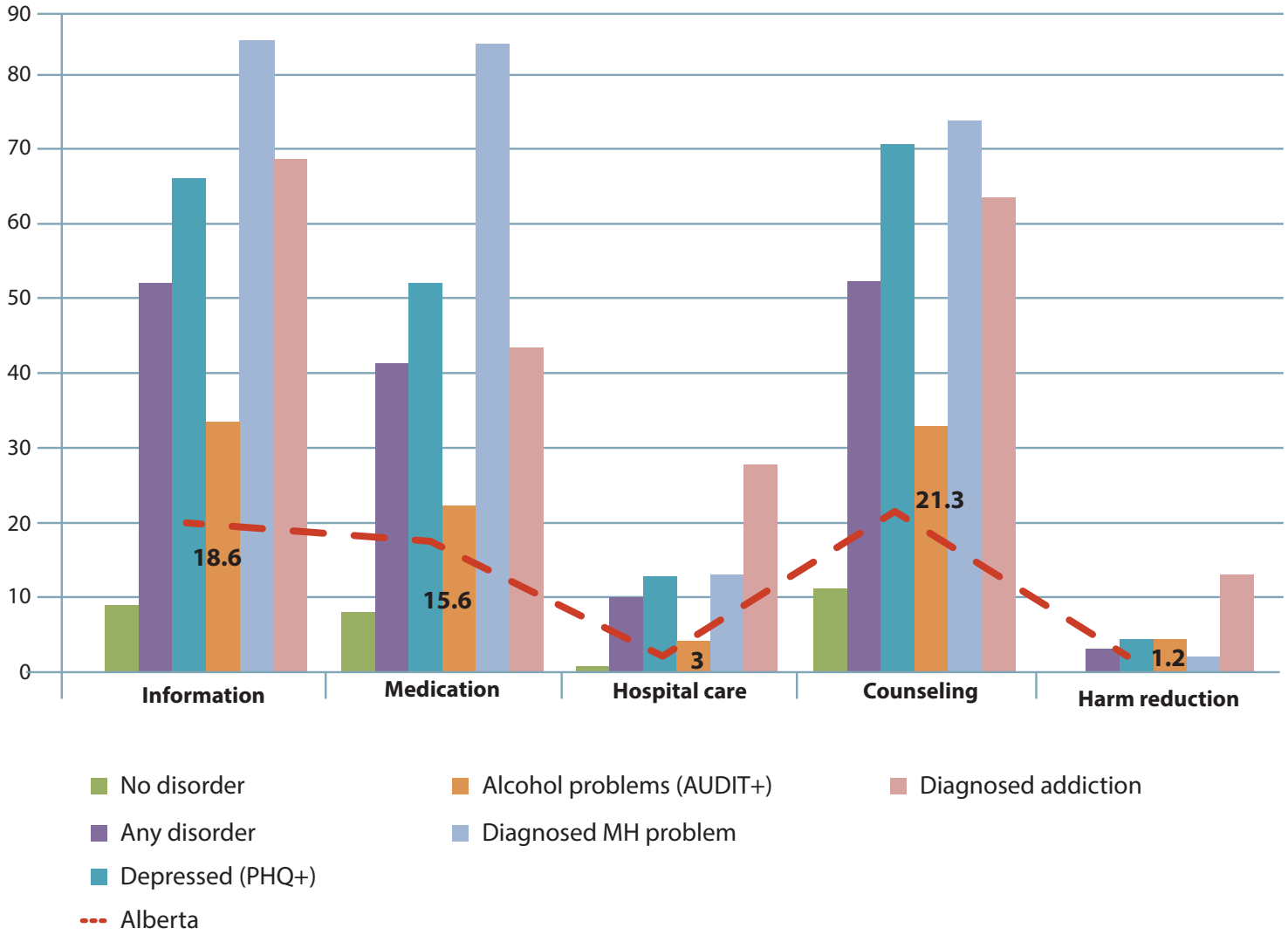


Figure 10 provides more detailed information on types of perceived service needs endorsed by Alberta adults.[14] Perceived needs for counselling, information, and medication were most common for all respondents (Alberta averages = 21.3%, 18.6%, and 15.6%, respectively). Although these same three service needs exhibited the same high priority among respondents with addiction and mental health problems, the rates of perceived need were considerably higher (e.g., over 60% of respondents with diagnosed mental disorders and addictions, as well as depressed adults endorsed a need for counselling).

Alberta adults reported the lowest perceived need for harm reduction services (i.e., help to reduce the risk of harm related to using drugs, such as needle exchanges, testing for diseases that can be passed on through drug use, and so on; provincial rate of perceived need = 1.2%). However, almost 13% of respondents meeting criteria for a diagnosed addiction perceived a need for these services – an estimated 7,500 Alberta adults. This rate considerably underestimates the true need for harm reduction services in this subgroup, because many adults with addictions who may be interested in accessing harm reduction services experience social disadvantage and would thus be missed using the GAP-MAP telephone survey methods used for this study.

[14] GAP-MAP results describing perceived need, help-seeking, and unmet needs for support (social interventions and skills training) are presented separately in Appendix A, which specifically deals with supportive services as its own topic area.

Figure 11
Percentage of Alberta adults who reported receiving different types of services because of problems with emotions, mental health, or use of alcohol or drugs in the past 12 months

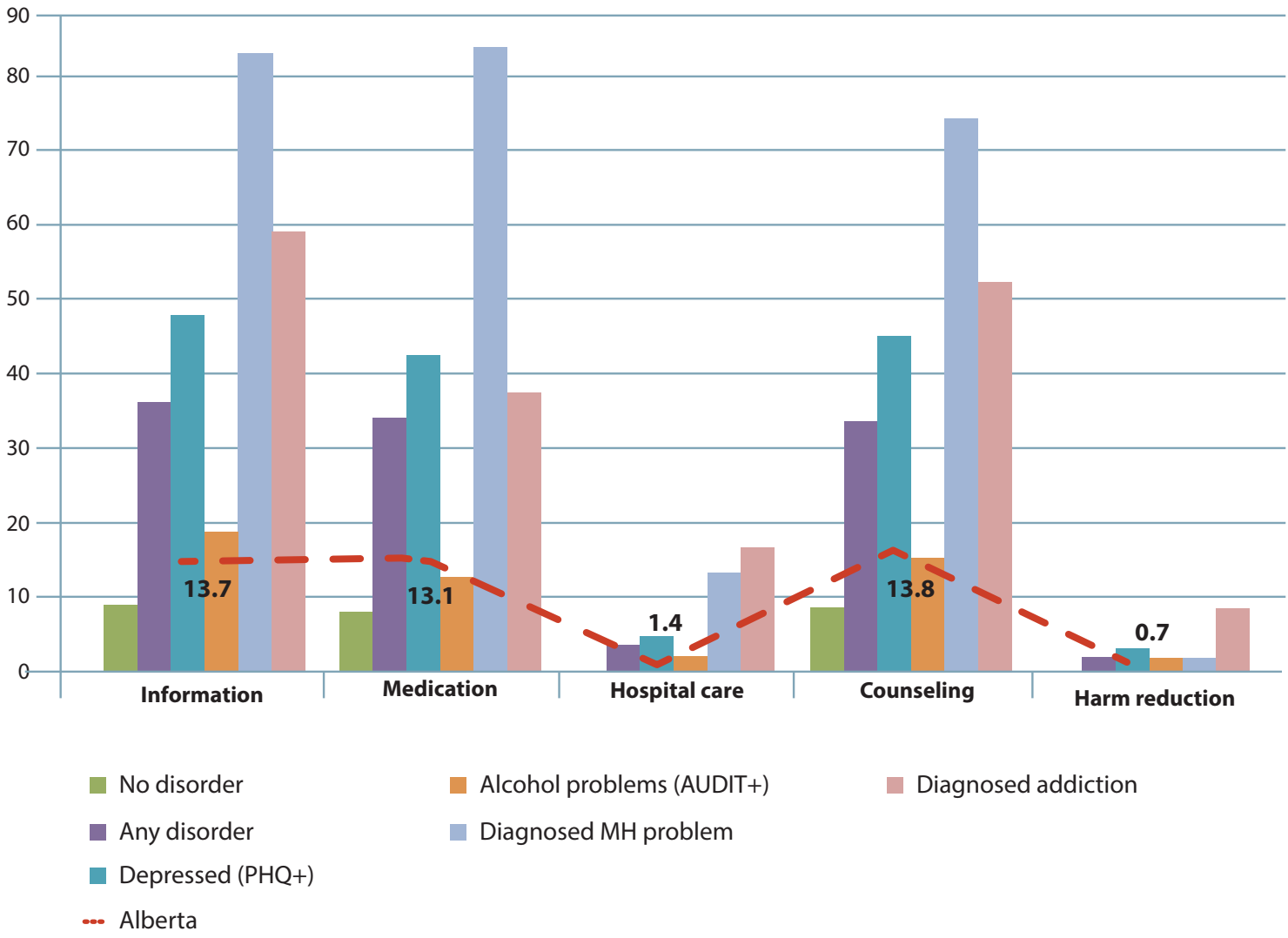
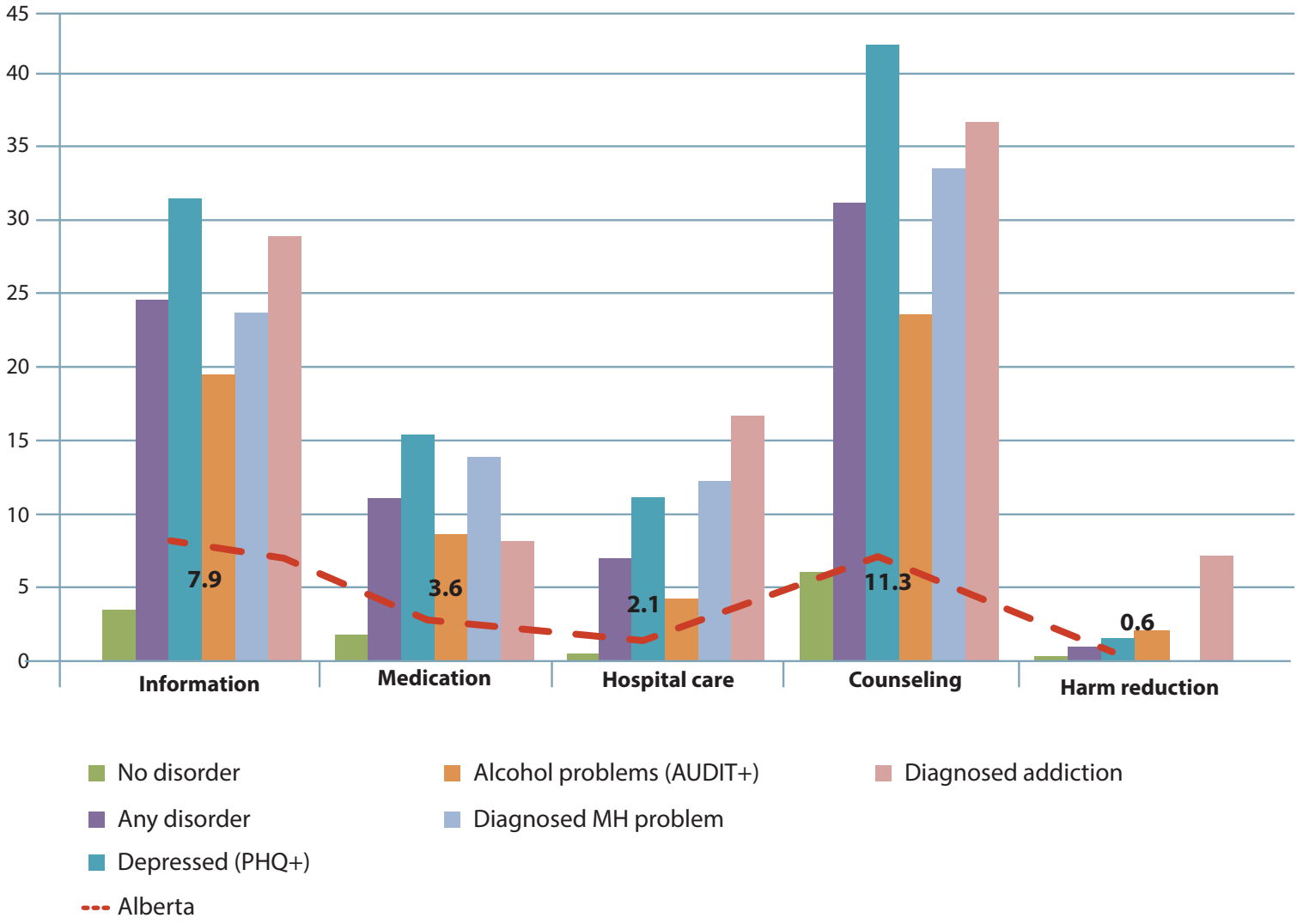



Figure 11 indicates that Alberta adults who received a diagnosis of a mental disorder from a health professional in the previous 12 months were most likely to receive five of the seven types of services assessed by the PNCQ (84%, 85%, 73%, 41%, and 48% of these respondents received information, medication, counselling, social interventions, and skills training, respectively). In contrast, respondents with a diagnosed addiction were most likely to have received hospital care and harm reduction services (17% and 7%, respectively). Depressed respondents and those meeting GAP-MAP criteria for any disorder were next-most likely to receive any of the seven services assessed by the PNCQ measure.

Figure 12
Percentage of Alberta adults who reported unmet need for different types of services because of problems with emotions, mental health, or use of alcohol or drugs in the past 12 months




When considering unmet needs for different kinds of services, Figure 12 indicates that the most commonly-reported unmet needs were for counselling, information, and medication. Albertans who experienced past-year addiction and mental disorders reported substantially higher unmet needs for all types of services, compared to the provincial rate and to those who did not meet criteria for addiction and mental health problems. Depressed respondents indicated the greatest level of these unmet service needs, followed by those who had received an addiction or mental disorder diagnosis. Alberta adults with alcohol problems reported the lowest rates of unmet service needs.

Figure 13
Percentage of Alberta adults endorsing different reasons for one or more unmet service needs

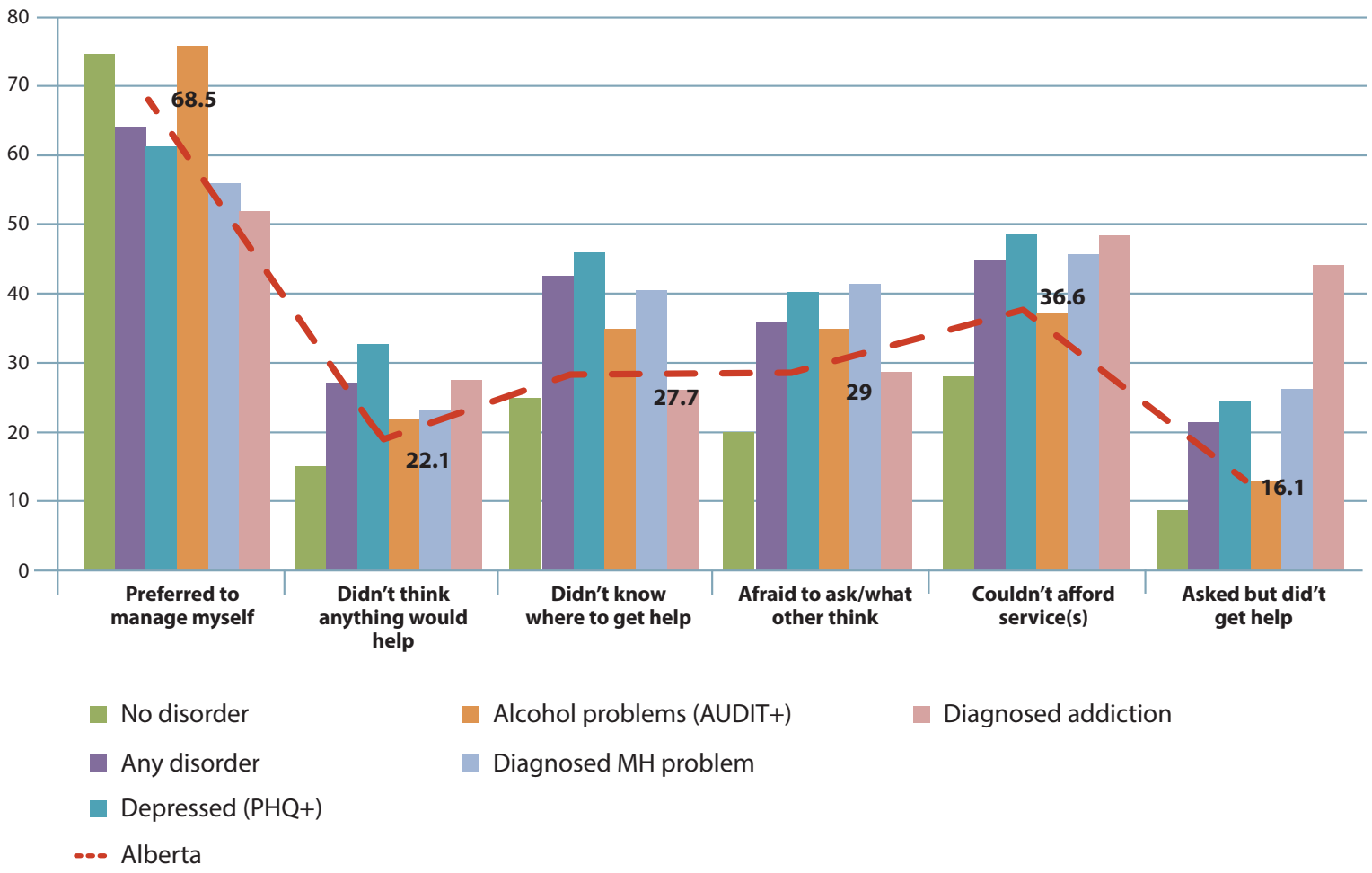



Figure 13 presents respondents' reasons for reporting unmet care needs. The most noteworthy finding was that all respondents meeting any of the GAP-MAP criteria for addiction and mental health problems reported that the most influential reason for unmet need was that they prefer to self-manage their condition. Interestingly, although stigma is often cited as a barrier to receiving care for mental health problems, GAP-MAP found that preference for self-management and lack of affordable access to services were the most common reasons for unmet care needs reported by Alberta adults. Stigma issues (i.e., being afraid to ask for help or what others would think) were the third-most influential reason underlying unmet needs for services. These results are consistent with national data. Rush et al. (2010) conducted a secondary analysis of the Canadian Community Health Survey (Mental Health Supplement) and also found that preference to self-manage symptoms was the most commonly cited reason for perceived unmet need for services. In addition, Rush et al. (2010) reported that unmet service needs were greatest for those with pure substance-related disorders. GAP-MAP data presented in Figure 13 confirm that preference for

self-management was highest among Albertans meeting criteria for alcohol problems. Aside from preferences to self-manage, results displayed in Figure 13 consistently show that depressed Albertans expressed greater endorsement of all other reasons for unmet care needs, followed by those meeting criteria for any disorder.

The importance of affordability as a reason for unmet care needs requires interpretation. Recall from Figure 12 that the most common type of unmet need for care is for counselling. Although most publicly-funded programs and services for addiction and mental health problems in Alberta provide counselling, the vast majority of qualified counsellors operate privately, outside the system of publicly-funded care (Moulding et al., 2009). Taken in the context of the results presented in Figure 12, affordability of private counselling services may account for the high rates of affordability cited by Albertans as a reason for unmet care needs. Although this interpretation requires further corroboration from future Alberta-based research, it is supported by commentaries on the urgent need to integrate psychological services into publicly-funded health systems provided by prominent Canadian researchers (see Dobson, 2002).

## 6.2 Description of Services Offered (AHS Direct and Contracted Services)

### 6.2.1 Overview

This section provides results for GAP-MAP's survey of programs and services. Recall that the subproject designed to map relevant services engaged AHS in an extensive consultation process that reflects the complex features of addiction and mental health service delivery across the province. In order to accommodate significant Zone-level variability in service organization, GAP-MAP consultations identified two levels of analysis to facilitate administration of the survey of programs and services. A cluster was defined as a higher level organization of programs, services and activities along thematic or sub-regional lines, often administered by senior AHS managers. Within service clusters, we identified and mapped the individual programs and services offered by AHS, along with line-level managers administering these activities. Thus, Part A of the survey was designed to capture information about clusters of addiction and mental health programs and services, including the organizational structure, budget and provincial allocations, clinical personnel, continuous improvement needs, and potential for participation in research. This section was designed to be completed by the relevant manager overseeing the cluster of programs and services who would have access to financial and human resource information. Part B of the survey was designed to capture more detailed information about each individual program or service nested within clusters.

### 6.2.2 Cluster-level Results

GAP-MAP received responses from 147 service clusters (AHS direct services provided information on 119 service clusters; AHS vendors provided information on 28 service clusters). Descriptive statistics were computed to summarize responses to the quantitative survey items. In addition, Health provided current information on dedicated public sector treatment beds allocated for addiction and mental health services.

## Bed Counts and Clinical Staff Capacity

Information on bed counts was obtained from Health to supplement GAP-MAP's survey of programs and services. Treatment beds are often shared across individual programs and services, as are front-line clinical staff. Thus, we included these data as part of the cluster-level reporting for GAP-MAP.

Table 32 describes number of direct care FTEs in Alberta as well as the total number of dedicated public sector specialty addiction and mental health treatment beds. To facilitate Zone comparisons, these were also converted to rates per 100,000 Alberta adult population to facilitate regional comparisons.

As of March 31, 2012, a total of 2859 beds were allocated for specialty addiction treatment (n = 830 beds, 29% of total bed capacity), psychiatric services (n = 1515 beds, 53% of total bed capacity), and in community mental health clinics (n = 514 beds and spaces, 18% of the total bed capacity; see Figure 14).

Figure 14
Percentage of total addiction and mental health beds (N = 2859) by specialty service, as of March 31, 2012

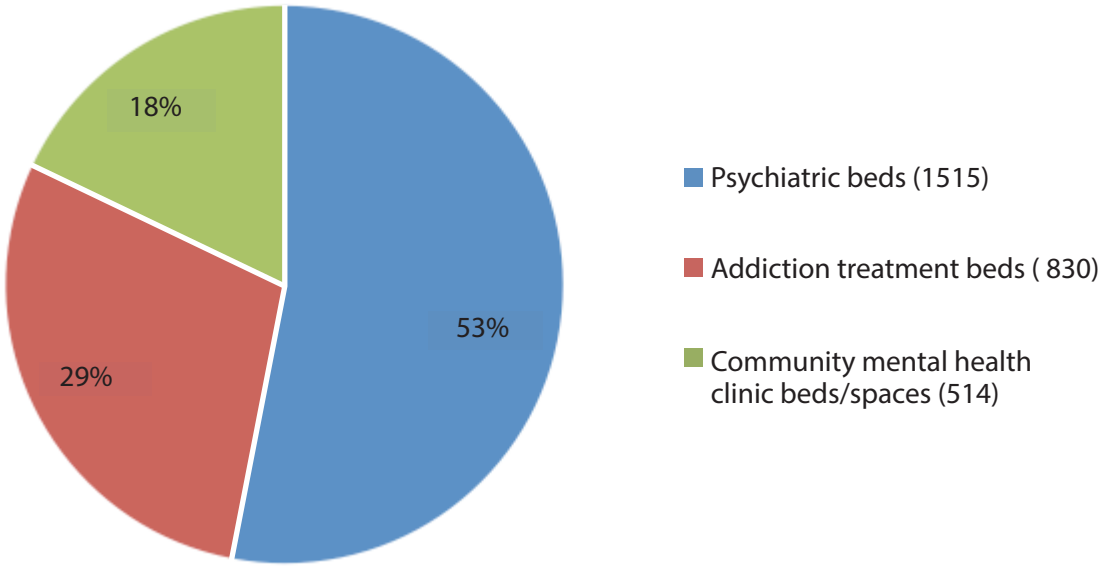


Figure 15
Percentage of total addiction and mental health beds (N = 2,859) by Zone, as of March 31, 2012

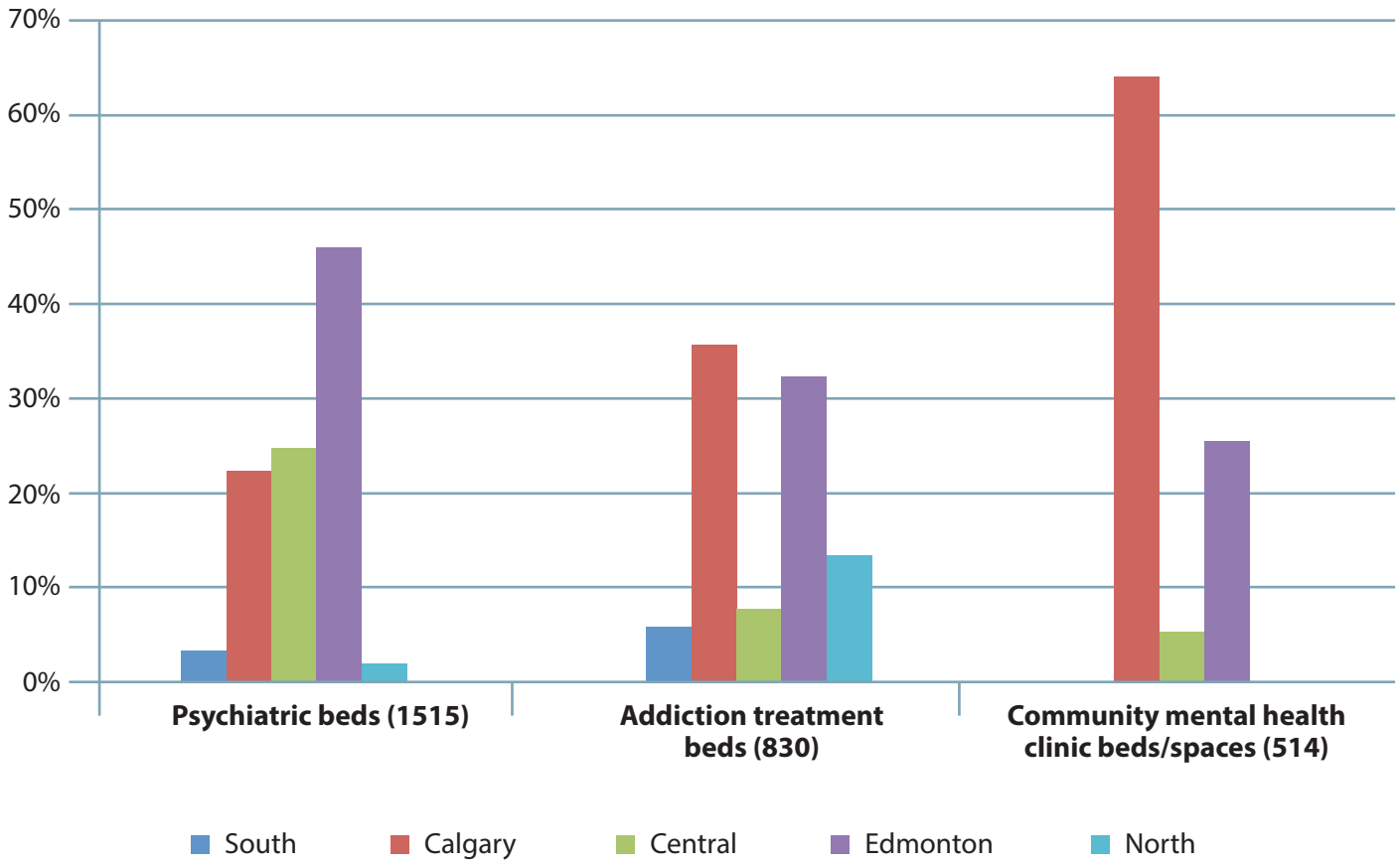



Figure 15 displays the proportional allocation of specialty addiction and mental health beds by Zone, and shows that Edmonton has almost half of the provincial psychiatric bed capacity (45.5% of beds), followed by the Central Zone (25.1% of beds). Calgary has substantially more bed capacity than other Zones with respect to community mental health clinic beds (64.6% of available spaces in this service context). As of March 31, 2012, the South Zone had no bed or space capacity in community mental health clinics.

## Access to Physicians and Psychiatrists

Figures 16 and 17 describe the extent to which service clusters reported engaging physicians and psychiatrists in the provision of addiction and mental health services, respectively. Figure 16 indicates that only a small proportion of AHS direct services and no AHS contracted services engage physicians during service delivery.

Figure 16

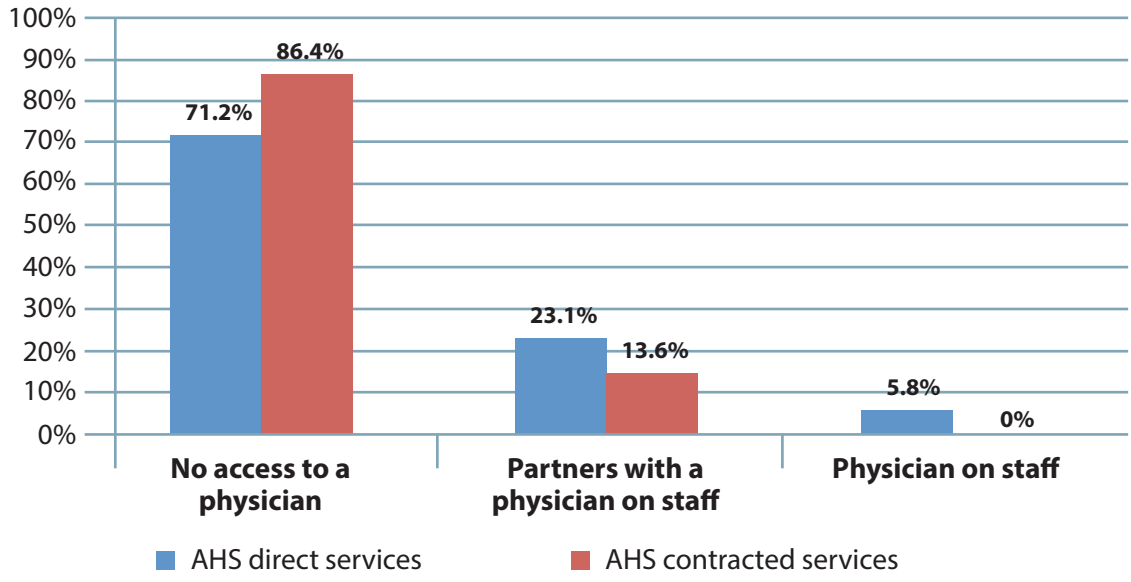
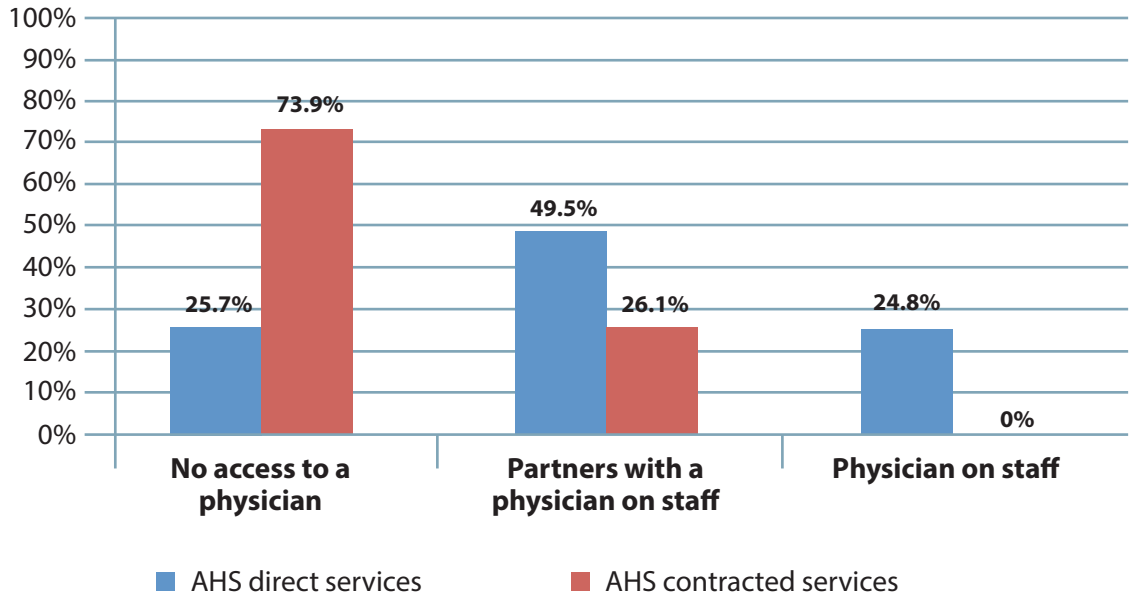



Figure 17
Percentage of service clusters reporting access to a psychiatrist

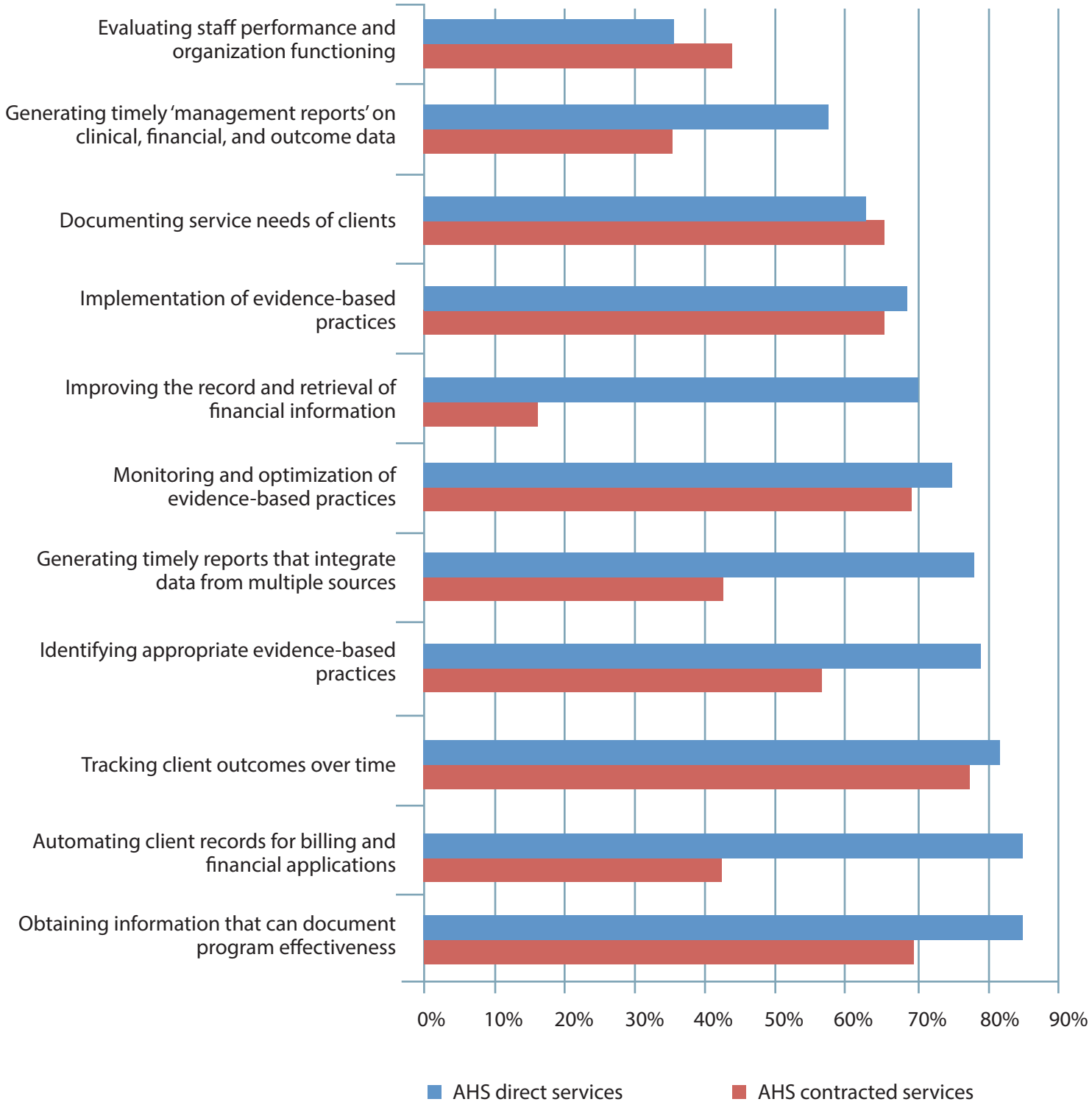


About a quarter (25.7%) of AHS direct service clusters reported that they did not have access to a psychiatrist; this figure was noticeably greater among AHS contracted services (73.9%). Only about a quarter of AHS funded services reported partnering with a psychiatrist in the delivery of cluster services and programs (see Figure 17).

## Support for Continuous Improvement of Clinical and Management Functions

A series of 11 items asked cluster-level respondents to indicate their disagreement or agreement with statements designed to assess perceived needs for additional support and resources to execute clinical and management functions. Figure 18 presents comparisons of AHS direct and AHS contracted services. Over 78% of respondents reporting on AHS direct and AHS contracted service clusters agreed or strongly agreed that additional support or resources are needed to track client outcomes and to obtain information that can document program effectiveness. In addition, about 80% of cluster-level respondents representing AHS direct services agreed or strongly agreed that additional resources and supports are needed to identify appropriate evidence-based practices, and to create systems to automate client billing for financial applications. Respondents exhibited least agreement that supports are needed to evaluate staff performance and organizational functioning.

Figure 18
Percentage of service clusters that agreed or strongly agreed that additional supports and resources are needed for continuous improvement



## Qualitative Responses to Open-Ended Questions About System and Client Needs

Cluster-level surveys concluded with two questions designed to elicit open-ended responses about addiction and mental health services: (1) In your opinion, what 3 actions deserve the highest priority in order to better support Albertans with addiction and mental health needs, and (2) In your opinion, whose needs are not being met by the current mental health and addiction system in Alberta, and why? A total of 70 of the 119 cluster-level respondents to the main survey provided answers to these open-ended questions (58.8% of survey respondents). A PhD candidate affiliated with the GAP-MAP study group and who had extensive experience analyzing open-ended questions, completed a thematic analysis of their responses, and the main results are provided below.

**a. Underserved Populations**

Respondents identified several specific populations that they believe are not well served by Alberta's current mental health and addiction system.

## Children and Youth

Many respondents highlighted children and youth as a population whose mental health and addiction-related needs are not being met. Participants indicated that services and supports are needed for children and youth impacted by: parental addiction and mental health problems, early psychosis, substance abuse and addiction, eating disorders, autism spectrum disorder, Asperger's syndrome, fetal alcohol spectrum disorder, self-harm, bipolar disorder, and developmental delays. Respondents also identified several system-level challenges associated with adequately meeting the service needs of children and youth, including: difficulty in linking children and youth under provincial care with services and supports, a lack of services and supports tailored to children under 16 years of age, few available spaces for children and youth requiring long-term residential care, long term outpatient counseling, intensive, and/or brief episodic care. Additionally, respondents highlighted a lack of long term programs available to children and youth, and a lack of health professionals trained to provide psychiatric consults for this population.

## Rural Albertans

A number of respondents reported that there is an overall lack of mental health and addiction services and supports in rural Alberta. Respondents suggested that individuals are often required to travel far to access help for mental health and addiction problems and as a result they are less likely to obtain the services and supports they need. Specific gaps include a lack of programs targeting children and youth, limited access to forensic psychiatry services in rural areas, and minimal on-reserve services and supports. Some respondents suggested program expansion into rural areas, and the development of travelling clinics as ways to mitigate some of these challenges.

## Families

Several respondents mentioned a lack of services and supports available to families in Alberta. This included both programming to help families deal with mental health or addiction, as well as services designed to

address mental health and addiction problems rooted in individuals' relationships with their family members. Specifically, respondents identified a need for mental health and addictions counseling that adopts a family system perspective, rather than simply focusing on the individual as separate from the family. Additionally, they suggested a need for respite services for family members caring for someone with a mental illness, and other supports and counselling for family members of individuals diagnosed with a mental health or addiction problem.

## Forensic Psychiatry Clients

Several respondents highlighted insufficient system capacity for individuals deemed not criminally responsible (NCR) on account of mental disorder and other individuals with mental health and addictions problems and justice system involvement. For example, one respondent wrote at length about the lack of 'step down' supports for NCR individuals in Southern Alberta, which leads to a backlog in the system because individuals who are ready to re-enter the community cannot access appropriate supports (e.g. supportive housing, counselling), which need to be in place prior to discharge from the hospital. Additionally, NCR patients in the South are often transferred to the North, where there is more capacity, this was characterized as suboptimal as it removes the individual from their social support networks.

## Additional Underserved Populations

Respondents also identified gaps in mental health services and supports for First Nations people, due to a lack of culturally appropriate treatment and counselling approaches, and limited overall capacity to effectively address intergenerational trauma linked to residential school experiences, and cycles of poverty, violence and addiction. Respondents also suggested an overall need for more targeted services and supports for (1) people with dual diagnosis and/or other complex needs, (2) people with severe and persistent mental illness or addictions issues, (3) people with concurrent disorders who require medical detoxification, (4) people diagnosed with post-traumatic stress disorder, (5) people with coexisting mental health and developmental presentations (e.g. Autism, Pervasive Developmental Disorders), (6) people needing a psychiatric consultation, (7) homeless individuals with mental health and/or addiction issues, (8) people living with brain injuries, (9) Lesbian, Gay, Bisexual, Transsexual and Queer ("LGBTQ") populations, and (10) refugee populations. Finally, one respondent indicated that a harmonization of interpretive services has led to service gaps for vulnerable cross-cultural populations.

### b. Housing

A number of respondents identified a lack of various housing options for people suffering from mental health and/or addictions who are homeless or otherwise unstably housed. Specifically, respondents suggested a need for more (1) 'housing first' and harm reduction housing options for people with mental health and/or addictions issues; (2) supervised residential facilities for people with mental health or addictions clients involved in the justice system; (3) transitional supportive living arrangements for people recovering from addiction and mental illness; (4) permanent supportive living arrangements for individuals with long term mental health problems; (5) in-home supports for clients; and (6) transitional supports for clients returning home from an acute hospitalization. One respondent suggested that increased access to housing and related supports for people involved in Alberta's mental health and addiction system could reduce the burden on emergency rooms and acute care beds.

### c. Stigma

A few respondents mentioned a need for additional efforts to educate the public about mental health and addiction issues and mitigate stigma experienced by people living with mental illness and/or addiction in Alberta.

### d. Prevention

Respondents identified a need for more prevention and mental health promotion programming in Alberta. In particular, screening and early intervention programs that work with individuals vulnerable to mental illness or addiction were seen as valuable.

### e. Models of Care

Several respondents mentioned current and alternative models of care. Some suggested a need for more community-based services rather than the addition of more 'mental health beds.' Others suggested a refocusing of the mental health and addiction system away from an acute care/crisis model of care and towards a model of care that recognizes how mental health and addictions issues can be persistent across the life course. Respondents outlined how services and supports should be available to clients over the long term, tailored to different points in their mental illness/addiction trajectory, and coordinated across sectors. One respondent suggested the importance of using a team-based approach, where clients are seen as partners in their care. Another respondent suggested that families and loved ones should also be able to play a greater role in an individual's mental health and addictions care. Other respondents articulated a desire to see the mental health system focus on being as clinically flexible for clients and focus on engagement rather than business models and fiscal outcomes.

### f. Administrative Practices

Respondents expressed interest in seeing a number of administrative practice changes. These changes included (1) implementation of appropriate technologies to allow for more effective delivery of care across multiple service providers, and better tracking of clients; (2) electronic medical record implementation; (3) integration of databases; (4) improved scheduling software; (5) increased focus on evidence-based practices and service efficiency; (6) better tracking of caseloads; (7) changes to physician billing practices to ensure they accurately reflect the amount of time spent with a client; (8) strengthening interactions between front line staff and senior managers; (9) improved IT and human resources infrastructure for services; (10) additional quality improvement; and (11) better integration and coordination across services (primary care to specialized care).

### g. Lack of Resources

Several respondents highlighted an ongoing need for more resources to fund Alberta's mental health and addiction system. They cited a constant pressure to do more with less, and suggested that a lack of resources was compromising standards of care and leading to long wait times for services. In particular, respondents identified a need to adequately fund 'core' programs and services, especially when there is an ongoing push to increase uptake to these services. They also suggested that psychological counseling

should be included with Albertan's health care coverage, and that both inpatient and community-based/ outpatient programs need more resources to improve clients' access to services and supports.

### h. Human Resources

Respondents also reported a number of staffing concerns. Specifically, they suggested a need to (1) cross-train mental health and addictions workers so they are competent to deal with a variety of client issues; (2) increase staffing levels for programs with high numbers of clients; (3) increase specialized mental health and/or addiction training for staff working in community settings; (4) improve training for in home support workers and enable them to play a more active role in treatment and care, (5) increase the number of mental health professionals trained to liaise between children/parents and the education system, (6) ensure all clinical staff are familiar with strength based, client -centered approaches for brief episodic care, and be able to implement both individual and group-based counselling modalities.

### i. Emergency Care

A few respondents also supplied recommendations for improving emergency care for individuals experiencing a mental health crisis. They suggested a need for trained mental health professionals in every emergency room, and a separate, quiet and secure area of the hospital dedicated to mental health/ psychiatric assessments. Another respondent also suggested improving emergency room physicians' and nurses' knowledge about mental health and addiction, and increasing their capacity to assess and treat individuals in crisis.

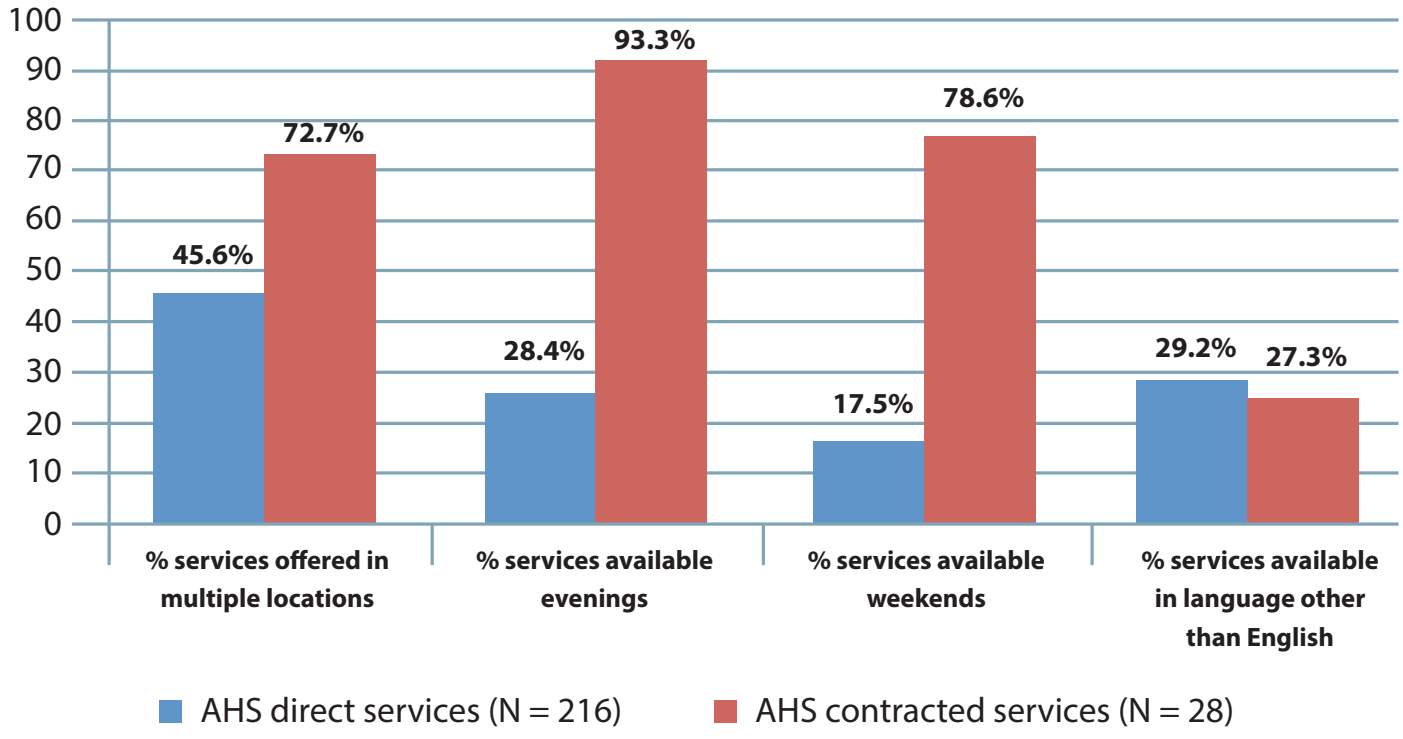
### 6.2.3 Program and Service-level Results

GAP-MAP received responses from 244 programs and services (AHS direct services provided information on 216 individual programs; AHS vendors provided information on 28 programs). Descriptive statistics were computed to summarize responses to the quantitative survey items.

## Accessibility of Services

Almost half of AHS direct services (45.6%) surveyed offer activities in multiple locations. In general, few surveyed AHS direct services operated in the evening and on weekends. In contrast, accessibility of AHS contracted services surveyed indicated that they had greater accessibility in terms of multiple locations as well as availability on weekends and evenings (Figure 19).

Figure 19
Program accessibility, AHS direct and contracted services




Less than 30% of AHS direct and contracted services surveyed indicated that they provide activities in a language other than English.

Figure 20
Percentage of AHS direct and contracted programs offering technology-based services

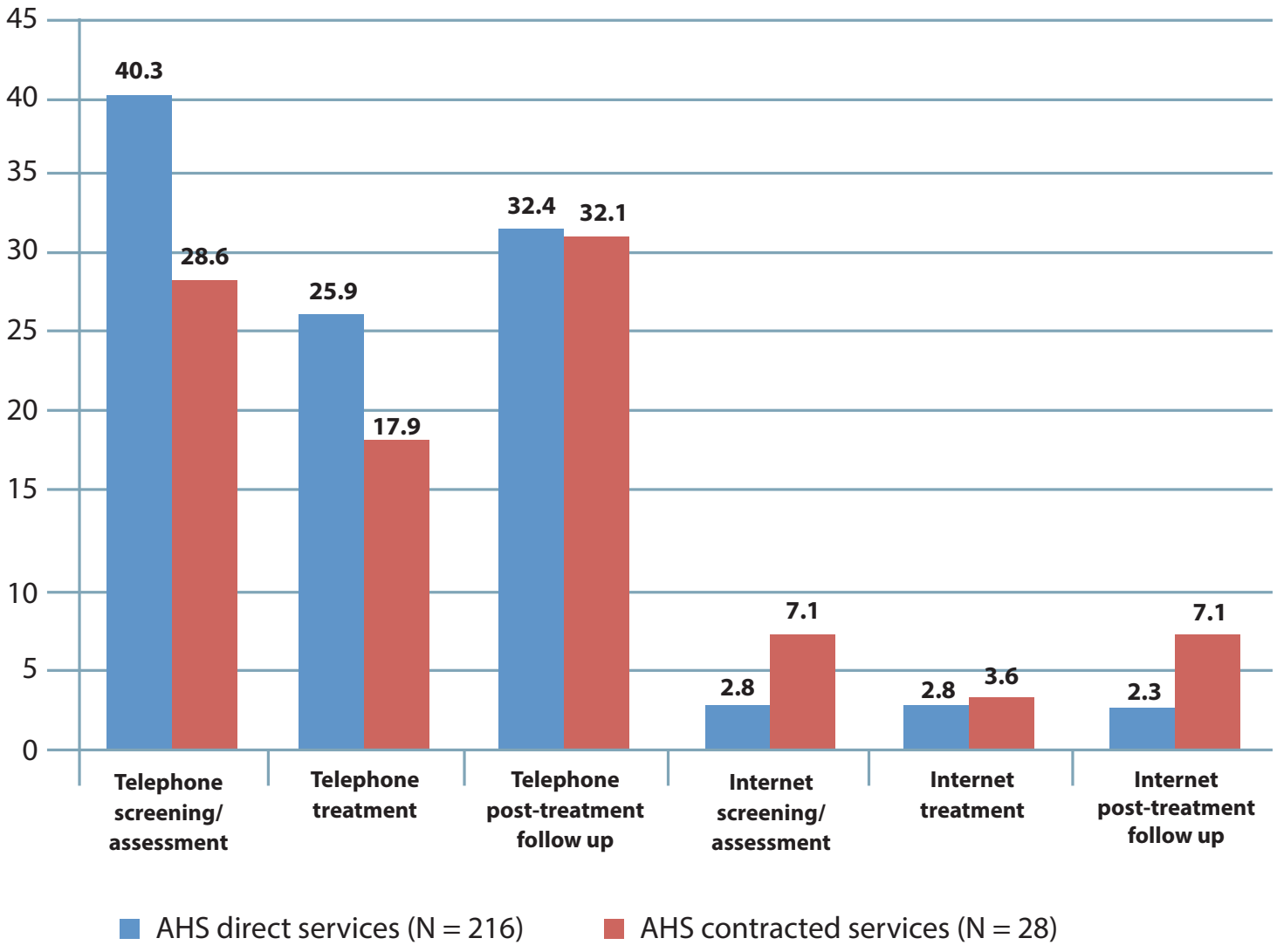
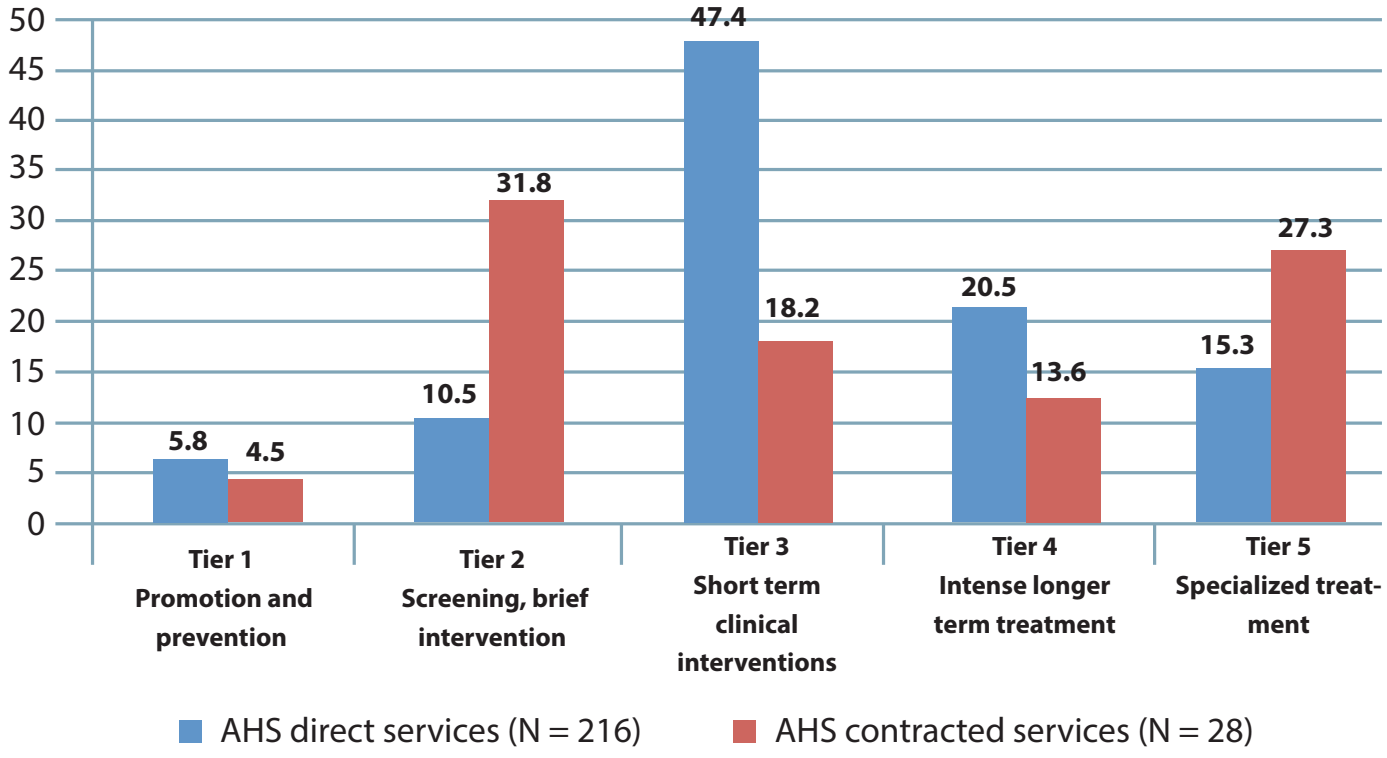



Figure 20 describes the use of technology-based services. Telephone access to screening and assessment was most common (40.3% and 28.6% of AHS direct and contracted services, respectively), followed by telephone-based follow ups post treatment. Use of the internet to provide any of screening/assessment, treatment, and post-treatment follow up was reported to be less than 10% for all services participating in the survey.

## Activities Provided

Figure 21 displays surveyed programs' self-identified affiliation with different Tiers of service. About 15% of AHS direct services surveyed indicated that they engage in Tier 1 (promotion and prevention) and Tier 2 (screening, brief intervention) activities. Over 80% of AHS direct programs surveyed reported that they are primarily engaged in providing Tier 3–5 activities.

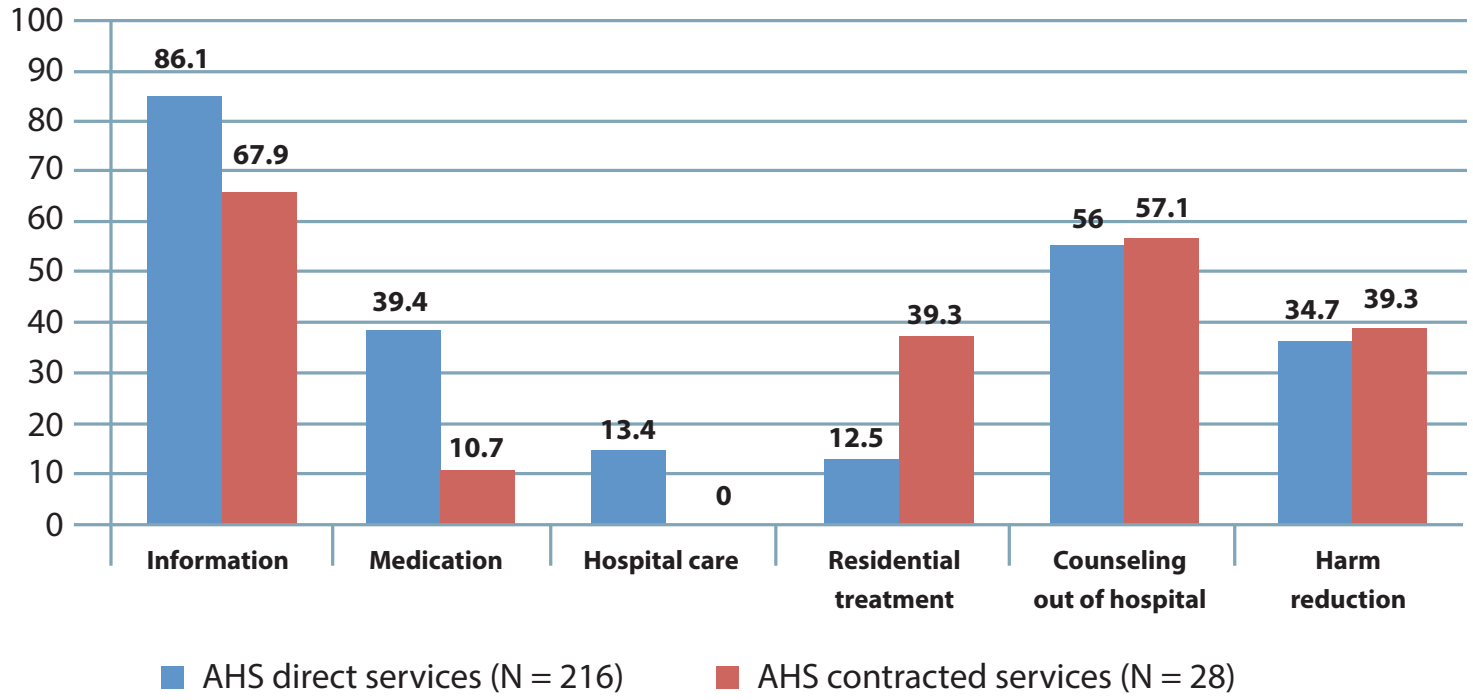
Figure 21
Percentage of AHS direct and contracted services classified by tier




Surveyed AHS contracted services reported a more even distribution of services allocated across tiers, with about 32% of programs surveyed indicating that they engage in Tier 2 activities.

Figure 22 displays the percentage of surveyed programs that offered 6 different activities as part of routine operations. The most commonly reported service activity was providing information (86.1% and 67.9% of surveyed AHS direct and contracted programs, respectively), followed by out-of-hospital counselling (56.0% and 57.1%, respectively). Harm reduction activities were reported by about one-third of AHS direct and contracted services.

Figure 22
Percentage of AHS direct and contracted services offering different activities




Figures 23–27, following, provide Alberta-wide and Zone-level descriptive information on the different types of intervention activities provided by AHS direct and contracted services. Readers should note that programs and services could endorse more than one activity, i.e., response categories were not mutually exclusive. Brief mental health screening and assessment activities were very common in all programs and services surveyed (over 75% of all AHS direct and contracted programs offered these activities; Figure 23). The most common medically-supervised activities offered were prescribing and monitoring medications, medical diagnosis and testing, and smoking cessation treatment (Figure 24).

The most commonly offered therapies provided for both AHS direct and contracted services were individual therapy/counselling, group therapy/counselling, and family therapy (Figure 25). With regard to prevention activities (Figure 26), awareness and education programs were most commonly reported by surveyed programs, followed by stigma reduction. The most common harm reduction interventions reported by surveyed programs were overdose prevention education, alcohol interventions, and education on safer injections (Figure 27).

Figure 23
Percentage of AHS direct and contracted services offering different screening activities

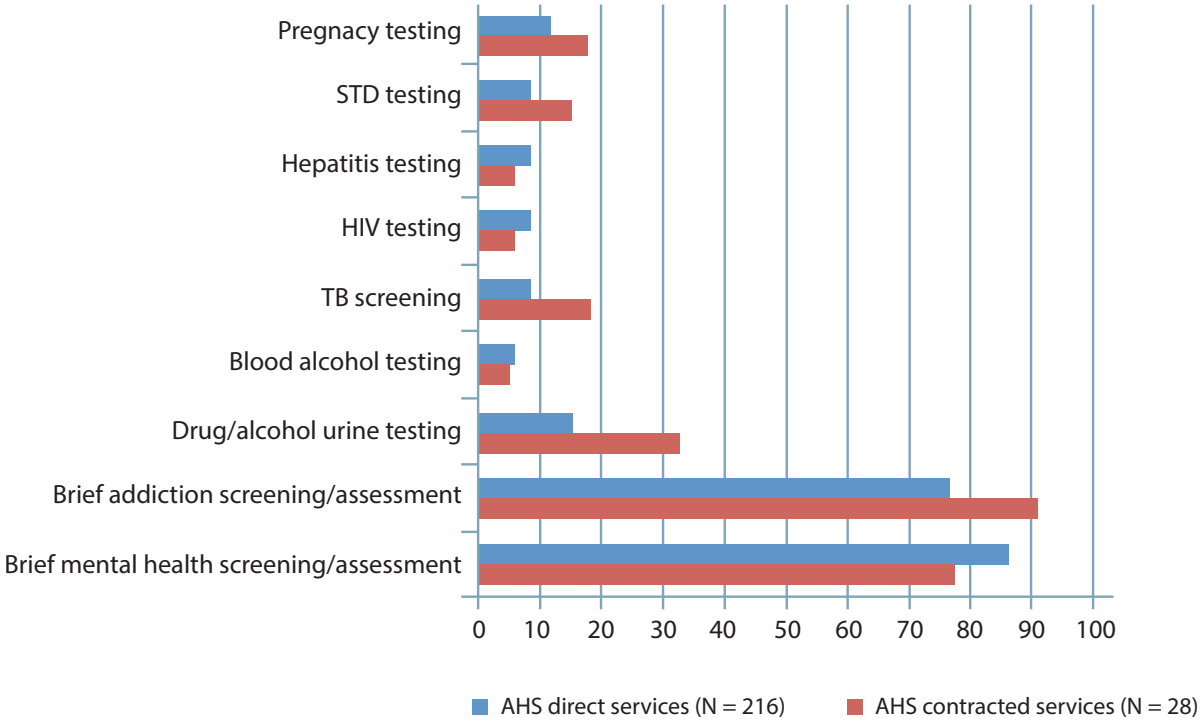



Figure 24
Percentage of AHS direct and contracted services offering different medical activities

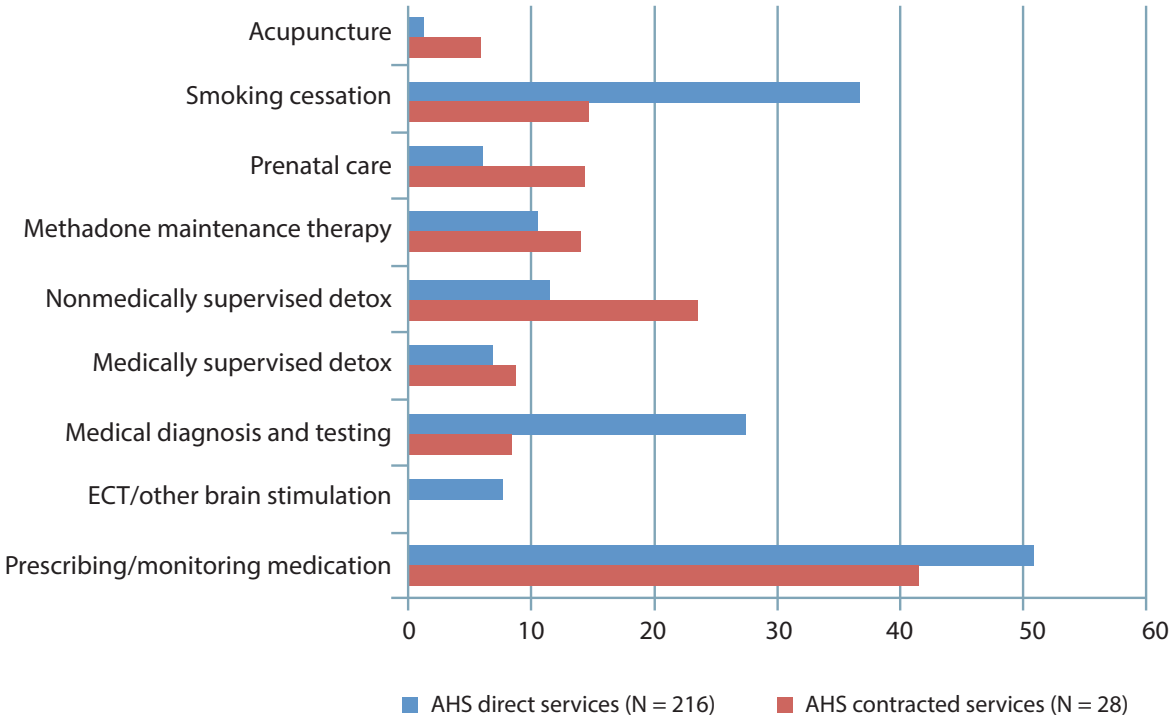


Figure 25
Percentage of AHS direct and contracted services offering different therapy activities

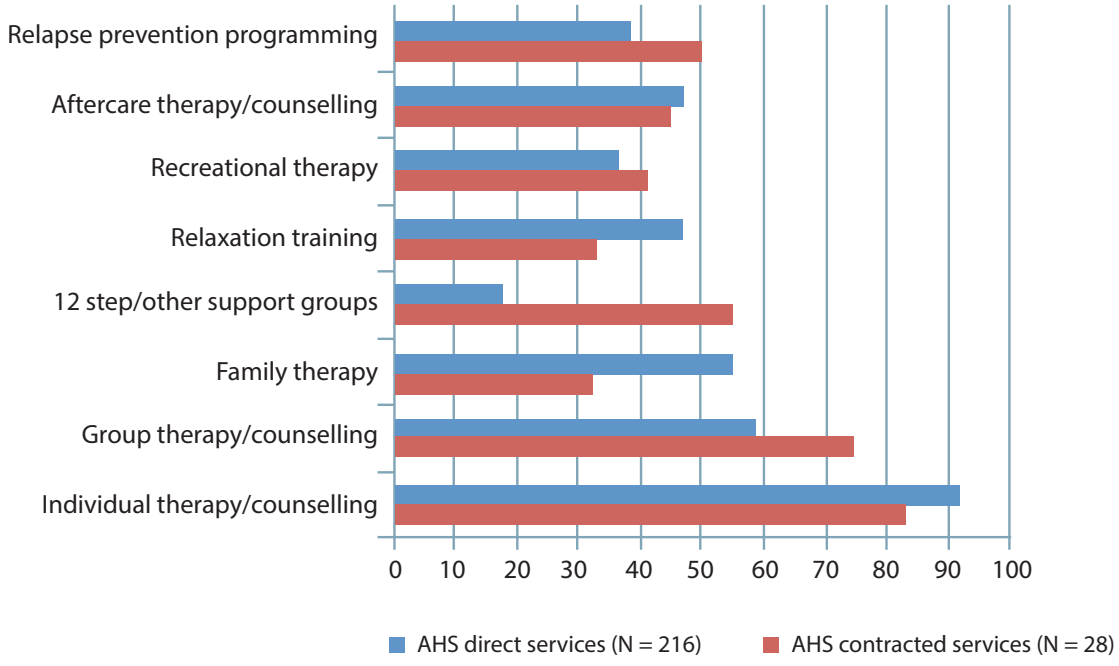



Figure 26
Percentage of AHS direct and contracted services offering different prevention activities

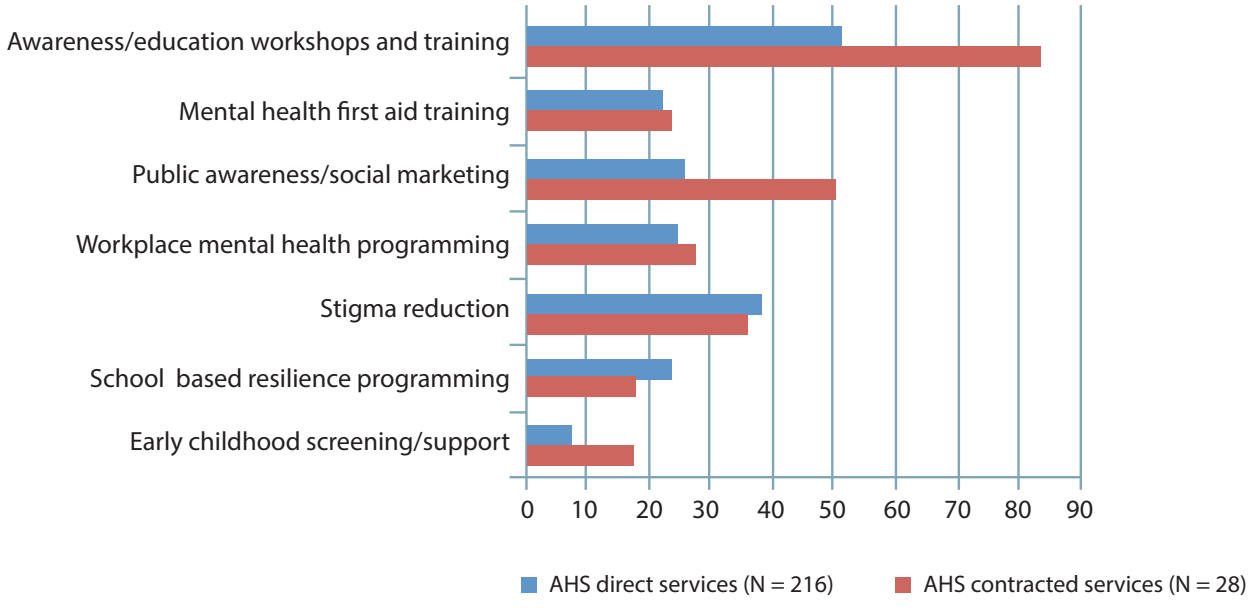
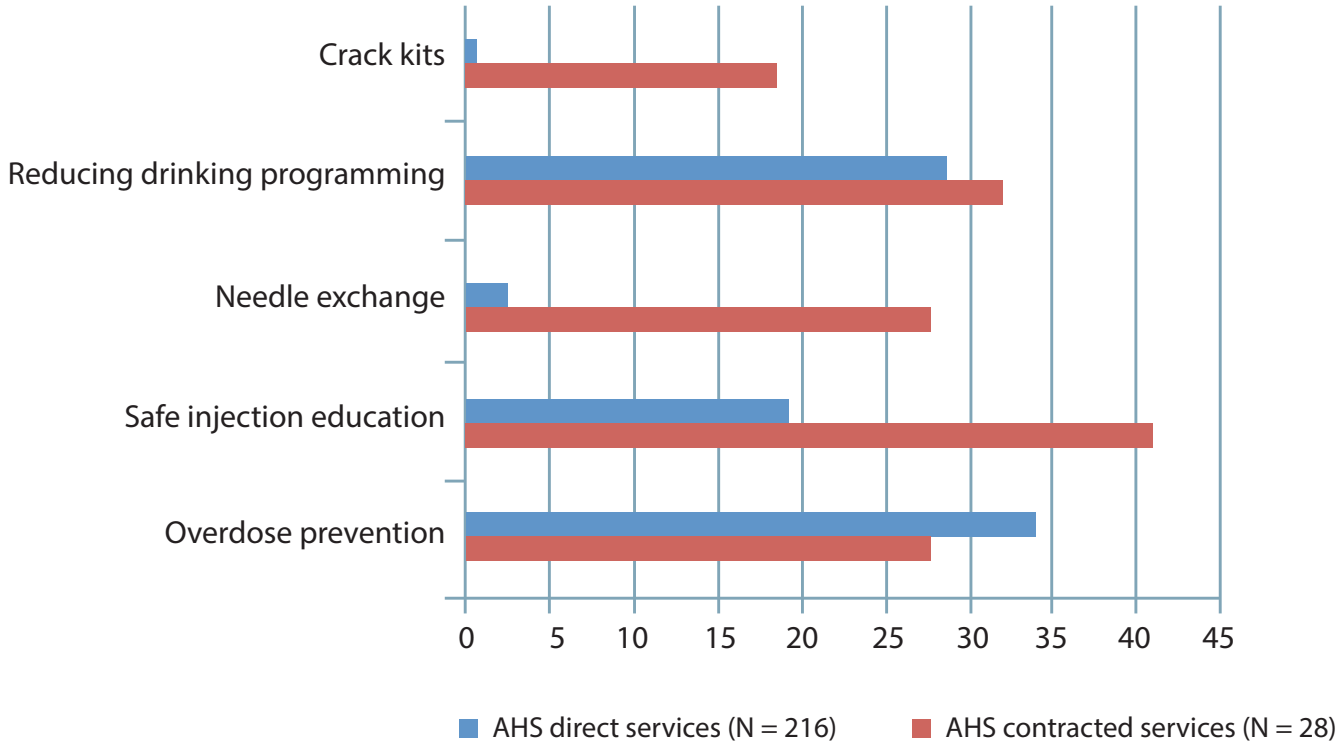


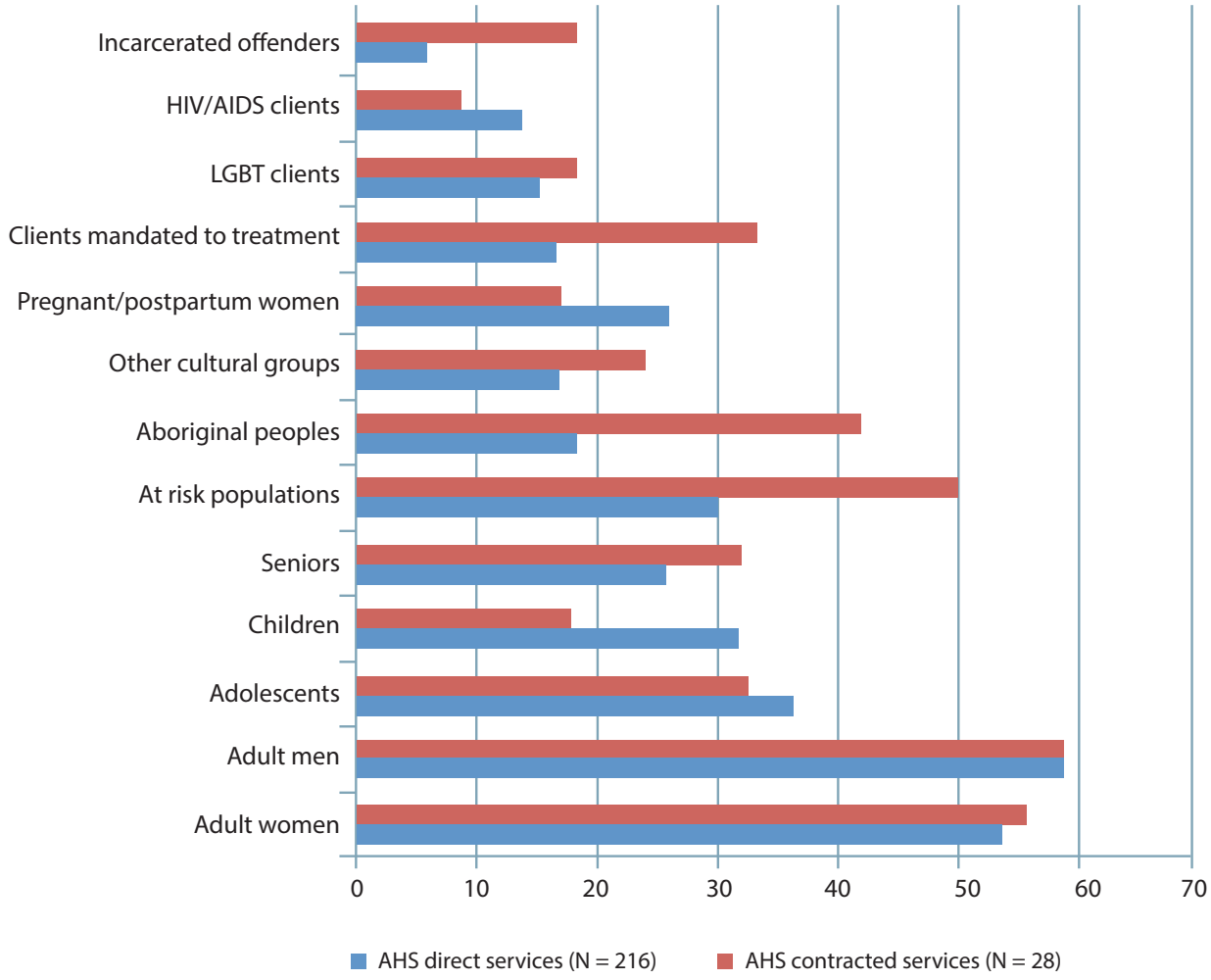
Figure 27
Percentage of AHS direct and contracted services offering different harm reduction activities




## Target Populations and Conditions

Figure 28 describes the populations that surveyed programs and services directly target, i.e., the activities of the service were endorsed by programs as designed to provide care specifically for each group. Readers should note that programs and services could endorse more than one target population, i.e., response categories were not mutually exclusive.

Figure 28
Percentage of AHS direct and contracted services specifically designed to target different populations




Surveyed AHS contracted services indicated that they specifically target adult men, 'at risk' populations (clients with a history of violence, involvement in child services, etc.), aboriginal peoples, and clients mandated to receive treatment from the justice system. In contrast, AHS direct services primarily targeted adult women, adult men, adolescents, and children.

Figures 29 and 30 provide further details on addiction and mental health conditions specifically targeted by surveyed programs. The most common mental health conditions targeted by surveyed AHS direct and contracted services were depression, anxiety disorders, and other mood/bipolar disorders. The most common addiction conditions targeted by surveyed AHS direct and contracted services were alcohol, prescription drug misuse, and tobacco.

Figure 29
Percentage of AHS direct and contracted services reporting that they provide service for different mental health problems

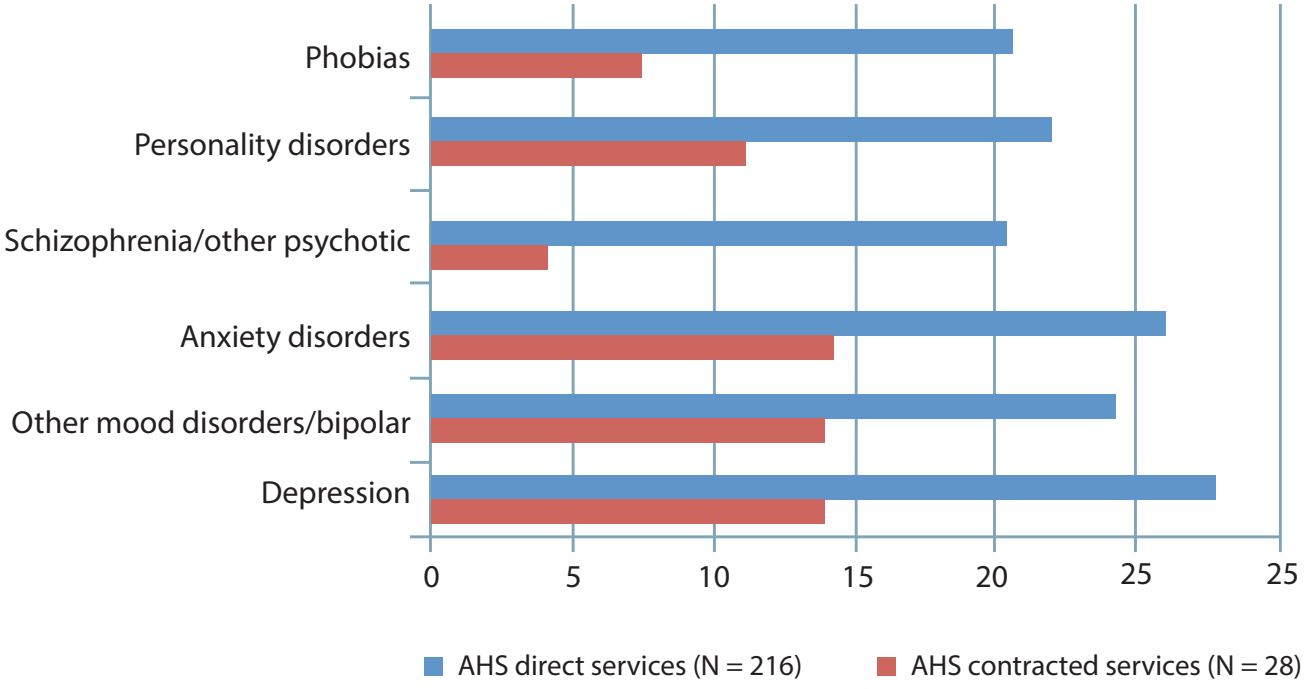
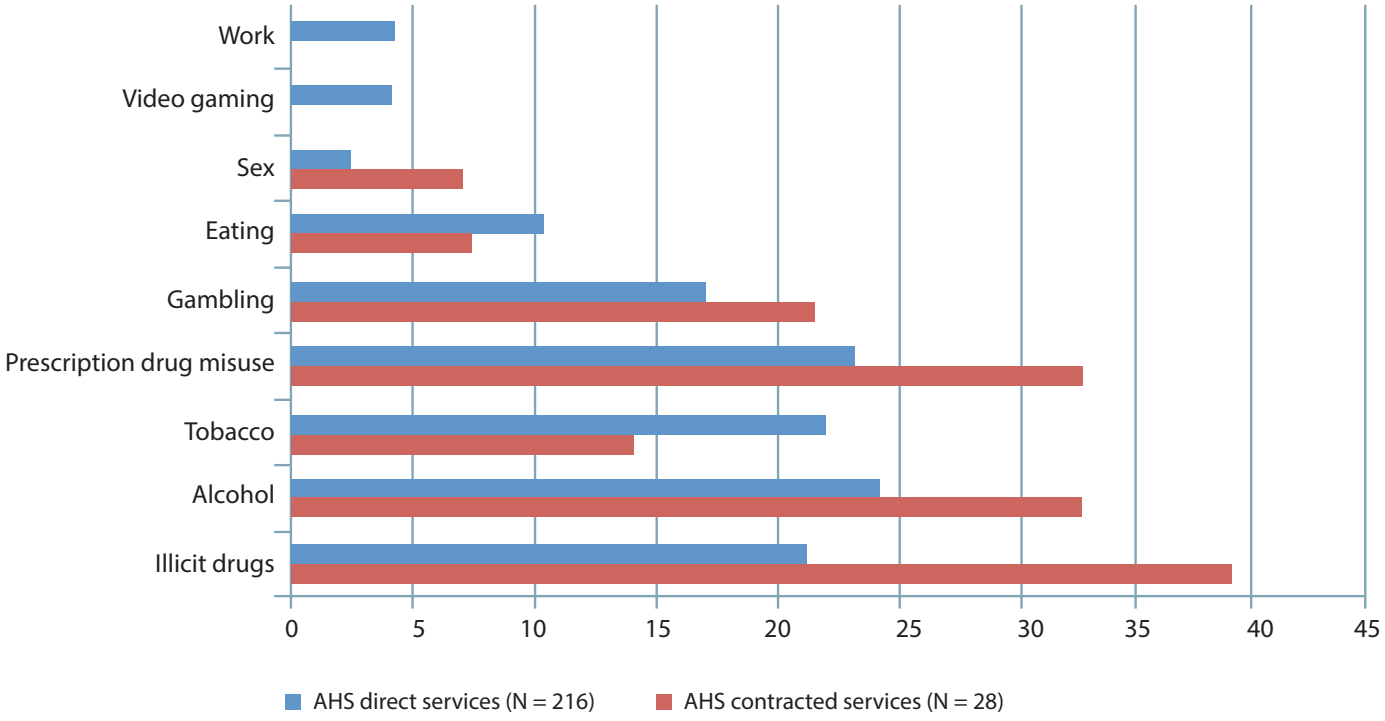


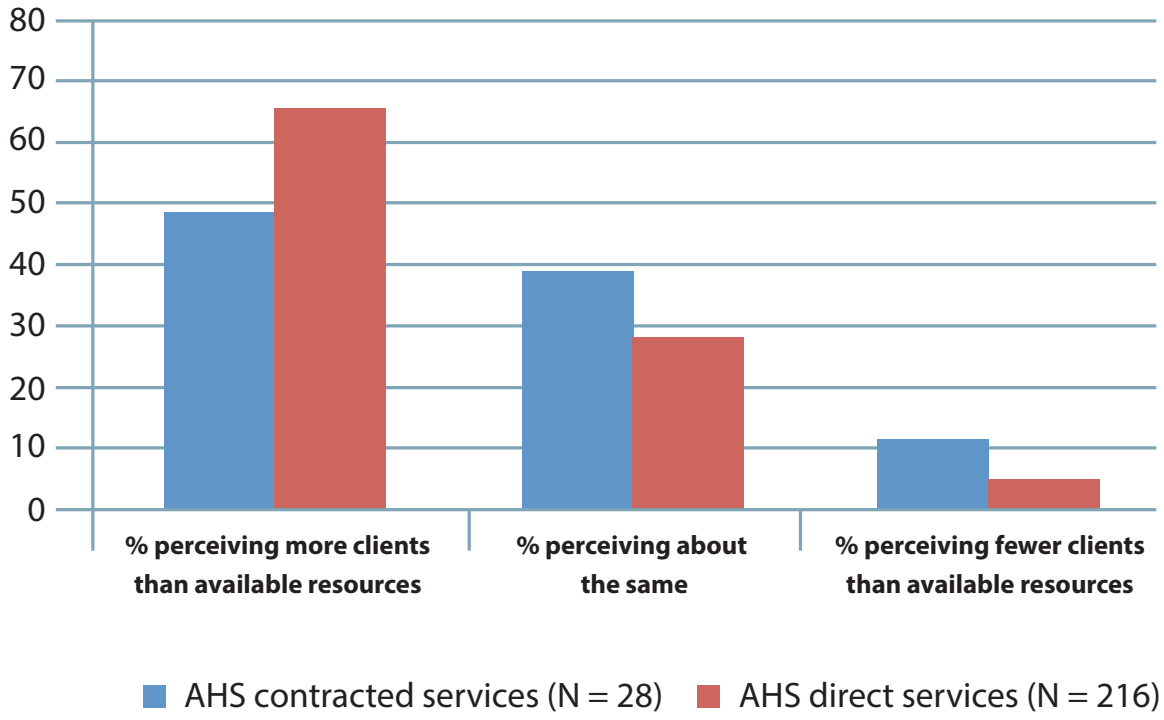
Figure 30
Percentage of AHS direct and contracted services reporting that they provide service for different addiction problems




## Caseloads

Table 33 presents caseload data from AHS direct and contracted services. Total admissions across Alberta in the fiscal year preceding the survey were 539.7 clients and 1461 clients receiving AHS direct and contracted services, respectively. The maximum caseload on any given day of service varied between ~16–33 clients across the AHS direct service Zones. Surveyed programs from AHS direct services indicated that about 13 clients were on a waitlist as of the survey administration day; this was higher among surveyed AHS contractors (27 clients on a waitlist). Programs and services indicated that clients waited, on average, about 22 days to access AHS direct services and about 26 days to access AHS contracted services. Importantly, 20–100% of programs and services indicated that caseload information was estimated rather than exact numbers. Figure 31 presents the perceptions of surveyed programs and services with regard to the relationship between caseload and resources.

Figure 31
Perceived relation between caseload and resources




A majority of surveyed AHS direct and contracted programs perceived that they receive more clients than they currently have resources to provide for.

## Evaluation Procedures

Table 34 summarizes evaluation procedures used by surveyed AHS direct and contracted services at the Zone and provincial level. Although over 90% of surveyed programs indicated that they record client demographic information in a database, only 23.5% of AHS direct services surveyed reported that they systematically record post-program outcome information. Use of these procedures was slightly greater among AHS contracted services.

## 6.3 Cost and Utilization of Programs, Services, and Initiatives

### 6.3.1 Overview

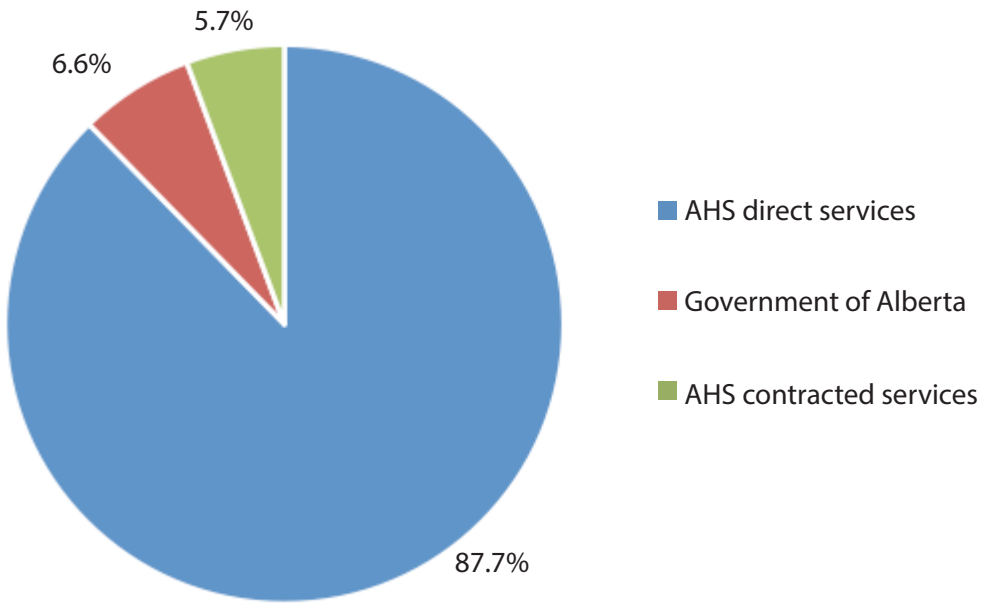
AHS direct service costs were analyzed by type of service provided, including hospital-based inpatient and outpatient services, psychiatric hospitals, emergency departments, community mental health services, residential and outpatient addiction treatment services, and opioid dependence treatment. Subgroup analyses for different service recipients were conducted in order to describe costs by gender and AHS service Zone. For inpatients receiving services from acute care hospitals and psychiatric hospitals, additional analyses were performed to describe costs of services for eligible GAP-MAP diagnoses using the CIHI Case Mix Grouper (CMG) method (see http://www.cihi.ca/CIHI-ext-portal/internet/EN/TabbedContent/standards+and+data+submission/standards/case+mix/cihi010690). Physician services were also described for eligible GAP-MAP diagnoses using the same method, although funding for those services are primarily provided by Health.

An integrated and coordinated approach is used in mental health and addiction services planning and delivery, and so is our costing analysis. Costs associated with AHS contracted services were analyzed and described on the basis of programs and vendors, and the monetary amounts allocated to each AHS service Zone. The relatively short time frame for GAP-MAP precluded us from obtaining systematic data from the beneficiaries of these services.

Finally, cost information is reported in aggregate amounts across the GoA units from where the information was collected. For example, mental health projects and costs from Health were presented for grants from the Addiction and Mental Health branch, and for programs and services provided by Primary Care Networks (PCNs). Other mental health programs and initiatives funded by non-health GoA ministries, i.e., Education, Culture, Human Services, are presented according to cost, quantity and type of services; e.g., counselling, therapies, and treatments, when available.

## 6.3.2 Total Costs From All Sources

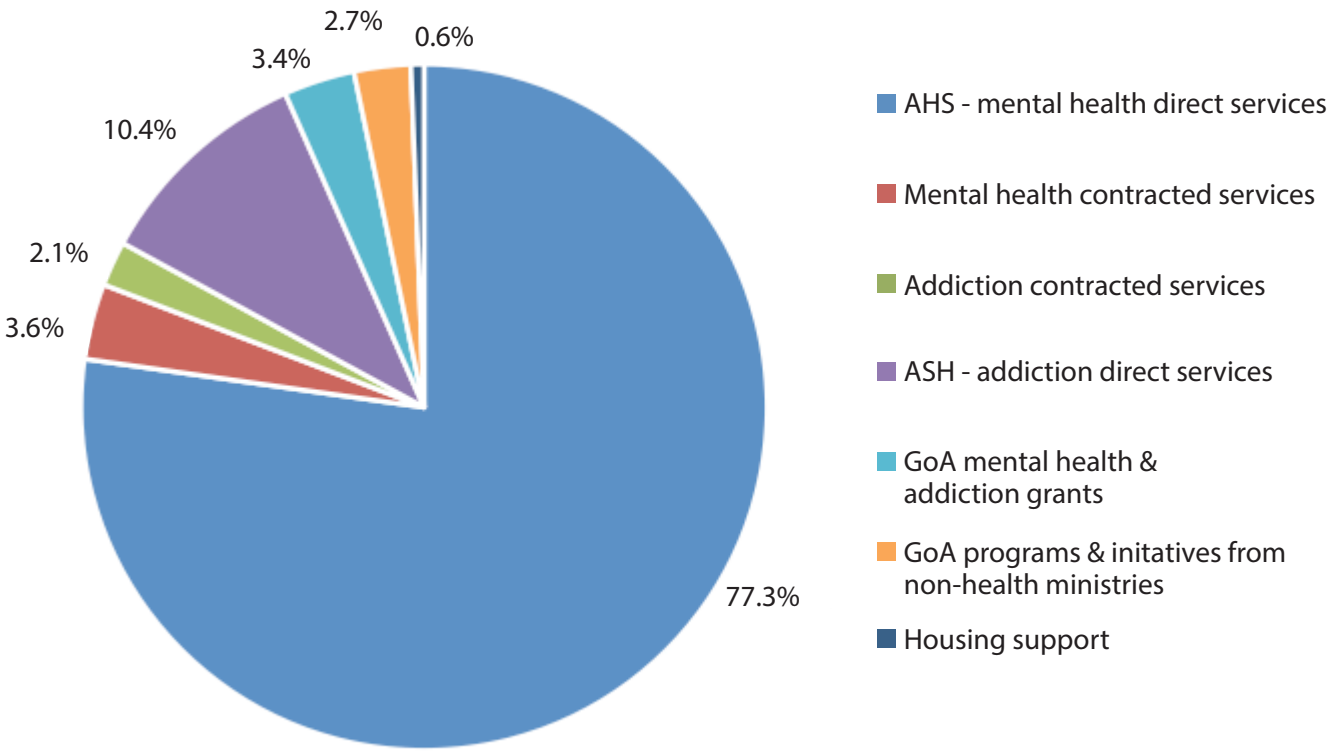
Figure 32
Proportional allocation of publicly-funded costs ($753.8M) for addiction and mental health programs, services, and initiatives, FY 2010–2011




Note. Although physicians do provide services in AHS-operated facilities and programs, most physician payments are not under direct control of AHS. If physician claims are excluded, AHS direct costs constitute 72.9% of total publicly-funded costs

As shown in Figure 32, GAP-MAP estimated that total provincial spending for mental health and addiction programs, services, and initiatives in Alberta was $753.8 million in FY 2010–2011. Of this total amount, 87.7% was accounted for by AHS direct services. AHS contracted services accounted for 6.6% of the total costs, while the remaining costs (5.7%) were accounted for by funding allocations and other initiatives by Health and other GoA ministries.

Figure 33
Proportional allocation of publicly-funded costs ($753.8M) for addiction and mental health programs, services, and initiatives, FY 2010–2011




Note. Although physicians do provide services in AHS-operated facilities and programs, most physician payments are not under direct control of AHS. If physician claims are excluded, AHS direct costs constitute 62.5% of total publicly-funded costs

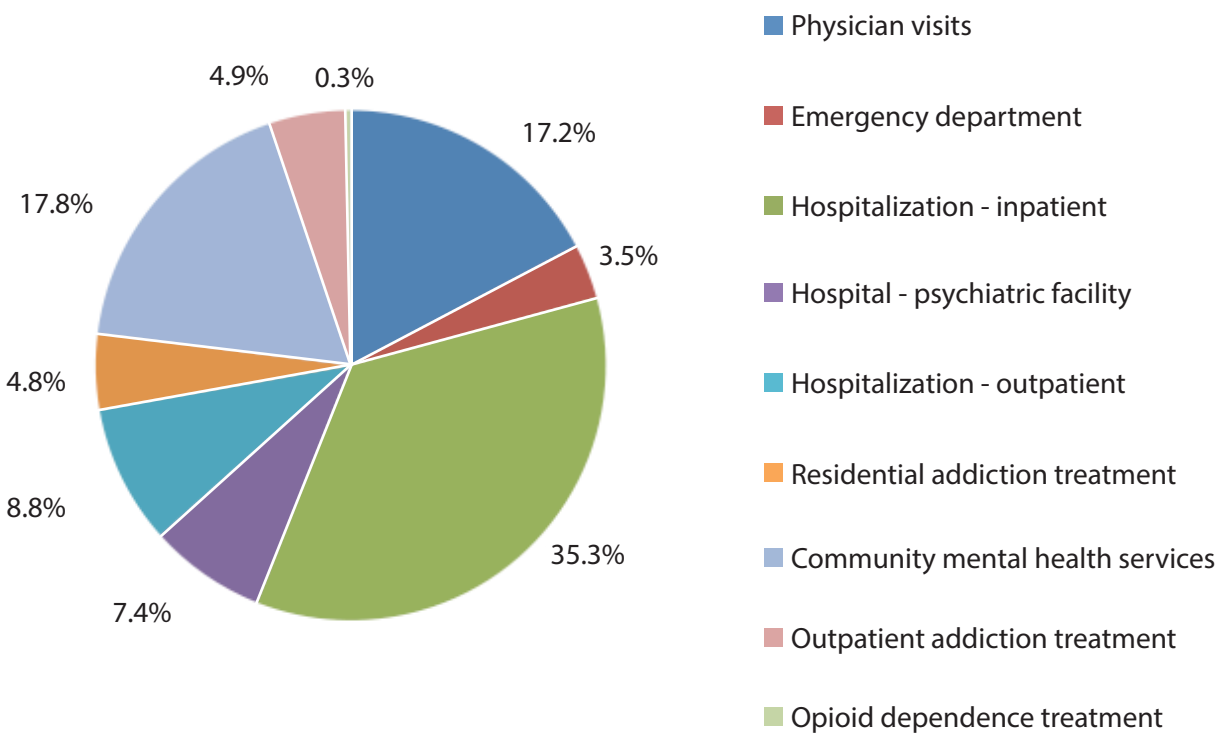
A more detailed analysis of total provincial costs from all sources in relation to spending on mental health versus addiction programs, services, and initiatives is provided in Figure 33 and in Table 40. Figure 33 indicates that there is a pronounced difference in the costing profiles of mental health and addiction services within Alberta. Specifically, of the estimated total of $753.8 million spent by the Province in 2010–2011, mental health programs and services accounted for 80.8% of the total costs; addiction programs and services accounted for about 12.6% of the total costs.

Outside of the AHS direct and contracted service system, grant allocations from the provincial government accounted for an additional 6.3% of total costs, which were almost evenly split between targeted mental health and addiction funding allocations from Health (3.3%) versus other GoA ministries (2.7% of total costs). Housing support provided by the GoA and specifically targeted to addiction and mental health clients accounted for 0.62% of the total provincial costs.

## 6.3.3 AHS Direct Services[15] Costs

We initially analyzed the total costs associated with AHS direct services, divided into different types of services, including physician visits, as well as patient encounters in emergency departments, hospitalization costs (in both inpatient and specialized psychiatric care), and treatments provided in outpatient contexts (hospital outpatient services, community mental health clinics, outpatient addiction treatment, and specialized addiction care. Physician claim costs were analyzed using the same method.

Figure 34
Proportional costs of different AHS direct services across Alberta, FY 2010–2011




Note: The size of the Opioid dependence treatment share (.3%) is too small to be seen in this figure

As displayed in Figure 34, inpatient services provided in hospitals and psychiatric facilities accounted for 42.71% of the total AHS direct service costs in 2010–2011. Community mental health services and physician visits each accounted for about 17% of AHS direct costs in this fiscal year. Addiction services, including residential addiction treatment, outpatient addiction treatment, and opioid dependence treatment services, accounted for about 10% of direct service costs for AHS in 2010–2011.

[15] The data and figures provided in this subsection describe individuals who accessed services for eligible GAP-MAP diagnoses. However, caution must be used when interpreting the results and comparing activity in each part of the continuum as some results reflect different fiscal years and differing methodologies of calculation of costs and individuals.

Figure 35
Proportional costs of all AHS direct mental health services across Alberta by age ranges, FY 2010–2011

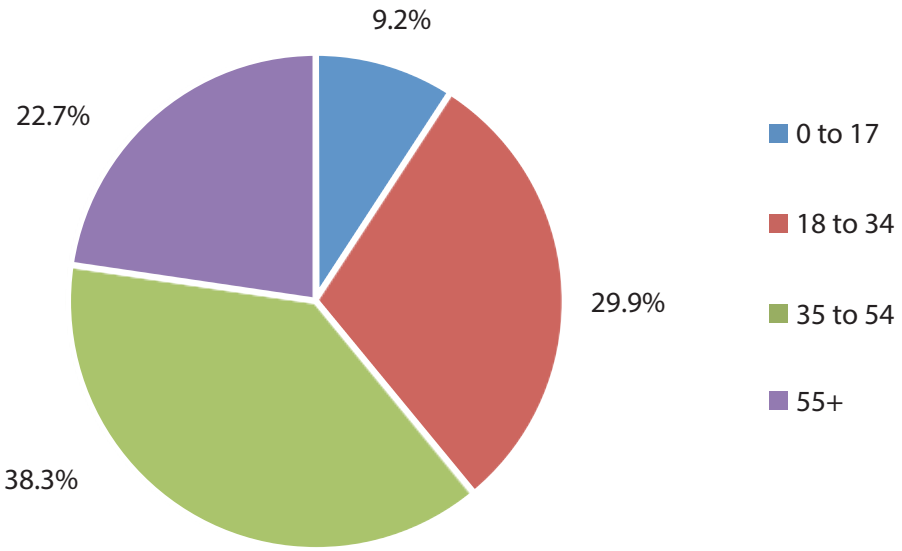
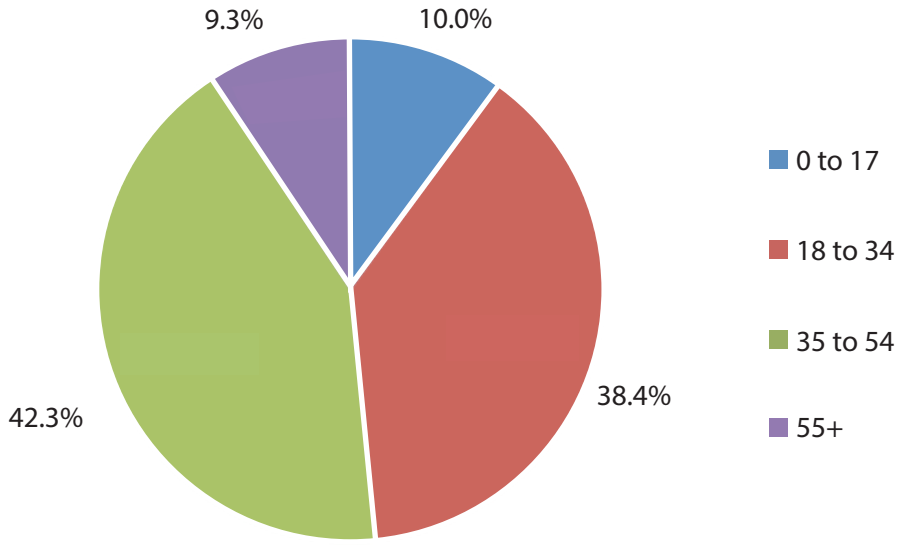


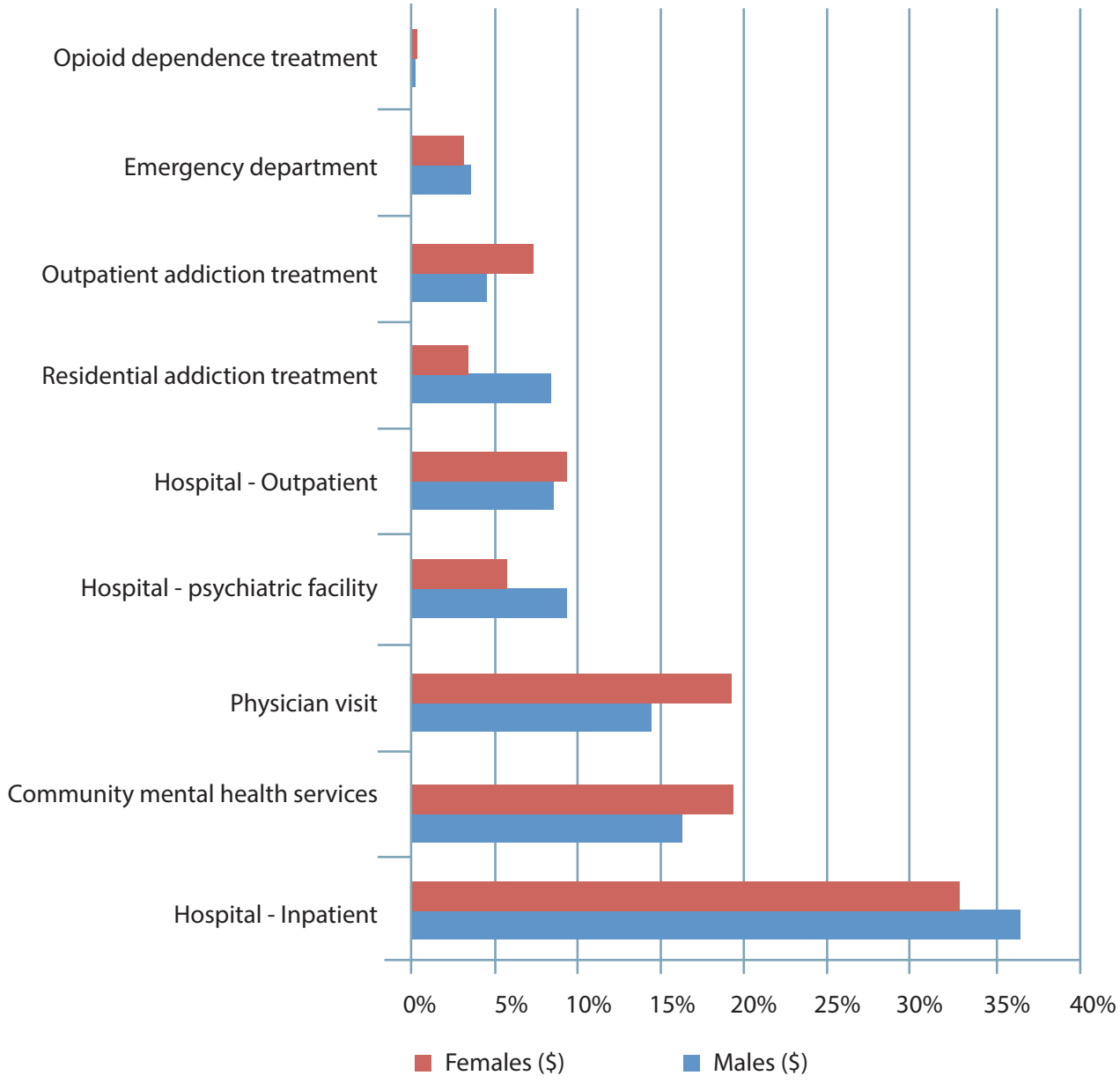

Figure 35 displays AHS direct service costs proportionally by age group served. Children and youth accounted for 9.2% of direct AHS costs for mental health services. Individuals aged 55 and greater accounted for 22.7% of AHS direct service costs.

Figure 36
Proportional costs of all AHS direct addiction services across Alberta by age ranges, FY 2010–2011



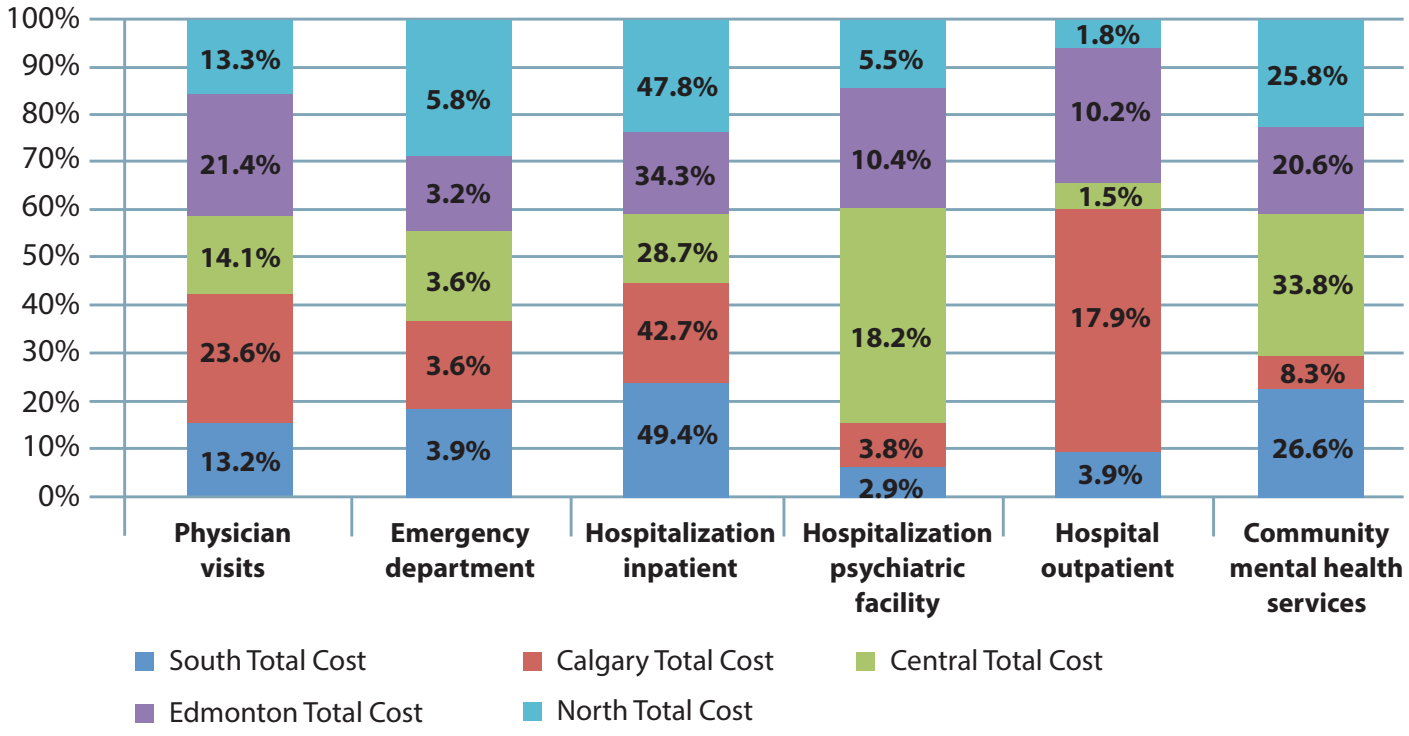
A similar costing profile was obtained for AHS direct addiction services. Children and youth accounted for 10.0% of direct AHS costs for addiction services. Individuals aged 55 and greater accounted for 9.3% of AHS direct service costs, and the bulk of costs were incurred for adults aged 18–54.

Figure 37
Proportional costs of different AHS direct services across Alberta by sex, FY 2010–2011



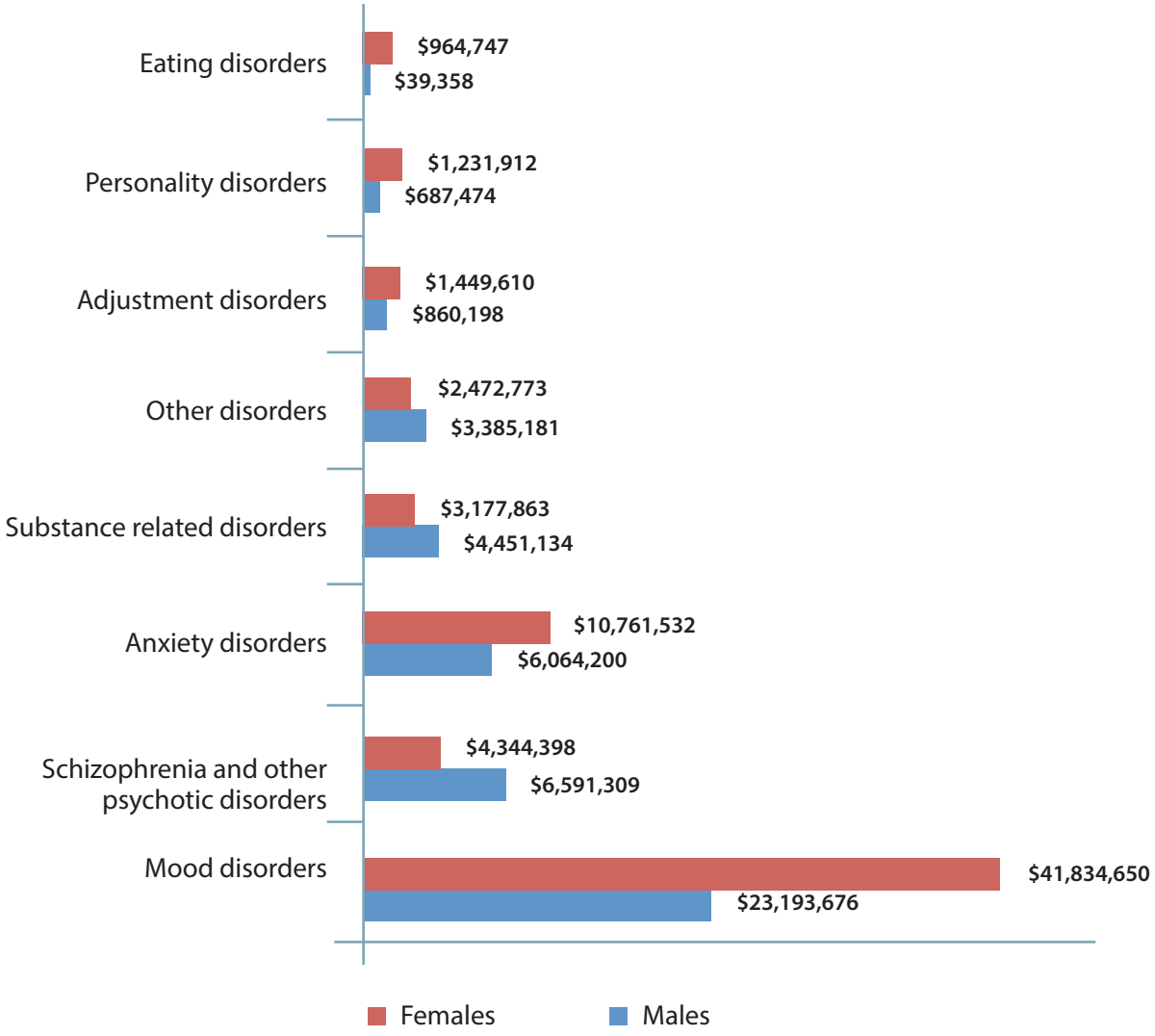

As shown in Figure 37, female clients accounted for proportionally more of total AHS direct service costs for physician visits, community mental health services, and hospital-based outpatient services. In contrast, male clients accounted for proportionally more of total AHS direct service costs for general and psychiatric hospitalization.

Figure 38
Proportional costs of different AHS direct services by Zone, FY 2010–2011 (excludes specialty addiction treatment)



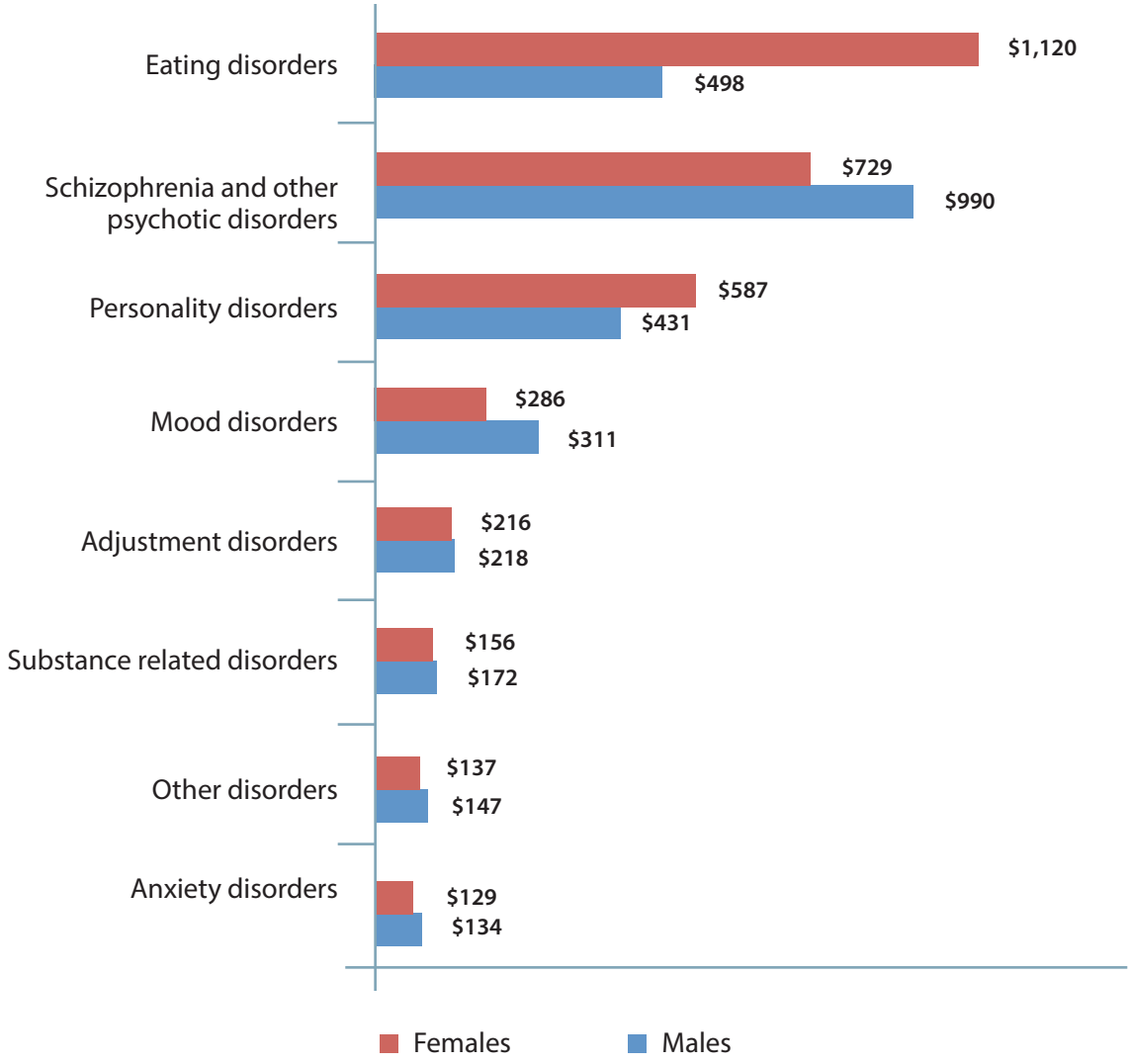

As shown in Figure 38, AHS service Zones exhibited fairly wide variability with respect to proportional costs across different types of direct services. For example, hospital-based outpatient services accounted for about 18% and 10% of the direct service costs in Calgary and Edmonton, respectively; these costs were much smaller in the rural Zones. This is consistent with several large acute-care hospitals being located in these urban areas. Similarly, costs for hospitalization at specialty psychiatric facilities were proportionally greater in the Central Zone and in Edmonton, where the two provincial psychiatric hospitals are located. Costs associated with provision of community mental health care services were greatest in the rural AHS Zones. Note that proportional costs of providing speciality addiction treatment were not included in Figure 38. GAP-MAP obtained costing information for individuals receiving addiction services in AHS Zones. However, there was missing information in some service categories for certain health zones and/or delivery of some services at a regional or provincial level. For example, for opioid dependence treatment, only Calgary and Edmonton zones provided information such as yearly budgets and number of unique clients. Therefore, proportional costs for different specialty addiction services are not provided in Figure 38.

Figure 39
Physician billing costs by diagnoses and sex, FY 2010–2011



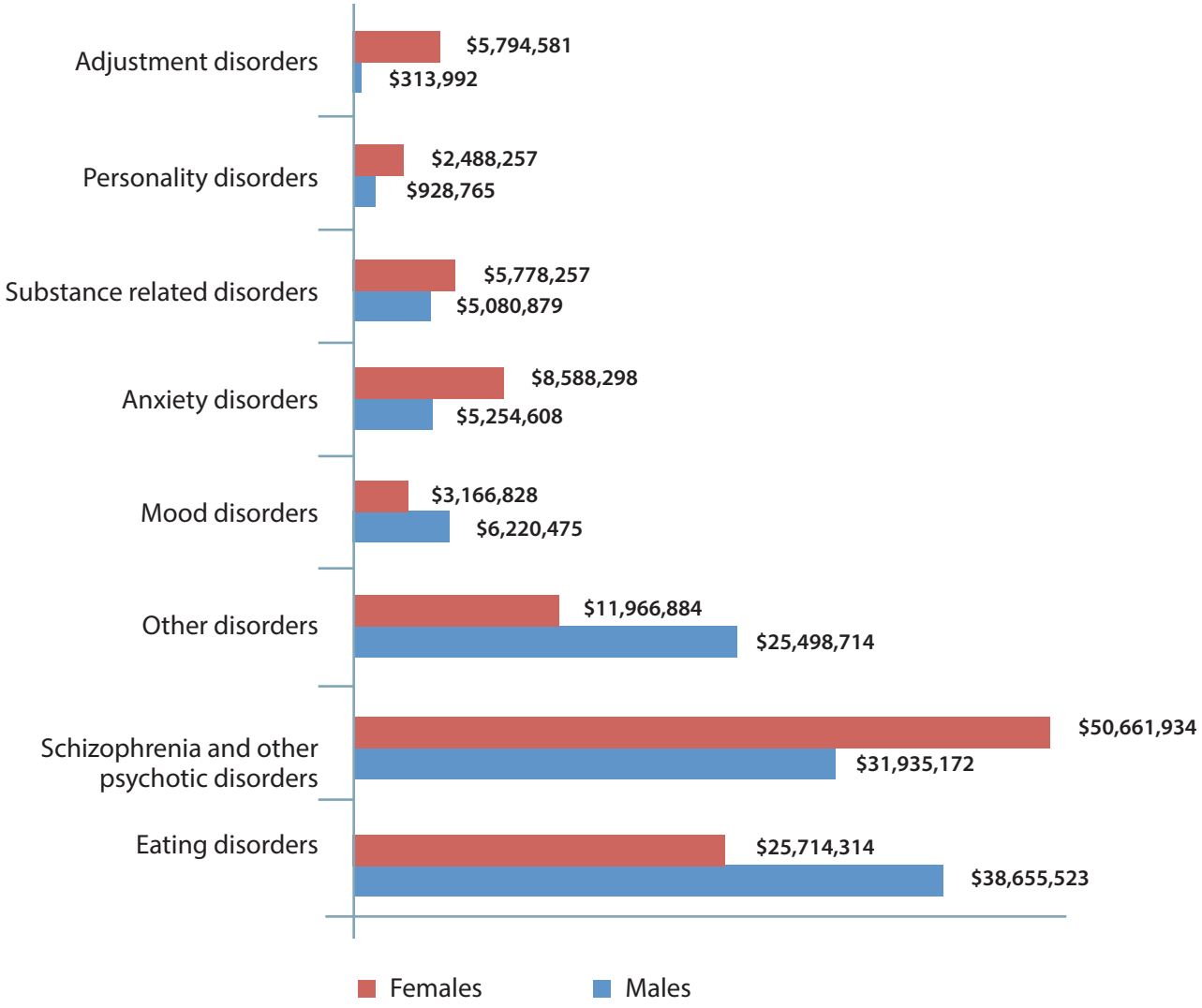

In 2010–2011, mood disorders, schizophrenia and other psychotic disorders, and anxiety disorders incurred the most physician billing costs, compared to other conditions (Figure 39). Females with mood and anxiety disorders accounted for substantially more physician billing costs than males with these mental health problems. In contrast, males with schizophrenia/other psychotic disorders and substance related disorders incurred more physician billing costs than females with these disorders.

Figure 40
Average physician claim costs by diagnosis and sex, FY 2009–2010



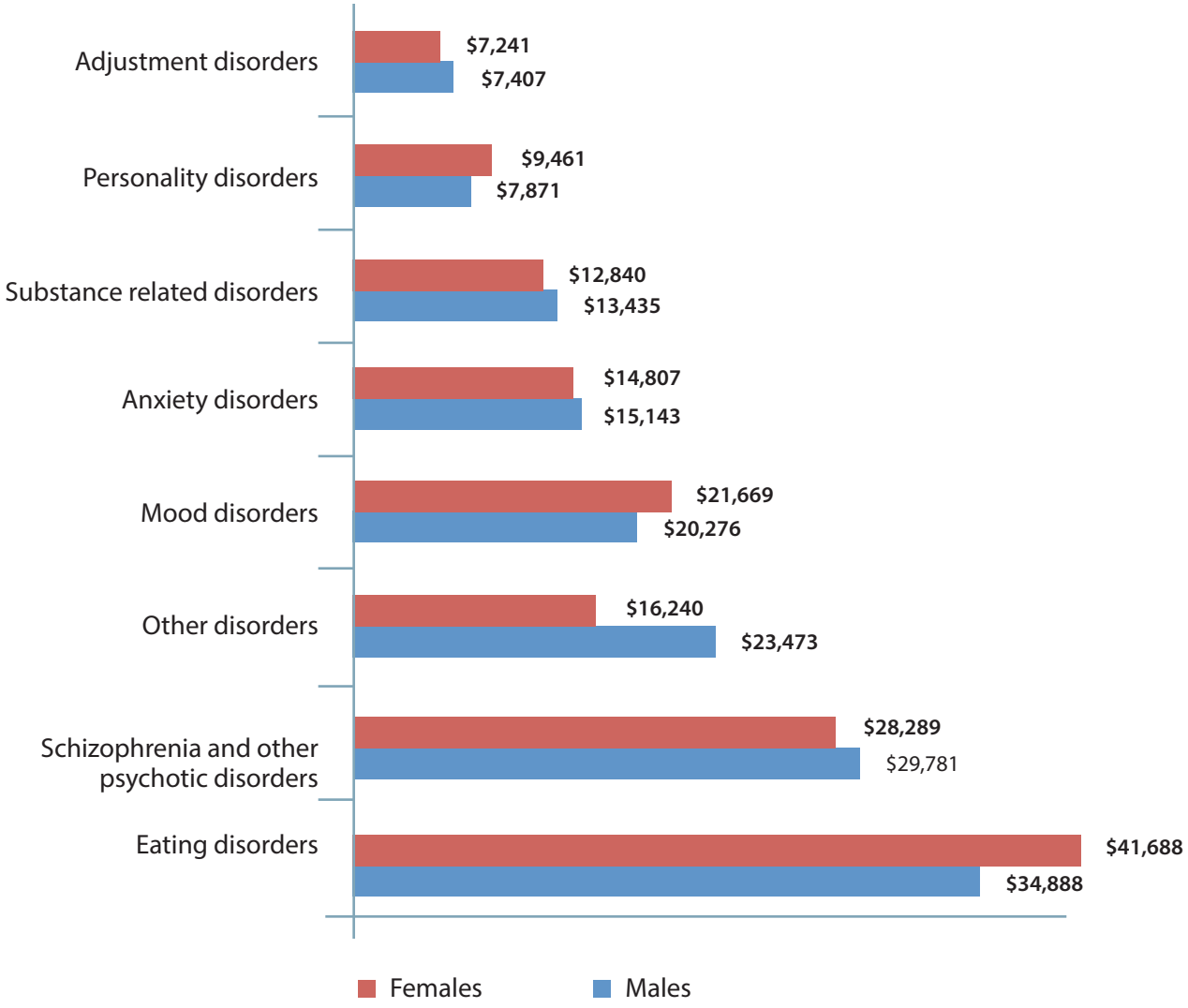

Across all relevant GAP-MAP diagnoses, males and females incurred, on average, $295 and $277 in physician claims respectively in 2009-2010. However, physician billing claims exhibited substantial variability across conditions. Specifically, the most expensive physician services diagnostic category was eating disorders for young females, which cost $1,120 per treated individual. The second most costly diagnostic category was schizophrenia and other psychotic disorders, which cost, on average, $729 per treated female patient, and $990 per treated male patient. In contrast, anxiety disorders and substance-related disorders incurred the least physician billing costs (see Figure 40).

Figure 41
Total acute inpatient care costs across diagnoses by sex, FY 2010–2011




As displayed in Figure 41, with respect to total acute inpatient care costs, mood disorders and schizophrenia/other psychotic disorders accounted proportionally for more acute inpatient hospitalization costs, while eating disorders, personality disorders, and adjustment disorders incurred the least costs for inpatient hospital care. Substantial sex differences are evident, with acute inpatient care for mood disorders and anxiety disorders being more expensive than for males with these conditions. In contrast, males incurred more costs for substance related disorders, compared to females.

Figure 42
Average acute inpatient care costs by diagnosis and sex, FY 2010–2011

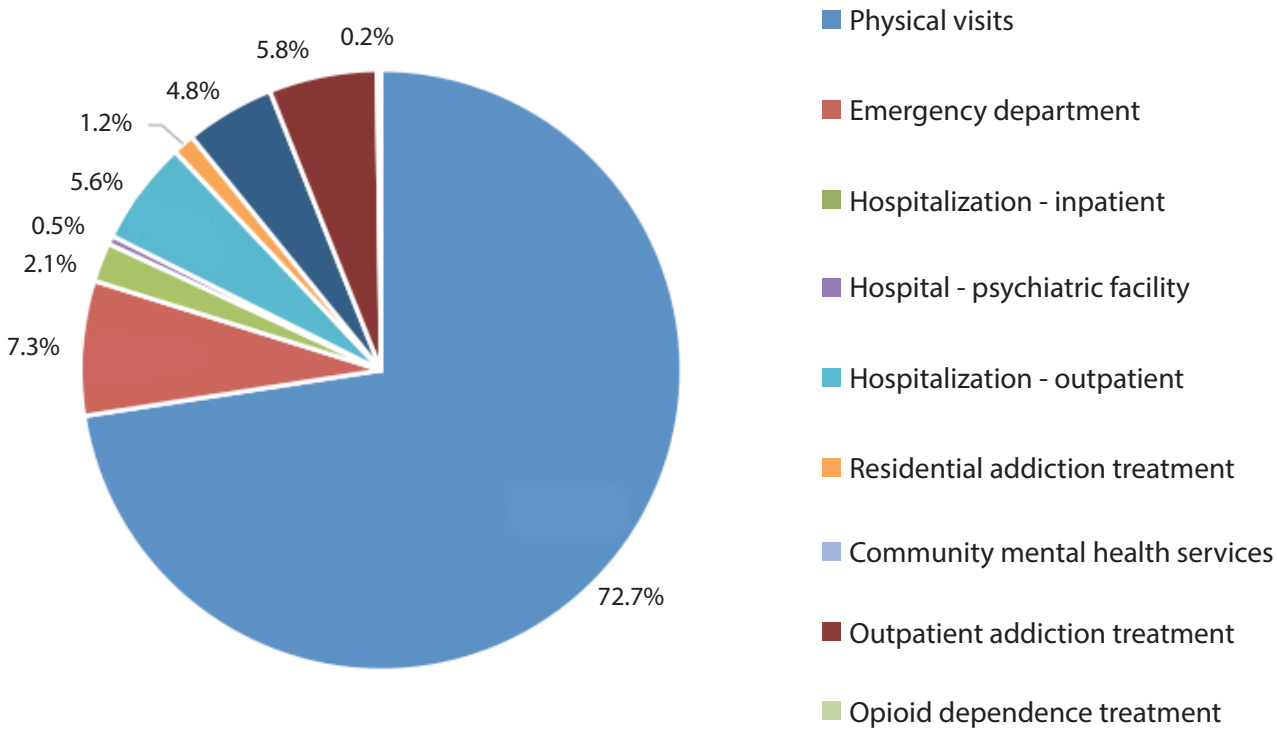



On a per-capita basis, Figure 42 shows that different addiction and mental disorders exhibited wide variation in costs of providing acute inpatient care. Specifically, inpatient services for eating disorders is the most costly condition to treat with this service among youths and adults, for both females and males, costing $41,688 per treated individual among females, and $34,888 per treated individual among males. The hospital inpatient costs of providing services for patients diagnosed with schizophrenia was the second highest during our study period, accounting for $28,289 per treated individual for females, and $29,781 for each treated male patient.

## Patient Encounters

In reporting the number of services received by Albertans from AHS direct services, it is important to keep several definitions in mind. A patient encounter, in general, refers to a service used by individuals with a most responsible GAP-MAP diagnosis of an addiction or mental health problem between April 1, 2009 and March 31, 2011 as defined in Section 4 of this report. Patient encounters thus include patient days, i.e., inpatient and outpatient service episodes provided in acute or psychiatric hospital settings, along with service episodes provided in emergency departments, or in community mental health services, outpatient addiction services, or specialist addiction programs (e.g., opioid dependence treatment). Physician visits refer to Albertans who consulted physicians for addiction and/or mental health problems during the same period. Thus, patient encounters could include, e.g., multiple physician visits or multiple patient days in one year. On the other hand, unique individual means that a patient is counted only once for each type of service received, regardless of how many patient encounters occurred within that service.

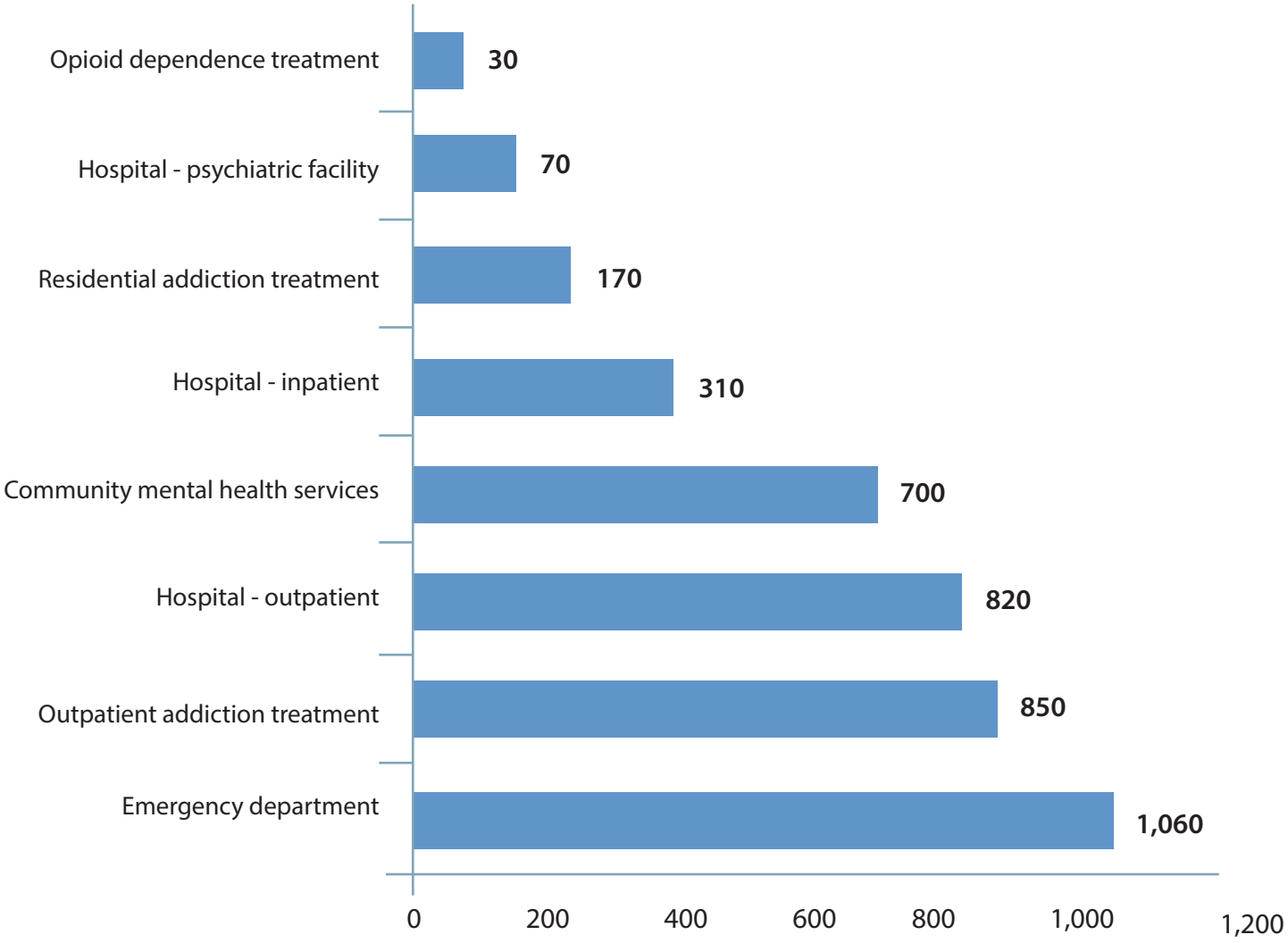
Figure 43
Proportion of total patient encounters (N = 541,610 patient encounters) across different AHS direct services in Alberta, FY 2010–2011




Note: The size of the Opioid dependence treatment share (.2%) is too small to be seen in this figure

Figure 43 displays proportional frequencies of total patient encounters across different AHS direct services. The most frequently accessed service was physician visits (72.7% of all patient encounters), followed by emergency department services (7.3% of all patient encounters). Addiction services (provided in residential and outpatient settings, as well as the opioid dependence treatment program) collectively accounted for about 7% of all AHS direct service patient encounters.

Figure 44
Patient encounter rates standardized per 100,000 Alberta population, AHS direct services, FY 2010–2011




Note that in FY 2010–2011, physician visit encounter rates (not displayed in Figure 44) were 10,570 per 100,000 population. The next most frequent service utilization was for emergency departments (1,060 per 100,000 population), followed by outpatient addiction treatment services, outpatient mental health services, and community health services (Figure 44).

Figure 45
Patient encounter rates (physician visits per 100,000 Zone population), AHS direct services, FY 2010–2011

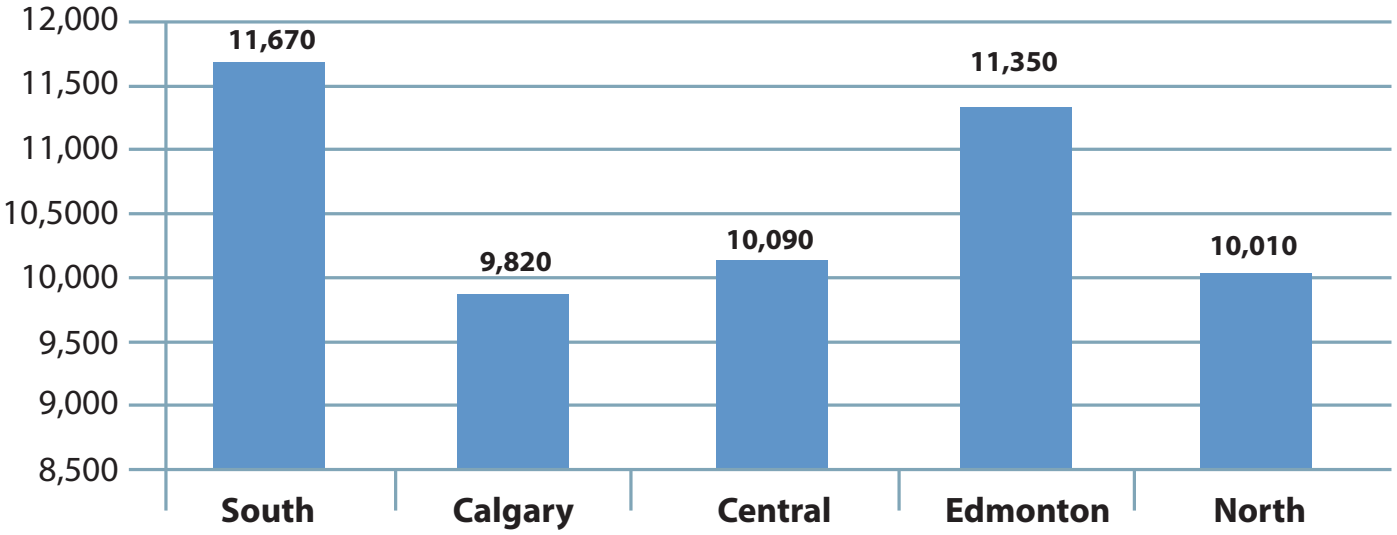



Figure 46
Patient encounter rates (other treatment services) per 100,000 Zone population, AHS direct services, FY 2010–2011

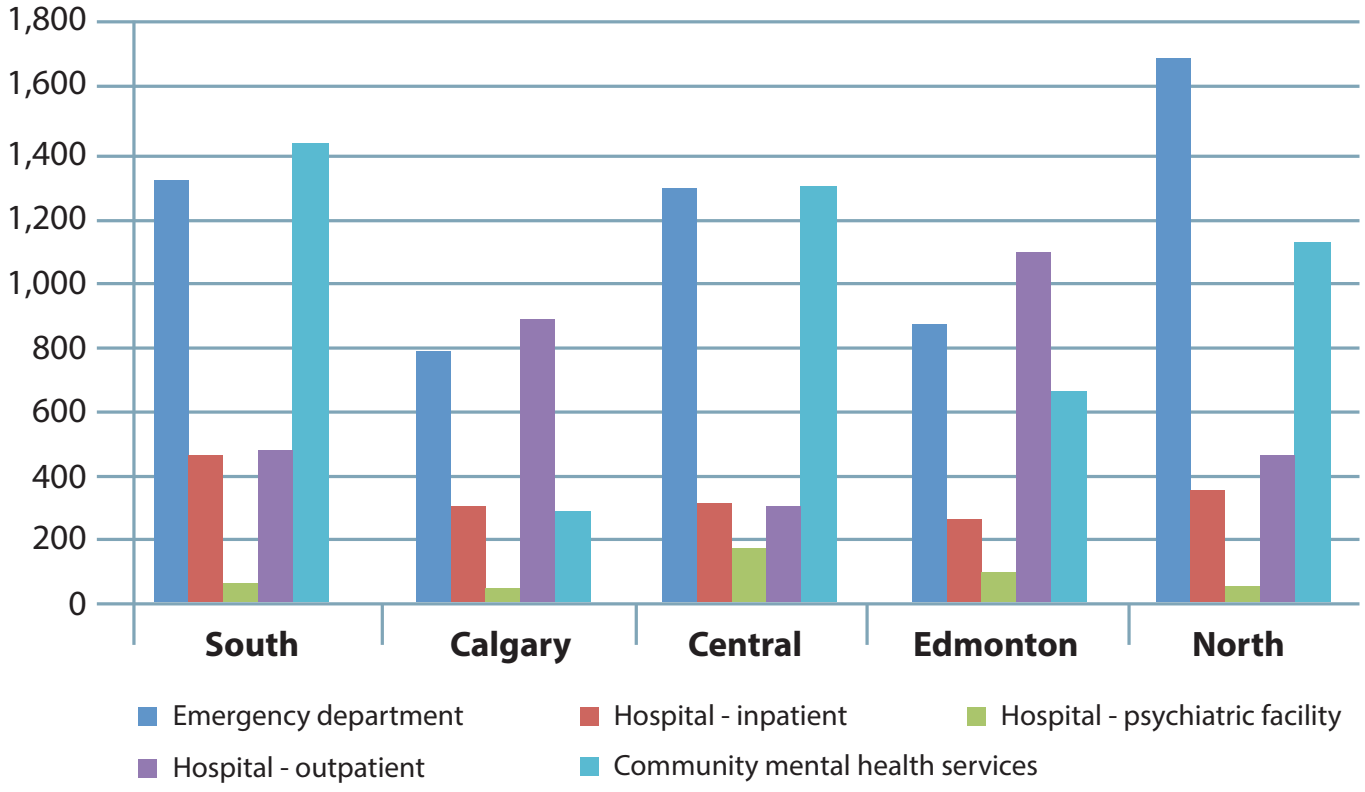
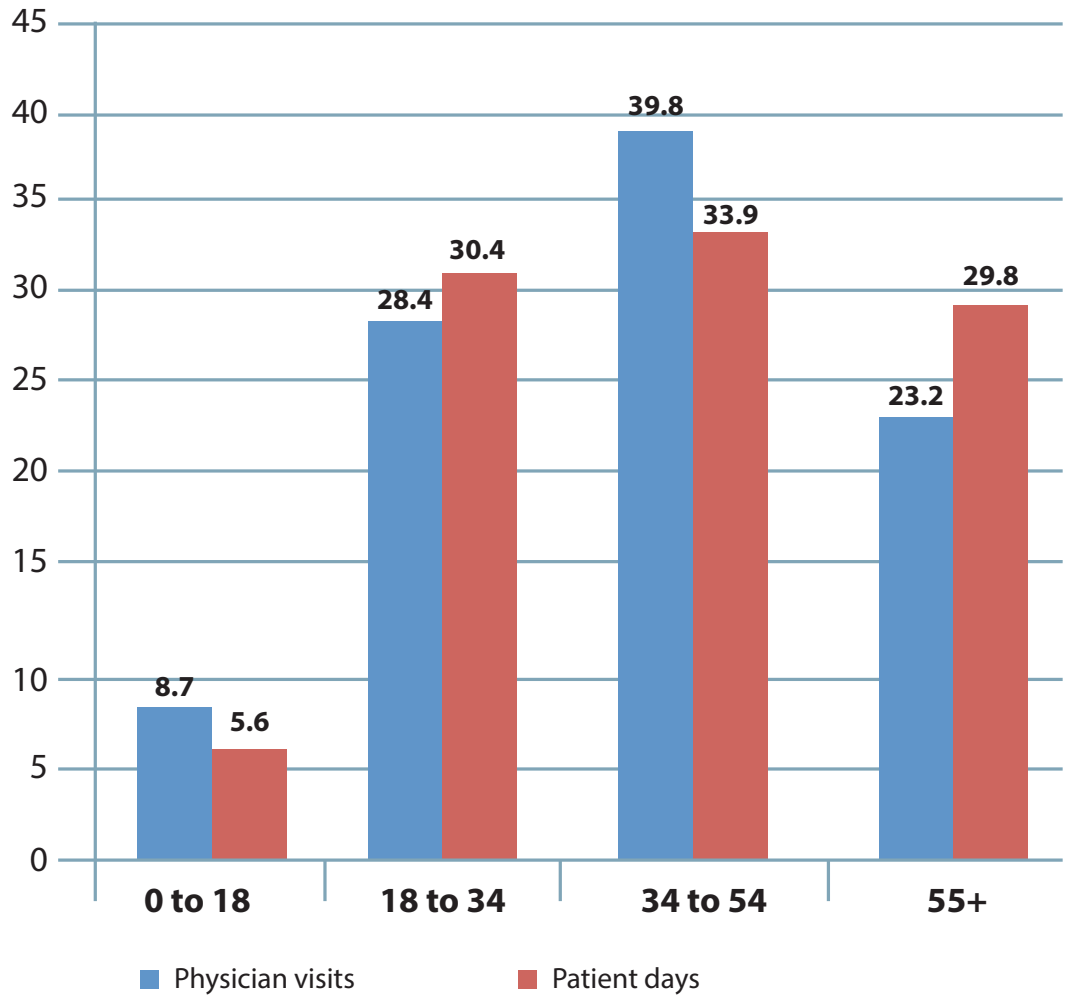


Figure 47
Proportion (%) of total physician visits and patient days by patient age group, AHS direct services, FY 2010–2011




As shown in Figure 47, less than 9% of total physician visits and patient days in hospital-based services were accounted for by children and youth. These figures are consistent with the costing information provided earlier, which indicated that less than 10% of total AHS direct service costs were consumed by children and youth seeking addiction and mental health services.

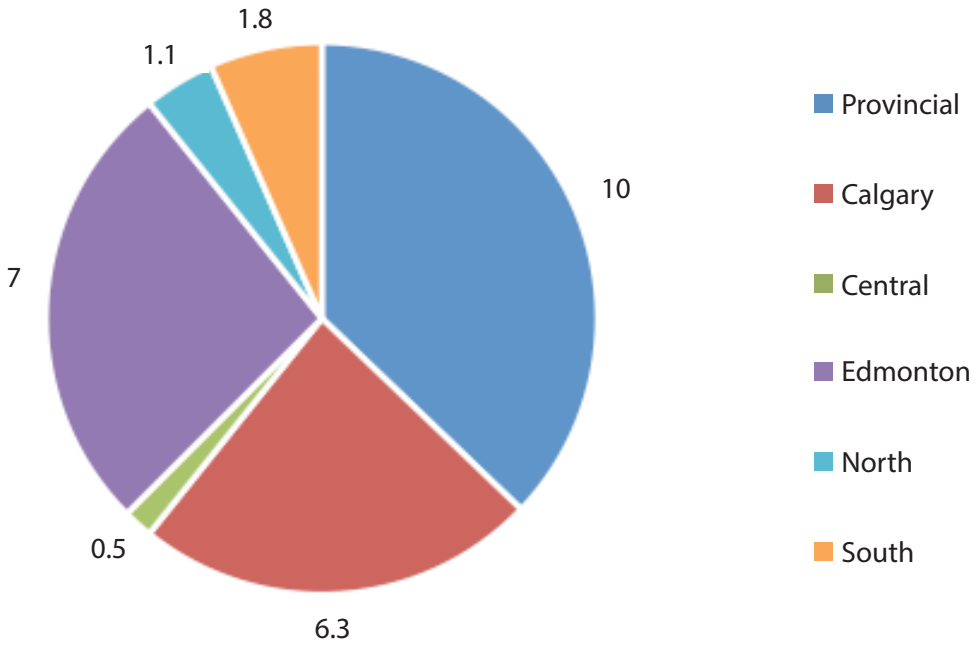
### 6.3.4 AHS Contracted Services

Costs of publicly-funded mental health services[16] offered through AHS subcontracts to related agencies such as the Canadian Mental Health Association, the Schizophrenia Society, police services (i.e., City of Calgary Police Service, Edmonton Police Services), Education, the Edmonton Public School Board, and the Child & Adolescent Services Association ("CASA") are presented in Figures 48 and 49. More than one-third of the contracted services were provided at the provincial level. Edmonton and Calgary together account for around 50% of the contracted services, though the number of people who benefited from these programs is not known.

## Percentage of AHS Contracted Services by Health Zones

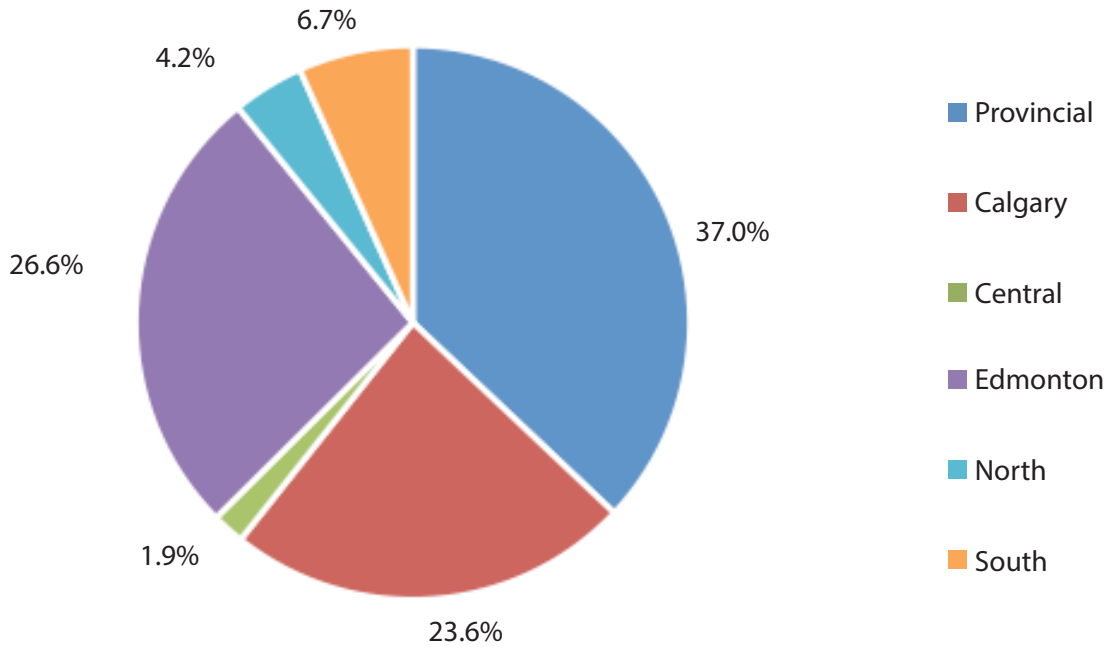
Figure 48
Proportional allocation of $26,867,272 for AHS contracted mental health services, by Zone in million CDN$

Amount in million CDN$




[16] Neither AHS nor Health provided provincial and Zone-based cost breakdowns for $15,966,614 allocated to AHS contracted

Figure 48
Continued




## 6.3.5 GoA Funding Health – Mental Health Branch

GAP-MAP identified 25 programs and initiatives that meet the GAP-MAP project scope. Among them, six were funded by Health in FY 2010–2011. A total of $19,164,750 was allocated by the Health ministry directly to address mental health and addiction problems. Also in 2010–2011, Health allocated $10,100,000 to the Children's Mental Health Plan, and provided $689,000 in Safe Community grants for providing six medical beds in psychiatric facilities. All six programs targeted care at the provincial level, for all ethnic groups, both genders, and in all age categories. Four initiatives targeted both mental health and addiction care. Four programs were community-based, one program was hospital/institution-based, and one program was based in both areas.

## Health - Primary Care Networks (PCNs)

According to the Primary Care Initiative website, many PCNs claim that mental health (n = 27) and tobacco cessation (n = 13), are the priority services being provided. However, after reviewing the annual reports from all 45 Primary Care Networks (PCNs) for FY 2010–2011, only 11 of these reported targeted funding allocated to addiction and mental health problems. The total expenditures from these 11 PCNs in 2010–2011 was $5,113,399. Six of the nine PCNs in the Edmonton Health Zone reported their spending in addiction and mental health areas to be $2,818,390 (55%), while three of the seven PCNs in the Calgary Zone reported

total costs of $2,200,588 (43%).

That only a small proportion of the PCNs report allocating costs specifically to addiction and mental health services can be explained by the following observations. First, about 15 of the PCNs were being developed or were expected to be developed during 2010–2011. For the newly established PCNs, no costing information could be generated. In addition, the Mental Health initiative, as a local priority, was discontinued in some PCNs and funds were re-allocated to other local health needs. Some PCNs in the Calgary Health Zone reported using psychologists or MH therapists; however, the relevant costing information was not shown under the annual MH spending category. Consequently, these cost estimates are probably underestimates.

## Alberta Education

Early Child Development Branch. Among the administrative units associated with the ministry of Education that were consulted during GAP-MAP, the Early Child Development branch was the only department that provided us with complete program and costing information. For FY 2010–2011, a total of 1,946 students with mental health-related special education needs received help from publicly-funded programs. As shown in Figure 49, almost 80% of these students resided in Calgary and Edmonton. Among these students, 841 were identified as having severe emotional or behavioural disorders. The total spending for these programs was $4,800,401, with only 20.8% of these funds allocated to students living outside of Edmonton and Calgary. Because some of this funding was coded in total personnel costs, the costs of specific programs within this funding envelope could not be tracked.

Figure 49
Proportion of special education students with mental health special needs by AHS Zone (N = 1,946), FY 2010–2011

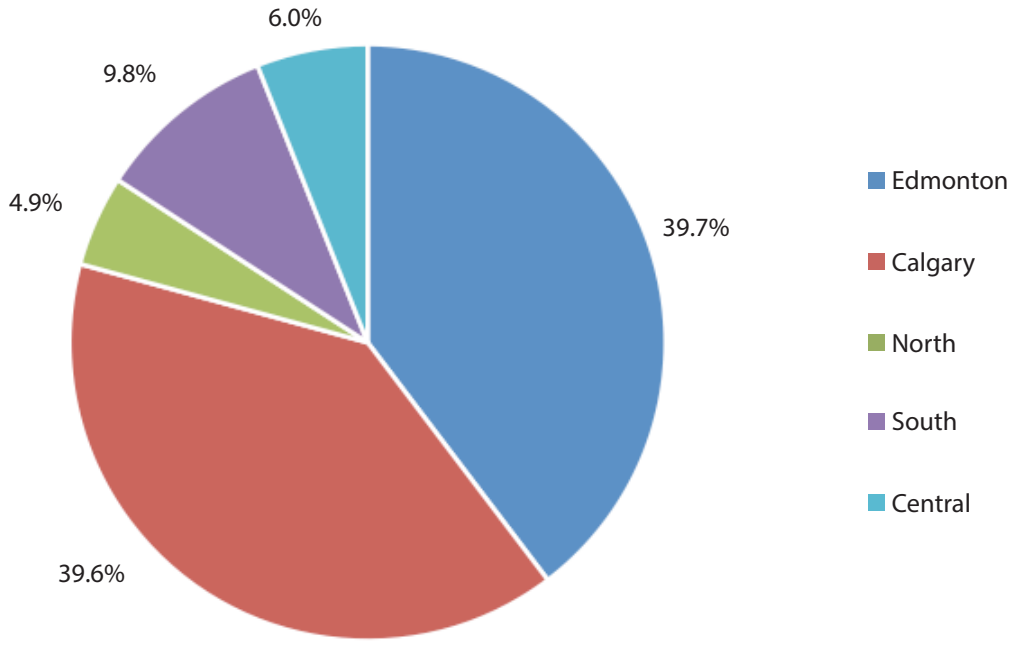
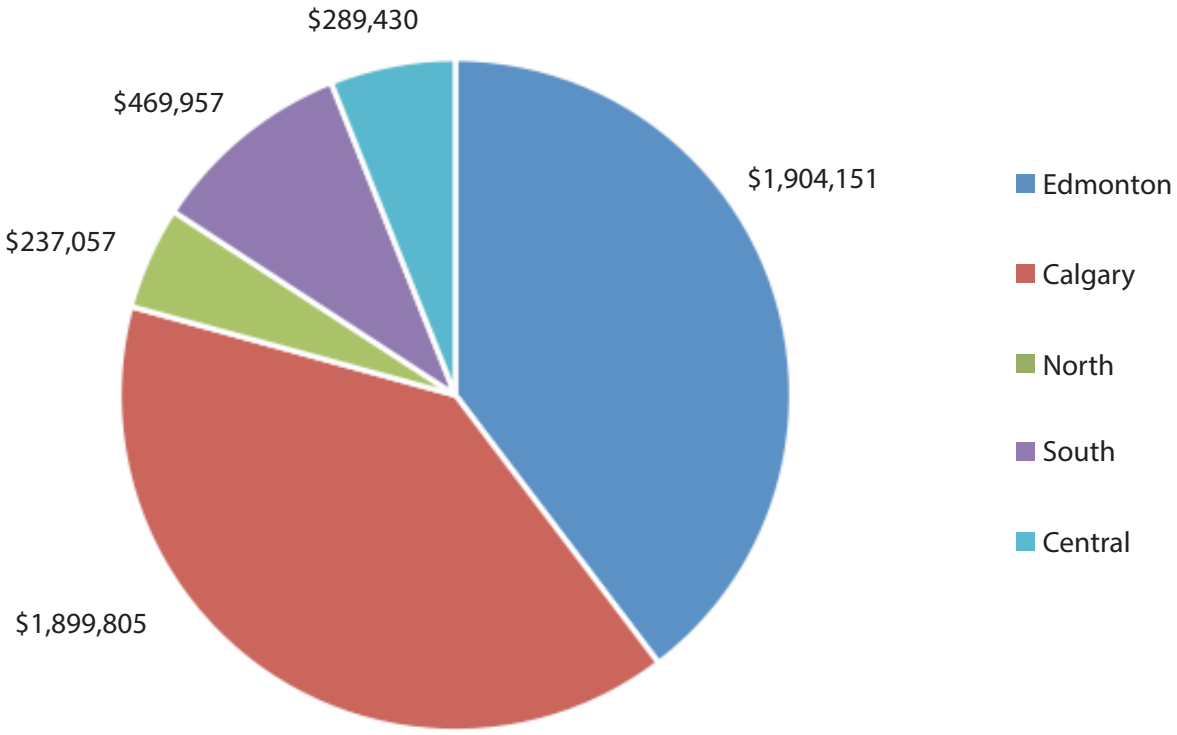


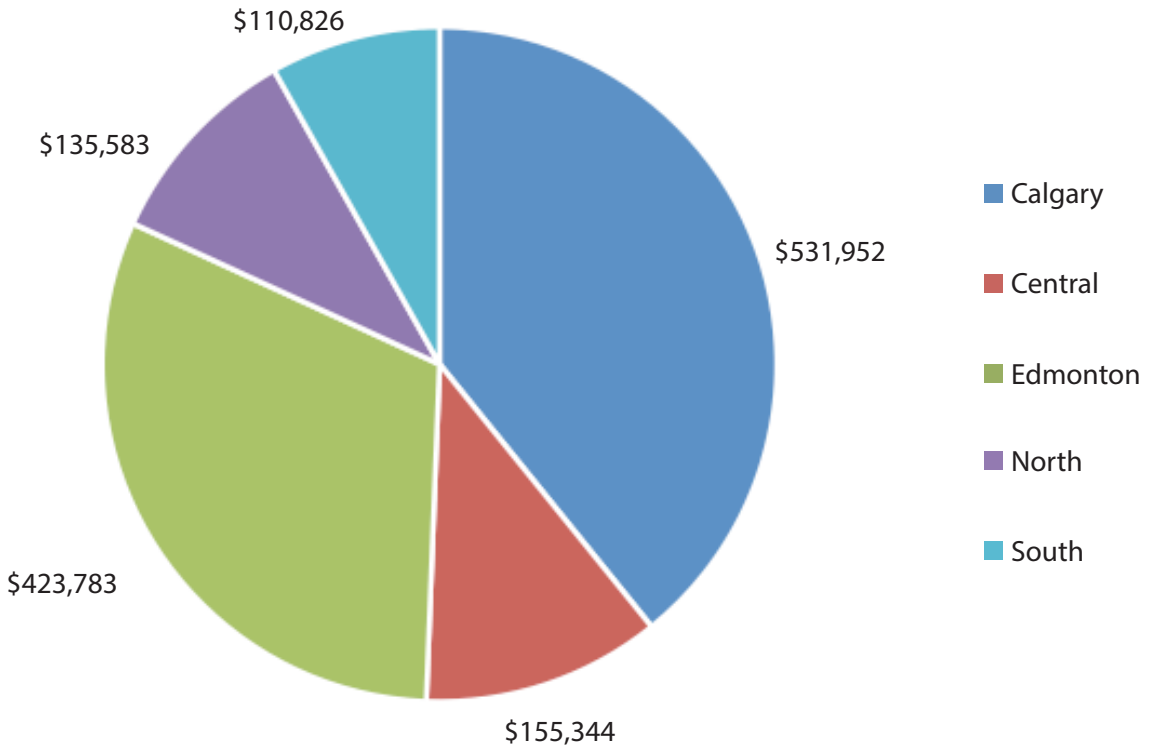
Figure 50
Proportion of total special education spending ($4,800,401) by AHS Zone, FY 2010–2011




## Alberta Culture Lottery Fund

In 2010–2011, a total of $1,357,488 was directed from the Alberta Lottery Fund to organizations or programs with a focus on addiction and mental health. These grants were used to support organizations with respect to operations, programs, and/or capital projects. Specifically, $591,483 of the grants funded community initiatives and facility enhancement programs, including various youth drug awareness, life skills, and outreach programs. In addition, $321,305 was directed to the Community Spirit Donation Grants, which funds programs and operations of the Canadian Mental Health Association, Big Brother and Big Sister Society, and various detoxification and counselling centres. Figure 51 shows the funding from Alberta Lottery Funds allocated to various health zones across Alberta during FY 2010–2011. Due to a lack of information about those who benefit from the programs, a more detailed analysis is not possible at this time.

Figure 51
Allocation of Alberta Lottery Fund by AHS Zone, FY 2010–2011




## Alberta Human Services – Child and Family Services Authority

Consultation with Human Services during GAP-MAP fieldwork indicated that this ministry had concerns about the relatively narrow scope of programs and services included in GAP-MAP. Specifically, the GAP-MAP inclusion and exclusion rules excluded many childhood psychological conditions, including developmental delays, mental retardation, and autism. At our initial meeting with this ministry to start the process of identifying their relevant programs and services, senior representatives expressed the view that virtually all of their programs and services are provided to clients who have mental health or addiction issues in their case history. Moreover, some mental health services (e.g., counselling) offered in this ministry do not require a diagnosis or are offered to individuals with sub-clinical problems.

Many programs operated by Human Services engage in activities that could be broadly construed as prevention or promotion of well-being. For example, providing parent skills training, or providing respite for caregivers of people with disabilities, or anger management workshops for those whose children have been apprehended by the legal system all may help reduce the likelihood of mental health or addictions. Although some stakeholders from Human Services argued that most if not all of the work that is undertaken or funded by this ministry could qualify as either prevention or amelioration if a broad interpretation of promoting mental well being is accepted, such programs typically do not explicitly identify mental health or

addiction prevention outcomes of interest, provide services to people with these conditions only incidentally, and do not record the presence of addiction and/or mental health problems during routine operations. As such, many Human Services programs and services were excluded from GAP-MAP (see Appendix A for a complete discussion of supportive services). Following clarification of GAP-MAP's inclusion and exclusion rules for eligible programs with ministry representatives and Human Services executed an internal consultation process which resulted in them conveying to the study group a total expenditure of $13,949,189 of eligible costs contributed to publicly-funded addiction and mental health services. No further breakdown of this costing information was provided.

## Alberta Municipal Affairs: Homeless Unit

GAP-MAP also received information about the grants allocated by the Homelessness units in Municipal Affairs. Capital dollars were used to fund homeless shelters and housing units. Since mental illness was not used as one of the criteria for housing allocations for homeless people, we were not able to separate any portion of the funding that would have been specifically targeted for citizens living with addiction and mental health problems, and these funds were excluded from GAP-MAP costing estimates.

## 6.4 Corresponding Data Tables for Population Survey

### Table 17

Prevalence of past-year addiction and mental health problems among Alberta adults; 95% confidence intervals, and estimated population size

| Subgroup | N | Prevalence (%) | 95% CI | Estimated Population[a] Size |
|---|---|---|---|---|
| No disorder | 4542 | 79.1 | (77.92 – 80.28) | 2,419,675 |
| Any disorder[b] | 1199 | 20.9 | (18.60 – 23.20) | 639,333 |
| Depression (PHQ+) | 686 | 11.9 | (9.48 – 14.32) | 364,022 |
| Alcohol problems (AUDIT+) | 500 | 8.5 | (6.06 – 10.94) | 260,016 |
| Diagnosed MH problem | 180 | 3.0 | (0.51 – 5.49) | 91,770 |
| Diagnosed addiction | 115 | 1.9 | (0.00 – 5.10) | 58,121 |

Note. Weighted data presented; disorder categories/subgroups are not mutually exclusive. [a]Reference population is the total Alberta population age 18 or greater in 2012 (3,059,008 people). [b]Diagnosed addiction, and/or diagnosed mental health problem, and/or alcohol problems (AUDIT+), and/or depression (PHQ +), and/or comorbid depression and alcohol problems.

## Table 18

Prevalence of past-year addiction and mental health problems among Alberta adults, by sex, age, and Zone

| Characteristic | Any disorder[a] | | |
|---|---|---|---|
| | N | % (95% CI) | Estimated population size[b] |
| **Sex ( χ2 [1] = 11.7, p < .001)** | | | |
| Males | 655 | 22.7 (19.49 – 25.91) | 347,142 |
| Females | 544 | 19.0 (15.70 – 22.30) | 290,652 |
| **Age range (χ2 [2] = 74.2, p < .0001)[2]=11.7** | | | |
| 18 – 34 | 507 | 26.1 (22.28 – 29.92) | 265,920 |
| 35 – 54 | 433 | 21.4 (17.54 – 25.26) | 246,657 |
| 55+ | 259 | 14.6 (9.51 – 17.89) | 121,595 |
| **Zone (χ2 [4] = 16.2, p < .003)** | | | |
| South | 100 | 23.4 (15.10 – 31.70) | 52,633 |
| Calgary | 422 | 19.2 (15.44 – 22.96) | 221,509 |
| Central | 125 | 18.5 (11.69 – 25.31) | 66,148 |
| Edmonton | 394 | 21.7 (17.63 – 25.77) | 210,938 |
| North | 158 | 25.4 (18.61 – 32.19) | 89,095 |

## Table 18
Continued

| Characteristic | Alcohol Problems (AUDIT+) | | |
|---|---|---|---|
| | N | % (95% CI) | Estimated population size |
| **Sex ($\chi 2$ [1] = 132.7, p < .0001)** | | | |
| Male | 374 | 12.6 (9.24 – 15.96) | 192,687 |
| Female | 126 | 4.3 (0.76 – 22.30) | 65,779 |
| **Age range ($\chi 2$ [2] = 95.4, p < .0001)** | | | |
| 18 – 34 | 255 | 12.9 (8.79 – 29.92) | 131,432 |
| 35 – 54 | 167 | 8.1 (3.96 – 12.24) | 93,361 |
| 55+ | 77 | 4.1 (0.00 – 8.53) | 36,390 |
| **Zone ($\chi 2$ [4] = 8.0, ns)** | | | |
| South | 31 | 7.1 (0.00 – 16.14) | 15,970 |
| Calgary | 187 | 8.3 (4.35 – 12.25) | 95,757 |
| Central | 58 | 8.3 (1.20 – 15.40) | 29,677 |
| Edmonton | 151 | 8.0 (3.67 – 12.33) | 77,765 |
| North | 72 | 11.2 (3.92 – 18.48) | 39,286 |

## Table 18
Continued

| Characteristic | Depression (PHQ +) | | |
|---|---|---|---|
| | N | % (95% CI) | Estimated population size |
| **Sex ($\chi 2$ [1] = 25.4, p < .001)** | | | |
| Male | 282 | 9.7 (5.62 – 13.78) | 148,338 |
| Female | 405 | 14.0 (10.62 – 17.38) | 214,165 |
| **Age range ($\chi 2$ [2] = 19.6, p < .0001)** | | | |
| 18 – 34 | 261 | 13.4 (9.27 – 17.53) | 136,526 |
| 35 – 54 | 262 | 12.9 (8.84 – 16.96) | 148,686 |
| 55+ | 164 | 9.1 (4.70 – 13.50) | 80,768 |
| **Zone ($\chi 2$ [4] = 8.0, ns)** | | | |
| South | 63 | 14.7 (5.96 – 23.44) | 33,064 |
| Calgary | 233 | 10.6 (6.65 – 14.55) | 122,292 |
| Central | 63 | 9.3 (2.13 – 16.47) | 33,253 |
| Edmonton | 234 | 12.7 (8.43 – 16.97) | 123,452 |
| North | 93 | 14.8 (7.58 – 22.02) | 51,913 |

Note. Prevalence estimates calculated from weighted sample data. Subpopulation sums do not exactly correspond to Alberta totals due to rounding during calculation of prevalence estimates. [a]Diagnosed addiction and/or diagnosed mental health problem, and/or alcohol problems (AUDIT+), and/or depression (PHQ +), and/or comorbid depression and alcohol problems. [b]Reference population is the total Alberta population age 18 or greater in 2012 (N = 3,059,008) by sex, age range, and zone subpopulation sizes.

## Table 19

Mean levels of life satisfaction, mental health symptoms, and psychological distress among Alberta adults with and without addiction and mental health problems in the past year

| Subgroup | Life Satisfaction (PWI) | Mental Health Symptoms (GHQ-12) | Psychological Distress (K6) |
|---|---|---|---|
| Any disordera | | | |
| Yes | 6.80 | 18.26 | 6.90 |
| No | 8.18 | 15.88 | 3.12 |
| Alcohol problems (AUDIT+) | | | |
| Yes | 7.40 | 17.02 | 5.14 |
| No | 7.92 | 16.31 | 3.82 |
| Depression (PHQ+) | | | |
| Yes | 6.21 | 19.61 | 8.71 |
| No | 8.12 | 15.93 | 3.24 |
| Diagnosed MH problem | | | |
| Yes | 6.64 | 19.17 | 7.80 |
| No | 7.92 | 16.36 | 3.68 |
| Diagnosed addiction | | | |
| Yes | 6.76 | 18.29 | 6.66 |
| No | 7.89 | 16.42 | 3.77 |

Note. Weighted data presented. a Diagnosed addiction and/or diagnosed mental health problem, and/or alcohol problems (AUDIT+), and/or depression (PHQ+), and/or comorbid depression and alcohol problems. All comparisons are significantly different across subgroups with and without addiction and mental health problems, $p < .001$.

## Table 20

Perceived need, help-seeking, and unmet needs for one or more services because of problems with emotions, mental health, or use of alcohol or drugs in the past year, Alberta adults

| Group | No Need for Any Services | | Need Not Met (Unserved) | | Partially Met Need (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Alberta (N = 6,000) | 65.3 | 1,997,532 | 8.8 | 269,193 | 11.8 | 360,963 | 14.0 | 428,261 |
| No disorder (n = 4,542) | 75.0 | 1,814,756 | 7.0 | 169,377 | 6.1 | 147,600 | 11.9 | 287,941 |
| Any disorder (n = 1,199) | 28.9 | 184,767 | 15.8 | 101,015 | 32.9 | 210,341 | 22.4 | 143,211 |
| Depressed (n = 688) | 13.9 | 50,596 | 17.6 | 64,064 | 43.7 | 159,069 | 24.8 | 90,272 |
| Alcohol problems (n = 500) | 48.6 | 126,368 | 18.7 | 48,623 | 19.8 | 51,483 | 12.9 | 33,542 |
| Diagnosed MH problem (n = 180) | 3.2 | 2,937 | 4.9 | 4,497 | 54.0 | 49,556 | 37.8 | 34,689 |
| Diagnosed addiction (n = 115) | 18.8 | 10,927 | 5.0 | 2,906 | 53.3 | 30,978 | 22.9 | 13,310 |

## Table 20
Continued

| Group | Any Perceived Need | | Received Services | | Unmet Need (Unserved and Underserved) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Alberta (N = 6,000) | 34.7 | 1,061,476 | 25.8 | 789,224 | 20.6 | 630,156 |
| No disorder (n = 4,542) | 25.0 | 604,919 | 18.0 | 435,542 | 13.1 | 316,977 |
| Any disorder (n = 1,199) | 71.4 | 456,484 | 55.4 | 354,190 | 48.7 | 311,355 |
| Depressed (n = 688) | 86.4 | 314,498 | 68.5 | 249,341 | 61.3 | 223,133 |
| Alcohol problems (n = 500) | 51.8 | 134,688 | 32.6 | 84,765 | 38.5 | 100,106 |
| Diagnosed MH problem (n = 180) | 96.8 | 88,833 | 91.9 | 84,337 | 59.0 | 54,144 |
| Diagnosed addiction (n = 115) | 82.3 | 47,834 | 76.2 | 44,288 | 58.3 | 33,885 |

## Table 21

Perceived need for different addiction and mental health services in the Alberta adult population (N = 6,000)

| Category of need | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 81.1 | 2,486,974 | 4.8 | 146,832 | 3.1 | 94,829 | 10.6 | 324,255 |
| Medication | 83.9 | 2,578,744 | 2.2 | 67,298 | 1.4 | 42,826 | 11.9 | 360,963 |
| Hospital care | 96.7 | 2,967,238 | 1.6 | 48,944 | 0.6 | 18,354 | 0.8 | 24,472 |
| Counselling | 78.2 | 2,404,380 | 7.4 | 226,367 | 3.9 | 119,301 | 9.9 | 302,842 |
| Social interventions | 88.3 | 2,710,281 | 5.5 | 168,245 | 1.7 | 52,003 | 4.1 | 125,419 |
| Skills training | 87.1 | 2,676,632 | 6.0 | 183,540 | 1.5 | 45,885 | 4.8 | 146,832 |
| Harm reduction | 98.4 | 3,02,2,300 | 0.5 | 15,295 | 0.1* | 3,059 | 0.6 | 18,354 |
| All perceived needs | 65.3 | 1,997,532 | 8.8 | 269,193 | 11.8 | 360,963 | 14.0 | 428,261 |

| Category of need | Any Perceived Need | | Received Services | | Unmet Need (Not Met or Partially met Needs) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 18.6 | 568,975 | 13.7 | 419,084 | 7.9 | 241,662 |
| Medication | 15.6 | 477,205 | 13.1 | 400,730 | 3.6 | 110,124 |
| Hospital care | 3.0 | 9,177 | 1.4 | 42,826 | 2.1 | 64,239 |
| Counselling | 21.3 | 651,569 | 13.8 | 422,143 | 11.3 | 345,668 |
| Social interventions | 11.4 | 348,727 | 5.8 | 177,422 | 7.2 | 220,249 |
| Skills training | 12.5 | 382,376 | 6.4 | 195,777 | 7.5 | 229,426 |
| Harm reduction | 1.2 | 36,708 | 0.7 | 21,413 | 0.6 | 18,354 |
| All perceived needs | 34.7 | 1,061,476 | 25.8 | 789,224 | 20.6 | 630,156 |

## Table 22

Perceived need for different addiction and mental health services in the Alberta adult population with no addiction or mental health problems (n = 4,542)

| Category of need | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 90.2 | 2,182,547 | 2.2 | 53,233 | 1.2 | 29,036 | 6.2 | 150,020 |
| Medication | 90.8 | 2,197,065 | 1.1 | 26,616 | 0.5 | 12,098 | 7.4 | 179,056 |
| Hospital care | 98.8 | 2,390,639 | 0.6 | 14,518 | 0.2 | 4,839 | 0.3 | 7,259 |
| Counselling | 86.5 | 2,093,019 | 4.5 | 108,885 | 1.6 | 38,715 | 7.1 | 171,797 |
| Social interventions | 92.7 | 2,243,039 | 3.4 | 82,269 | 0.8 | 19,357 | 2.9 | 70,171 |
| Skills training | 92.6 | 2,240,619 | 3.3 | 79,849 | 0.8 | 19,357 | 3.1 | 75,010 |
| Harm reduction | 99.2 | 2,400,318 | 0.4 | 9,679 | 0 | 0 | 0.2 | 4,839 |
| All perceived needs | 75.0 | 1,814,756 | 7.0 | 169,377 | 6.1 | 147,600 | 11.9 | 287,941 |

| Category of need | Any Perceived Need | | Received Services | | Unmet Need (Not Met or Partially Met Needs) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 9.7 | 234,708 | 7.4 | 179,056 | 3.5 | 84,689 |
| Medication | 9 | 217,771 | 7.9 | 191,154 | 1.6 | 38,715 |
| Hospital care | 1 | 24,197 | 0.4 | 9,679 | 0.7 | 16,938 |
| Counselling | 13.3 | 321,817 | 8.7 | 210,512 | 6.1 | 147,600 |
| Social interventions | 7.1 | 171,797 | 3.8 | 91,948 | 4.2 | 101,626 |
| Skills training | 7.5 | 181,476 | 3.8 | 91,948 | 4.1 | 99,207 |
| Harm reduction | 0.5 | 12,098 | 0.2 | 4,839 | 0.4 | 9,679 |
| All perceived needs | 25 | 604,919 | 18 | 435,542 | 13.1 | 316,977 |

## Table 23

Perceived need for different addiction and mental health services in the Alberta adult population with any disorder (n = 1,199)

| Category of need | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 46.9 | 299,847 | 14.7 | 93,982 | 9.9 | 63,294 | 27.7 | 177,095 |
| Medication | 58.6 | 374,649 | 6.3 | 40,278 | 4.5 | 28,770 | 28.6 | 182,849 |
| Hospital care | 89.2 | 570,285 | 5.4 | 34,524 | 1.9 | 12,147 | 2.9 | 18,541 |
| Counselling | 46.5 | 297,290 | 18.8 | 120,195 | 12.7 | 81,195 | 21.4 | 136,817 |
| Social interventions | 72 | 460,320 | 13.9 | 88,867 | 4.6 | 29,409 | 8.9 | 56,901 |
| Skills training | 66.9 | 427,714 | 15.6 | 99,736 | 4.4 | 28,131 | 11.9 | 76,081 |
| Harm reduction | 96.2 | 615,038 | 1.1 | 7,033 | 0.2 | 1,279 | 2.2 | 14,065 |
| All perceived needs | 28.9 | 184,767 | 15.8 | 101,015 | 32.9 | 210,341 | 22.4 | 143,211 |

| Category of need | Any Perceived Need | | Received Services | | Unmet Need (Not Met or Partially Met Needs) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 52.7 | 336,928 | 37.6 | 240,389 | 24.6 | 157,276 |
| Medication | 40.6 | 259,569 | 33.1 | 211,619 | 10.8 | 69,048 |
| Hospital care | 10.2 | 65,212 | 4.8 | 30,688 | 7.3 | 46,671 |
| Counselling | 53.1 | 339,486 | 34.2 | 218,652 | 31.5 | 201,390 |
| Social interventions | 27.5 | 175,817 | 13.6 | 86,949 | 18.5 | 118,277 |
| Skills training | 32.2 | 205,865 | 16.4 | 104,851 | 20 | 127,867 |
| Harm reduction | 3.4 | 21,737 | 2.4 | 15,344 | 1.3 | 8,311 |
| All perceived needs | 71.4 | 456,484 | 55.4 | 354,190 | 48.7 | 311,355 |

## Table 24

Perceived need for different addiction and mental health services in the Alberta adult population with alcohol problems (n = 500)

| Category of need | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 65.8 | 171,091 | 13.8 | 35,882 | 6.1 | 15,861 | 13.9 | 36,142 |
| Medication | 78.6 | 204,373 | 7.7 | 20,021 | 1 | 2,600 | 11.8 | 30,682 |
| Hospital care | 92.4 | 240,255 | 3.7 | 9,621 | 0.9 | 2,340 | 2.5 | 6,500 |
| Counselling | 66.3 | 172,391 | 17.8 | 46,283 | 6.1 | 15,861 | 9.4 | 24,442 |
| Social interventions | 79.9 | 207,753 | 11.1 | 28,862 | 2.8 | 7,280 | 6.3 | 16,381 |
| Skills training | 80.5 | 209,313 | 10.8 | 28,082 | 2.4 | 6,240 | 6 | 15,601 |
| Harm reduction | 96.3 | 250,395 | 1.6 | 4,160 | 0.2 | 520 | 1.9 | 4,940 |
| All perceived needs | 48.6 | 126,368 | 18.7 | 48,623 | 19.8 | 51,483 | 12.9 | 33,542 |

| Category of need | Any Perceived Need | | Received Services | | Unmet Need (Not Met or Partially Met Needs) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 34.9 | 90,746 | 20 | 52,003 | 19.9 | 51,743 |
| Medication | 21.9 | 56,944 | 12.8 | 33,282 | 8.7 | 22,621 |
| Hospital care | 7.1 | 18,461 | 3.3 | 8,581 | 4.5 | 11,701 |
| Counselling | 33.9 | 88,145 | 15.5 | 40,302 | 24 | 62,404 |
| Social interventions | 20.2 | 52,523 | 9 | 23,401 | 13.9 | 36,142 |
| Skills training | 19.7 | 51,223 | 8.4 | 21,841 | 13.3 | 34,582 |
| Harm reduction | 4.1 | 10,661 | 2.2 | 5,720 | 1.8 | 4,680 |
| All perceived needs | 51.8 | 134,688 | 32.6 | 84,765 | 38.5 | 100,106 |

## Table 25

Perceived need for different addiction and mental health services in the Alberta adult population with depression (n = 686)

| Category of need | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 32.7 | 119,029 | 18.0 | 65,520 | 13.7 | 49,868 | 34.7 | 126,309 |
| Medication | 46.2 | 168,169 | 8.4 | 30,576 | 6.9 | 25,116 | 35.6 | 129,585 |
| Hospital care | 85.4 | 310,858 | 8.1 | 29,484 | 3.0 | 10,920 | 2.9 | 10,556 |
| Counselling | 28.9 | 105,197 | 23.4 | 85,176 | 19.0 | 69,160 | 27.9 | 101,557 |
| Social interventions | 64.9 | 236,237 | 17.6 | 64,064 | 6.0 | 21,840 | 10.8 | 39,312 |
| Skills training | 56.5 | 205,661 | 20.0 | 72,800 | 6.5 | 23,660 | 15.0 | 54,600 |
| Harm reduction | 95.4 | 347,258 | 1.2 | 4,368 | 0.3 | 1,092 | 2.5 | 9,100 |
| All perceived needs | 13.9 | 50,596 | 17.6 | 64,064 | 43.7 | 159,069 | 24.8 | 90,272 |

| Category of need | Any Perceived Need | | Received Services | | Unmet Need (Not Met or Partially Met Needs) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 66.7 | 242,789 | 48.4 | 176,177 | 31.7 | 115,389 |
| Medication | 52.7 | 191,829 | 42.6 | 155,065 | 15.3 | 55,692 |
| Hospital care | 14.0 | 50,960 | 5.9 | 21,476 | 11.1 | 40,404 |
| Counselling | 70.6 | 256,985 | 46.9 | 170,717 | 42.4 | 154,337 |
| Social interventions | 34.6 | 125,945 | 16.8 | 61,152 | 23.6 | 85,904 |
| Skills training | 42.1 | 153,245 | 21.5 | 78,260 | 26.5 | 96,461 |
| Harm reduction | 4.1 | 14,924 | 2.9 | 10,556 | 1.5 | 5,460 |
| All perceived needs | 86.4 | 314,498 | 68.5 | 249,341 | 61.3 | 223,133 |

## Table 26

Perceived need for different addiction and mental health services in the Alberta adult population with diagnosed mental health problems (n = 180)

| Category of need | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 15.7 | 14,408 | 10.1 | 9,269 | 13.7 | 12,572 | 60.5 | 55,521 |
| Medication | 14.8 | 13,582 | 5.9 | 5,414 | 8.5 | 7,800 | 68.2 | 62,587 |
| Hospital care | 84.8 | 77,821 | 10.2 | 9,361 | 2 | 1,835 | 2.3 | 2,111 |
| Counselling | 25.3 | 23,218 | 14.4 | 13,215 | 19.6 | 17,987 | 39.5 | 36,249 |
| Social interventions | 58.3 | 53,502 | 21.3 | 19,547 | 7.3 | 6,699 | 12.4 | 11,379 |
| Skills training | 52.1 | 47,812 | 22 | 20,189 | 6 | 5,506 | 18.5 | 16,977 |
| Harm reduction | 97.5 | 89,476 | 0.3 | 275 | 0.3 | 275 | 2.2 | 2,019 |
| All perceived needs | 3.2 | 2,937 | 4.9 | 4,497 | 54 | 49,556 | 37.8 | 34,689 |

| Category of need | Any Perceived Need | | Received Services | | Unmet Need (Not Met or Partially Met Needs) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 84.3 | 77,362 | 74.2 | 68,093 | 23.8 | 21,841 |
| Medication | 85.1 | 78,096 | 76.7 | 70,388 | 14.4 | 13,215 |
| Hospital care | 14.4 | 13,215 | 4.2 | 3,854 | 12.1 | 11,104 |
| Counselling | 73.9 | 67,818 | 59.1 | 54,236 | 34 | 31,202 |
| Social interventions | 40.9 | 37,534 | 19.7 | 18,079 | 28.6 | 26,246 |
| Skills training | 47.5 | 43,591 | 24.5 | 22,484 | 28.1 | 25,787 |
| Harm reduction | 2.2 | 2,019 | 2.2 | 2,019 | 0 | 0 |
| All perceived needs | 96.8 | 88,833 | 91.9 | 84,337 | 59 | 54,144 |

## Table 27

Perceived need for different addiction and mental health services in the Alberta adult population with diagnosed addictions (n = 115)

| Category of need | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 29.4 | 17,088 | 8.2 | 4,766 | 21.4 | 12,438 | 38.5 | 22,377 |
| Medication | 53.6 | 31,153 | 5.1 | 2,964 | 3.2 | 1,860 | 34.5 | 20,052 |
| Hospital care | 71 | 41,266 | 10.1 | 5,870 | 6.6 | 3,836 | 10.6 | 6,161 |
| Counselling | 36.4 | 21,156 | 10.1 | 5,870 | 26.4 | 15,344 | 26.1 | 15,170 |
| Social interventions | 59.2 | 34,408 | 15.2 | 8,834 | 10.5 | 6,103 | 14.3 | 8,311 |
| Skills training | 51.3 | 29,816 | 19.3 | 11,217 | 7.3 | 4,243 | 22.1 | 12,845 |
| Harm reduction | 86.6 | 50,333 | 5.5 | 3,197 | 2 | 1,162 | 5.4 | 3,139 |
| All perceived needs | 18.8 | 10,927 | 5 | 2,906 | 53.3 | 30,978 | 22.9 | 13,310 |

| Category of need | Any Perceived Need | | Received Services | | Unmet Need | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Information | 69.1 | 40,162 | 59.8 | 34,756 | 29.6 | 17,204 |
| Medication | 44.2 | 25,689 | 37.7 | 21,912 | 8.2 | 4,766 |
| Hospital care | 27.3 | 15,867 | 17.2 | 9,997 | 16.7 | 9,706 |
| Counselling | 63.6 | 36,965 | 52.5 | 30,514 | 36.5 | 21,214 |
| Social interventions | 40.1 | 23,307 | 24.9 | 14,472 | 25.7 | 14,937 |
| Skills training | 48.7 | 28,305 | 29.4 | 17,088 | 26.6 | 15,460 |
| Harm reduction | 12.9 | 7,498 | 7.4 | 4,301 | 7.5 | 4,359 |
| All perceived needs | 82.3 | 47,834 | 76.2 | 44,288 | 58.3 | 33,885 |

## Table 28

Perceived need, help-seeking, and unmet needs for one or more services because of problems with emotions, mental health, or use of alcohol or drugs in the past year, Alberta adults (N = 6,000), by sex, age, and Zone (weighted data)

| Characteristic | No Need for Services | Not Met (Unserved) | Partially Met (Underserved) | Fully Met |
|---|---|---|---|---|
| Sex | χ2 (1) = 32.99*** | χ2 (1) = 0.41 | χ2 (1) = 1.84 | χ2 (1) = 50.70*** |
| Males | 69.0 | 9.1 | 11.1 | 10.9 |
| Females | 61.8 | 8.6 | 12.3 | 17.4 |
| Age | χ2 (2) = 83.12*** | χ2 (2) = 68.98*** | χ2 (2) = 18.43*** | χ2 (2) = 4.23 |
| 18 – 34 | 59.1 | 12.6 | 13.5 | 14.8 |
| 35 – 54 | 64.6 | 8.5 | 12.2 | 14.7 |
| 55+ | 73.2 | 4.9 | 9.1 | 12.7 |
| Zone | χ2 (4) = 23.73*** | χ2 (1) = 1.59 | χ2 (1) = 1.59 | χ2 (4) = 11.86** |
| South | 59.9 | 8.9 | 15.3 | 15.7 |
| Calgary | 64.8 | 9.1 | 11.1 | 14.9 |
| Central | 73.0 | 7.6 | 9.6 | 9.9 |
| Edmonton | 64.8 | 8.8 | 12.3 | 14.1 |
| North | 64.8 | 9.0 | 11.6 | 14.6 |

| Characteristic | Any Perceived Need | Received Services | Unmet Need |
|---|---|---|---|
| Sex | χ2 (1) = 32.95*** | χ2 (1) = 44.45*** | χ2 (1) = 0.40 |
| Males | 31.1 | 21.9 | 20.2 |
| Females | 38.3 | 29.6 | 20.8 |
| Age | χ2 (2) = 83.12*** | χ2 (2) = 22.50*** | χ2 (2) = 83.76*** |
| 18 – 34 | 40.9 | 28.2 | 26.2 |
| 35 – 54 | 35.7 | 26.9 | 20.8 |
| 55+ | 26.7 | 21.7 | 14.0 |
| Zone | χ2 (4) = 22.99*** | χ2 (4) = 21.28*** | χ2 (4) = 9.31* |
| South | 40.1 | 31.0 | 24.4 |
| Calgary | 35.3 | 26.0 | 20.3 |
| Central | 27.2 | 19.3 | 17.1 |
| Edmonton | 35.2 | 26.4 | 21.1 |
| North | 35.3 | 26.2 | 20.5 |

## Table 29

Perceived need, help-seeking, and unmet needs for one or more services because of problems with emotions, mental health, or use of alcohol or drugs in the past year, Alberta adults with any disorder (n = 1,199), by sex, age, and Zone (weighted data)

| Characteristic | No Need for Services | Not Met (Unserved) | Partially Met (Underserved) | Fully Met |
|---|---|---|---|---|
| Sex | χ2 (1) = 48.01*** | χ2 (1) = 0.08 | χ2 (1) = 7.23** | χ2 (1) = 22.29*** |
| Males | 37.2 | 16.0 | 29.6 | 17.3 |
| Females | 18.9 | 15.4 | 36.9 | 28.7 |
| Age | χ2 (2) = 7.55** | χ2 (2) = 11.90** | χ2 (2) = 3.94 | χ2 (2) = 1.04 |
| 18 – 34 | 27.5 | 19.8 | 22.2 | 72.5 |
| 35 – 54 | 26.4 | 13.7 | 23.8 | 74.5 |
| 55+ | 35.7 | 11.2 | 20.5 | 64.3 |
| Zone | χ2 (4) = 13.36** | χ2 (4) = 0.90 | χ2 (4) = 3.04 | χ2 (4) = 11.86** |
| South | 22.2 | 14.0 | 40.0 | 23.2 |
| Calgary | 26.5 | 16.4 | 32.9 | 24.1 |
| Central | 40.0 | 15.2 | 32.0 | 13.6 |
| Edmonton | 27.4 | 16.5 | 32.7 | 23.4 |
| North | 34.2 | 14.0 | 29.7 | 22.2 |

| Characteristic | Any Perceived Need | Received Services | Unmet Need |
|---|---|---|---|
| Sex | χ2 (1) = 48.43*** | χ2 (1) = 42.30*** | χ2 (1) = 5.54* |
| Males | 63.2 | 46.9 | 45.6 |
| Females | 81.4 | 65.6 | 52.4 |
| Age | χ2 (2) = 8.69** | χ2 (2) = 5.96*** | χ2 (2) = 3.74 |
| 18 – 34 | 72.5 | 52.5 | 50.3 |
| 35 – 54 | 74.5 | 60.0 | 50.0 |
| 55+ | 64.3 | 53.1 | 43.6 |
| Zone | χ2 (4) = 12.35** | χ2 (4) = 9.41* | χ2 (4) = 2.91 |
| South | 77.8 | 63.0 | 54.0 |
| Calgary | 73.9 | 57.1 | 49.3 |
| Central | 60.8 | 44.8 | 46.4 |
| Edmonton | 72.6 | 56.2 | 49.2 |
| North | 66.5 | 51.9 | 43.9 |

S = percentage suppressed because cell size < 30.

## Table 30

Perceived need, help-seeking, and unmet needs for one or more services because of problems with emotions, mental health, or use of alcohol or drugs in the past year, Alberta adults with depression (n = 686), by sex, age, and Zone (weighted data)

| Characteristic | No Need for Services | Not Met (Unserved) | Partially Met (Underserved) | Fully Met |
|---|---|---|---|---|
| Sex | χ2 (1) = 0.21 | χ2 (1) = 1.18 | χ2 (1) = 0.18 | χ2 (1) = 3.16 |
| Males | 14.6 | 19.5 | 44.7 | 21.3 |
| Females | 13.4 | 16.3 | 43.1 | 27.2 |
| Age | χ2 (2) = 5.60a | χ2 (2) = 7.56* | χ2 (2) = 4.25 | χ2 (2) = 1.42 |
| 18 – 34 | 11.4 | 22.6 | 39.0 | 26.9 |
| 35 – 54 | 13.0 | 14.2 | 47.9 | 24.8 |
| 55+ | 19.4 | S | 44.4 | 21.7 |
| Zone | χ2 (4) = 8.65 | χ2 (1) = 1.27 | χ2 (4) = 4.99 | χ2 (4) = 1.69 |
| South | S | S | 52.4 | S |
| Calgary | S | 17.2 | 46.8 | 34.7 |
| Central | S | S | S | S |
| Edmonton | 17.1 | 17.1 | 41.5 | 33.5 |
| North | S | S | 37.6 | S |

| Characteristic | Any Perceived Need | Received Services | Unmet Need |
|---|---|---|---|
| Sex | χ2 (1) = 0.18 | χ2 (1) = 1.50 | χ2 (1) = 1.51 |
| Males | 85.8 | 66.0 | 64.1 |
| Females | 86.9 | 70.4 | 59.4 |
| Age | χ2 (2) = 5.67a | χ2 (2) = 3.51 | χ2 (2) = 0.52 |
| 18 – 34 | 88.6 | 66.0 | 61.7 |
| 35 – 54 | 87.4 | 72.8 | 62.5 |
| 55+ | 80.7 | 65.8 | 59.0 |
| Zone | χ2 (4) = 8.20 | χ2 (4) = 8.00 | χ2 (4) = 4.57 |
| South | 93.8 | 78.1 | 68.3 |
| Calgary | 89.3 | 72.1 | 64.1 |
| Central | 82.5 | 58.7 | 63.5 |
| Edmonton | 82.9 | 65.8 | 58.5 |
| North | 84.0 | 66.0 | 54.8 |

S = percentage suppressed because cell size < 30.

## Table 31

Perceived need, help-seeking, and unmet needs for one or more services because of problems with emotions, mental health, or use of alcohol or drugs in the past year, Alberta adults with alcohol problems (n = 500), by sex, age, and Zone (weighted data)

| Characteristic | No Need for Services | Not Met (Unserved) | Partially Met (Underserved) | Fully Met |
|---|---|---|---|---|
| Sex | χ2 (1) = 14.13*** | χ2 (1) = 1.29 | χ2 (1) = 9.71** | χ2 (1) = 0.33 |
| Males | 53.5 | 17.6 | 16.6 | 12.3 |
| Females | 34.1 | 22.2 | 29.4 | 14.3 |
| Age | χ2 (2) = 12.39** | χ2 (2) = 5.03 | χ2 (2) = 0.65 | χ2 (2) = 6.85* |
| 18 – 34 | 43.2 | 21.4 | 21.0 | 14.5 |
| 35 – 54 | 48.8 | 18.9 | 17.8 | 14.6 |
| 55+ | 65.8 | S | 20.0 | S |
| Zone | χ2 (4) = 5.04 | χ2 (1) = 6.28 | χ2 (4) = 0.64 | χ2 (4) = 9.40* |
| South | S | S | S | S |
| Calgary | 46.0 | 19.3 | 37.3 | 17.1 |
| Central | 61.0 | S | S | S |
| Edmonton | 45.7 | 23.8 | 30.1 | S |
| North | 50.7 | S | S | S |

| Characteristic | Any Perceived Need | Received Services | Unmet Need |
|---|---|---|---|
| Sex | χ2 (1) = 14.91 | χ2 (1) = 9.11** | χ2 (1) = 11.99*** |
| Males | 46.8 | 29.1 | 34.2 |
| Females | 66.7 | 43.7 | 51.6 |
| Age | χ2 (2) = 12.44** | χ2 (2) = 3.58 | χ2 (2) = 3.80 |
| 18 – 34 | 56.8 | 35.4 | 42.0 |
| 35 – 54 | 52.4 | 35.3 | 36.6 |
| 55+ | S | S | S |
| Zone | χ2 (4) = 5.84 | χ2 (4) = 2.40 | χ2 (4) = 4.54 |
| South | S | S | S |
| Calgary | 55.6 | 35.3 | 36.9 |
| Central | S | S | S |
| Edmonton | 54.3 | 30.5 | 44.7 |
| North | 49.3 | S | S |

S = percentage suppressed because cell size < 30.

## 6.5 Additional Data Tables for the Survey of Programs and Service

### Table 32

Allocation of clinical staff (direct client contacts) and dedicated specialty treatment beds for addiction and mental health

| | AHS Direct Care FTE Clinical Staff | | Dedicated Public Sector Addiction and Mental Health Treatment Beds | |
|---|---|---|---|---|
| | Total number of FTEs allocated | FTEs per 100,000 (Zone or Alberta) adult population | Total number of beds allocated | Beds per 100,000 (Zone or Alberta) adult population |
| South | 78.2 | 34.8 | 125 | 55.6 |
| Calgary | 637.0 | 55.2 | 973 | 84.3 |
| Central | 281.2 | 78.6 | 474 | 132.6 |
| Edmonton | 796.0 | 81.9 | 1,121 | 115.3 |
| North | 377.4 | 107.6 | 166 | 47.3 |
| Alberta | 2,169.8 | 70.9 | 2,859 | 93.5 |

## Table 33
Caseloads, AHS direct and contracted services

| AHS Direct Care FTE Clinical Staff | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| Number of eligible programs/services | 38 | 121 | 34 | 101 | 132 | 426 | 71 |
| Number responding | 4 | 21 | 33 | 76 | 82 | 216 | 28 |
| Total admissions in last FY (mean; % who estimated) | 191.5 (100%) | 383.5 (42.9%) | 632.9 (51.6%) | 655.6 (30.2%) | 408.5 (37.0%) | 539.7 (39.2%) | 1461.0 (27.8%) |
| Maximum number of clients on any given day (mean;% who estimated) | 24.5 (33.3%) | 33.3 (31.3%) | 28.1 (51.7%) | 28.8 (46.6%) | 15.6 (50.0%) | 25.0 (46.8%) | 58.3 (27.8%) |
| Number of clients on waitlist as of survey day (mean; % who estimated) | 0.0 (0.0%) | 29.3 (20.0%) | 7.4 (33.3%) | 15.6 (20.4%) | 8.9 (24.0%) | 12.9 (23.5%) | 27.1 (22.2%) |
| Number of days clients are on waitlist before entering program (mean % who estimated) | 0.0 (0.0%) | 36.6 (60.0%) | 10.1 (41.4%) | 29.1 (60.4%) | 15.0 (49.0%) | 22.0 (51.3%) | 25.5 (27.8%) |
| Perceived relation between caseload and resources | | | | | | | |
| % More clients than resources | 0.0% | 47.1% | 66.7% | 55.6% | 36.5% | 49.4% | 66.7% |
| % About the same | 25.0% | 41.2% | 30.0% | 36.5% | 50.0% | 39.8% | 28.6% |
| % Fewer clients than resources | 75.0% | 11.8% | 3.3% | 7.9% | 13.5% | 10.8% | 4.8% |

## Table 34

Evaluation procedures used by programs and services, AHS direct and contracted services

| Characteristics of Programs and Services | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| Number of eligible programs/services | 38 | 121 | 34 | 101 | 132 | 426 | 71 |
| Number responding | 4 | 21 | 33 | 76 | 82 | 216 | 28 |
| % of programs administering one or more standardized baseline measures prior to service (for screening, treatment planning, and/or outcome monitoring) | 25.0% | 73.7% | 83.9% | 62.3% | 67.1% | 67.9% | 68.2% |
| % of programs administering one or more standardized measures at program exit (for discharge planning, and/or outcome evaluation) | 25.0% | 73.7% | 40.0% | 62.3% | 46.4% | 53.4% | 63.6% |
| % of programs entering database information on | | | | | | | |
| Demographics | 25.0% | 94.7% | 100.0% | 94.3% | 94.3% | 94.3% | 100.0% |
| Screening or assessment scores | 0.0% | 72.2% | 45.2% | 46.4% | 46.4% | 55.3% | 54.5% |
| Program participation /completion | 0.0% | 84.2% | 67.7% | 68.6% | 68.6% | 69.4% | 90.9% |
| Post-program outcomes | 0.0% | 33.3% | 25.8% | 14.5% | 14.5% | 23.5% | 40.9% |
| Whether clients are new or returning | 0.0% | 84.2% | 90.3% | 75.4% | 75.4% | 79.2% | 86.4% |

## Table 35

Description of service clusters, AHS direct and contracted services

| Organizational Characteristics of Service Clusters | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| Number of eligible service clusters | 16 | 85 | 11 | 34 | 22 | 168 | 71 |
| Number of clusters who participated | 5 | 54 | 10 | 30 | 20 | 119 | 28 |
| Number of cluster managers | 13 | 40 | 5 | 7 | 11 | 76 | not asked |
| Percentage of clusters located* in | | | | | | | |
| Acute care hospitals | 40.0% | 20.4% | 50.0% | 20.0% | 35.0% | 26.1% | 0.0% |
| General community clinics | 80.0% | 46.3% | 40.0% | 46.7% | 35.0% | 45.4% | 36.0% |
| Freestanding MH/A facilities | 0.0% | 11.1% | 60.0% | 16.7% | 10.0% | 16.0% | 53.6% |
| Provides service at multiple sites | 80.0% | 20.4% | 40.0% | 46.7% | 20.0% | 31.1% | 32.1% |
| % of clusters that can provide budgets | | | | | | | |
| As estimates only | missing | 29.3% | 70.0% | 62.1% | 72.2% | 48.5% | 34.8% |
| As exact numbers | 40.0% | 70.7% | 30.0% | 37.9% | 27.8% | 48.5% | 65.2% |
| Access to a physician | | | | | | | |
| No access | 100.0% | 75.0% | 70.0% | 51.7% | 87.5% | 71.2% | 86.4% |
| Partners with a physician not on staff | 0.0% | 20.5% | 20.0% | 37.9% | 12.5% | 23.1% | 13.6% |
| Physician on staff | 0.0% | 4.5% | 10.0% | 10.3% | 0.0% | 5.8% | 0.0% |
| Access to a psychiatrist | | | | | | | |
| No access | 60.0% | 20.0% | 40.0% | 17.2% | 37.5% | 25.7% | 73.9% |
| Partners with a psychiatrist | 40.0% | 40.0% | 50.0% | 65.5% | 50.0% | 49.5% | 23.1% |
| Psychiatrist on staff | 0.0% | 40.0% | 10.0% | 17.2% | 12.5% | 24.8% | 0.0% |
| Mean number of allocated clinical FTEs | 19.6 | 15.2 | 31.2 | 28.4 | 18.9 | 21.1 | 23.0 |
| Mean number of FT* clinical staff | 23.8 | 16.1 | 32.9 | 30.8 | 18.3 | 22.3 | 5.7 |
| Mean number of PT** clinical staff | 11.3 | 1.6 | 1.0 | 3.3 | 5.1 | 2.8 | 2.1 |
| Mean number of FTE positions split across programs within cluster | 0.3 | 1.5 | 7.9 | 2.8 | 4.8 | 3.0 | 0.6 |
| Mean number of FTE positions vacant | 0.8 | 1.1 | 4.3 | 2.1 | 1.6 | 1.8 | 2.8 |

Notes. *Respondents could check all that applied; categories are not mutually exclusive. **Full time staff who have direct client contact as .4 FTE or greater. *** Part time staff who have direct client contact as .3 FTE or less. Some columns may not total 100% due to missing data.

## Table 36

Description of service cluster needs for additional support or resources, AHS direct and contracted services

| Percentage of clusters that agree or strongly agree that additional support or resources are needed for… | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| | Number of Service Clusters Reporting | | | | | | |
| | 5 | 54 | 10 | 30 | 20 | 119 | 28 |
| | Clinical Functions | | | | | | |
| Documenting service needs of clients | 75.0% | 46.5% | 100.0% | 75.9% | 58.8% | 63.1% | 65.2% |
| Tracking client outcomes over time | 60% | 76.2% | 100.0% | 89.7% | 76.5% | 81.6% | 78.3% |
| Obtaining information that can document program effectiveness | 100.0% | 66.7% | 100.0% | 96.4% | 100.0% | 85.0% | 69.6% |
| Identifying appropriate evidence-based practices | 80.0% | 66.7% | 100.0% | 93.1% | 76.5% | 79.6% | 56.5% |
| Implementation of evidence-based practices | 80.0% | 60.5% | 80.0% | 69.0% | 82.4% | 69.2% | 65.2% |
| Monitoring and optimization of evidence-based practices | 80.0% | 61.9% | 100.0% | 89.7% | 64.7% | 74.8% | 69.6% |
| | Management Functions | | | | | | |
| Automating client records for billing and financial applications | 80.0% | 83.7% | 100.0% | 86.2% | 76.5% | 84.6% | 41.2% |
| Generating timely 'management reports' on clinical, financial, and outcome data | 66.7% | 44.7% | 100.0% | 41.4% | 93.3% | 57.4% | 34.8% |
| Generating timely reports that integrate data from multiple sources | 100.0% | 58.1% | 100.0% | 86.2% | 100.0% | 78.4% | 40.9% |
| Improving the recording and retrieval of financial information | 80.0% | 71.4% | 90.0% | 65.5% | 58.8% | 69.9% | 15.0% |
| Evaluating staff performance and organization functioning | 0.0% | 31.8% | 100.0% | 19.2% | 88.9% | 35.5% | 43.5% |

## Table 37

Location and accessibility of programs and services, AHS direct and contracted services

| Location and Accessibility | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| Number of eligible programs /services | 38 | 121 | 34 | 101 | 132 | 426 | 71 |
| Number responding | 4 | 21 | 33 | 76 | 82 | 216 | 28 |
| % of services located* in… | | | | | | | |
| Acute care hospitals | 75.0% | 10.5% | 12.9% | 21.7% | 35.3% | 25.1% | 0.0% |
| General community clinics | 0.0% | 21.1% | 29.0% | 18.8% | 27.9% | 23.6% | 36.0% |
| Freestanding MH/A facilities | 0.0% | 26.3% | 45.2% | 36.2% | 11.8% | 27.2% | 53.6% |
| % of programs providing their services at more than one location | 25.0% | 40.0% | 63.3% | 32.8% | 54.1% | 45.6% | 72.7% |
| % of programs offering evening hours (first named service location) | 0.0% | 75.0% | 26.3% | 21.7% | 22.6% | 28.4% | 93.3% |
| % of programs offering weekend hours (first named service location) | 0.0% | 71.4% | 15.8% | 8.7% | 12.9% | 17.5% | 78.6% |
| % of programs offering services in languages other than English | 25.0% | 0.0% | 23.3% | 55.1% | 14.3% | 29.2% | 27.3% |
| % of programs having one or more criteria for refusing client entry | 25.0% | 47.6% | 81.8% | 56.6% | 58.5% | 59.7% | 57.1% |
| % of programs that ___ after refusing client entry | | | | | | | |
| Provide info about other programs | 25.0% | 52.4% | 69.7% | 48.7% | 48.8% | 51.9% | 50.0% |
| Connect client with another service | 0.0% | 33.3% | 30.3% | 32.9% | 24.4% | 28.7% | 28.6% |
| % of programs offering… | | | | | | | |
| Telephone screening/assessment | 0.0% | 42.9% | 63.6% | 39.5% | 32.9% | 40.3% | 28.6% |
| Internet screening/assessment | 0.0% | 0.0% | 3.0% | 1.3% | 4.9% | 2.8% | 7.1% |
| Telephone treatment | 0.0% | 14.3% | 42.4% | 34.2% | 15.9% | 25.9% | 17.9% |
| Internet treatment | 0.0% | 9.5% | 3.0% | 2.6% | 1.2% | 2.8% | 3.6% |
| Telephone post-treatment follow up | 25.0% | 28.6% | 39.4% | 48.7% | 15.9% | 32.4% | 32.1% |
| Internet post-treatment follow up | 0.0% | 9.5% | 3.0% | 1.3% | 1.2% | 2.3% | 7.1% |

Note. *Only the three most common service locations are provided in this table.

## Table 38

Activities provided, AHS direct and contracted services

| Activities | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Servces (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| Number of eligible programs /services | 38 | 121 | 34 | 101 | 132 | 426 | 71 |
| Number responding | 4 | 21 | 33 | 76 | 82 | 216 | 28 |
| % reporting their main activities as… | | | | | | | |
| Tier 1 (promotion and prevention) | 0.0% | 5.3% | 0.0% | 1.5% | 12.9% | 5.8% | 4.5% |
| Tier 2 (screening, brief intervention) | 0.0% | 10.5% | 13.8% | 10.3% | 10.0% | 10.5% | 31.8% |
| Tier 3 (short term clinical interventions) | 50.0% | 31.6% | 48.3% | 41.2% | 57.1% | 47.4% | 18.2% |
| Tier 4 (intense longer term treatment) | 50.0% | 21.1% | 24.1% | 26.5% | 11.4% | 20.5% | 13.6% |
| Tier 5 (specialized treatment) | 0.0% | 31.6% | 13.8% | 20.6% | 7.1% | 15.3% | 27.3% |
| % of programs/services that provide | | | | | | | |
| Information | 100.0% | 90.5% | 90.9% | 85.5% | 82.9% | 86.1% | 67.9% |
| Medication | 75.0% | 42.9% | 57.6% | 52.6% | 17.1% | 39.4% | 10.7% |
| Hospital care | 25.0% | 0.0% | 24.2% | 19.7% | 6.1% | 13.4% | 0.0% |
| Residential treatment | 0.0% | 23.8% | 12.1% | 18.4% | 4.9% | 12.5% | 39.3% |
| Counselling outside a hospital | 50.0% | 61.9% | 54.5% | 61.8% | 50.0% | 56.0% | 57.1% |
| Harm reduction | 75.0% | 33.3% | 42.4% | 39.5% | 25.6% | 34.7% | 39.3% |
| 3 most common therapies offered | | | | | | | |
| % Individual therapy/counselling | 75.0% | 84.2% | 90.3% | 98.6% | 87.1% | 91.2% | 81.8% |
| % Group therapy/counselling | 25.0% | 63.2% | 61.3% | 71.0% | 45.7% | 58.5% | 72.7% |
| % Family therapy/counselling | 0.0% | 68.4% | 35.5% | 69.6% | 48.6% | 54.9% | 31.8%* |
| 3 most common screening activities | | | | | | | |
| % Brief MH screening/assessment | 100.0% | 84.2% | 96.8% | 85.5% | 80.0% | 85.5% | 77.3% |
| % Brief addiction screening/assess. | 50.0% | 78.9% | 87.1% | 85.5% | 64.3% | 76.7% | 90.9% |
| % Drug and alcohol urine screening | 25.0% | 10.5% | 22.6% | 23.2% | 4.3% | 15.0% | 31.8% |
| 3 most common medical interventions | | | | | | | |
| % Prescribing/monitoring meds | 75.0% | 42.1% | 80.6% | 65.2% | 22.9% | 50.3% | 40.9% |
| % Diagnosis, testing, treatment | 25.0% | 21.1% | 32.3% | 44.9% | 8.6% | 26.9% | 9.1% |
| % Nonmedical detoxification | 0.0% | 10.5% | 16.1% | 13.0% | 7.1% | 10.9% | 22.7% |

## Table 38
Continued

| Activities | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| 3 most common harm reduction activities | | | | | | | |
| % Overdose prevention | 0.0% | 52.6% | 54.8% | 29.0% | 27.1% | 34.2% | 27.3% |
| % Reducing drinking programming | 0.0% | 47.4% | 52.2% | 27.5% | 18.6% | 28.5% | 31.8% |
| % Safe injection information | 0.0% | 10.5% | 38.7% | 18.8% | 14.3% | 19.2% | 40.9%** |
| 3 most common prevention activities | | | | | | | |
| % Education/awareness workshops | 50.0% | 42.1% | 64.5% | 52.2% | 45.7% | 50.8% | 81.8% |
| % Stigma reduction | 0.0% | 31.6% | 74.2% | 34.8% | 30.0% | 38.3% | 36.4% |
| % Public awareness/social marketing | 0.0% | 10.5% | 32.3% | 30.3% | 34.3% | 24.9% | 50.0% |

Note. *Other therapies offered by AHS contracted services included 12-step or support groups (54.5%), relapse prevention groups (50.0%), and aftercare counselling (45.5%). **Needle exchange offered by 27.3% of AHS contracted services.

## Table 39

Target populations and conditions, AHS direct and contracted services

| Activities | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| Number of eligible programs /services | 38 | 121 | 34 | 101 | 132 | 426 | 71 |
| Number responding | 4 | 21 | 33 | 76 | 82 | 216 | 28 |
| % of programs self-identifying as a generalist mental health service | 100.0% | 47.6% | 15.2% | 46.1% | 53.7% | 43.4% | 46.4% |
| % of programs self-identifying as a generalist addiction service | 25.0% | 66.7% | 21.2% | 31.6% | 30.5% | 30.9% | 32.1% |
| Average number of special populations targeted by the programs/services | 0.8 | 6.2 | 3.3 | 3.7 | 5.2 | 4.4 | 6.8 |
| 3 most common populations targeted | | | | | | | |
| % Adult women | 25.5% | 68.4% | 61.3% | 49.3% | 50.0% | 52.8% | 54.5% |
| % Adult men | 25.5% | 68.4% | 61.3% | 46.4% | 45.7% | 50.3% | 59.1% |
| % Children | 0.0% | 15.8% | 22.6% | 30.4% | 42.9% | 31.6% | 18.2% |
| Average number of special populations that programs/ services exclude and/or refer to other programs | 0.0 | 4.9 | 3.8 | 1.6 | 2.6 | 3.6 | 3.0 |
| 3 most common populations excluded and/or referred elsewhere | | | | | | | |
| % Children | 0.0% | 14.3% | 63.6% | 26.3% | 41.4% | 59.1% | 63.6% |
| % Clients mandated from justice* | 0.0% | 14.3% | 60.6% | 26.3% | 25.7% | 42.5% | 22.7% |
| % Adolescents | 0.0% | 9.5% | 54.5% | 25.0% | 32.9% | 42.5% | 50.0% |
| Average number of mental health conditions targeted by the programs /services | 1.3 | 0.5 | 0.9 | 1.8 | 1.1 | 1.6 | 0.8 |

## Table 39
Continued

| Activities | AHS Direct Services (South) | AHS Direct Services (Calgary) | AHS Direct Services (Central) | AHS Direct Services (Edmonton) | AHS Direct Services (North) | AHS Direct Services | AHS Contracted Services |
|---|---|---|---|---|---|---|---|
| 3 most common mental health problems that programs provide services for | | | | | | | |
| % Depression | 0.0% | 14.3% | 63.6% | 26.3% | 18.3% | 27.3% | 14.3% |
| % Anxiety disorders | 0.0% | 14.3% | 60.6% | 26.3% | 13.5% | 22.0% | 14.3% |
| % Other mood/bipolar disorder | 0.0% | 9.5% | 54.5% | 25.0% | 17.1% | 24.5% | 14.3% |
| Average number of addictions targeted by programs/services | 1.3 | 0.5 | 0.9 | 1.8 | 1.5 | 1.4 | 1.6 |
| 3 most common addictions that programs provide services for | | | | | | | |
| % Alcohol | 25.5% | 9.5% | 30.3% | 27.6% | 23.2% | 24.5% | 32.1% |
| % Prescription drug misuse | 25.5% | 4.8% | 21.2% | 28.9% | 23.2% | 23.1% | 32.1% |
| % Tobacco | 25.5% | 9.5% | 12.1% | 27.6% | 22.0% | 21.3% | 14.3%** |

Note. *50% of AHS funded services target 'at risk' populations (i.e., history of violence, involvement with child services ); 40.9% target First Nations, Inuit, and/or Metis populations. **39.3% of AHS funded services target illicit drug use.

## 6.6 Additional Corresponding Data Tables for the Costing Analyses

### Table 40

Total expenditures for all reported eligible programs, services, and initiatives, FY 2010–2011

| AHS Direct Services | | | |
|---|---|---|---|
| **Mental Health Services** | **Treatment Episodes** | **Total Costs ($)** | **Average Cost Per Person ($)** |
| Hospitalization - inpatient | 11,435 | 228,054,651 | 19,943.56 |
| Hospitalization – psychiatric facility | 2,486 | 48,177,835 | 19,379.66 |
| Emergency departments | 39,267 | 22,436,459 | 571.38 |
| Hospital – outpatient care | 30,294 | 56,800,118 | 1,874.96 |
| Community mental health services | 26,077 | 115,365,635 | 4,424.04 |
| Physician visits | 392,993 | 111,510,548 | 283.75 |
| Subtotal | n/a | 582,345,245 | n/a |
| **Addiction Services** | | | |
| Residential and detox services - adults | 5,634 | 16,177,885 | 2,871.47 |
| Residential and detox services - youth | 758 | 14,905,879 | 19,664.75 |
| Outpatient addiction treatment | 31,512 | 31,521,846 | 1,000.31 |
| Opioid dependence treatment | 1,179 | 1,841,742 | 1,562.12 |
| Prevention | INA | 835,838 | INA |
| Other Costs | INA | 13,329,962 | INA |
| Subtotal | | 78,613,152 | |
| **GoA** | | | |
| **Alberta Health** | | | |
| Health - MH&A branch | INA | 19,164,750 | INA |
| Health - PCN unit | INA | 5,113,399 | INA |
| Alberta Community HIV Fund | INA | 975,164 | INA |
| Subtotal | | 25,253,313 | |

## Table 40
Continued

| | | | |
|---|---|---|---|
| **GoA** | | | |
| **Other GoA Ministries** | | | |
| Education – Early Child Development | 1,946 | 4,800,401 | 2,453.19 |
| Culture – Lottery Fund Grants | INA | 1,357,488 | n/a |
| Human Services – CFSA | INA | 13,949,189 | n/a |
| Municipal Affairs | n/a | No eligible funding | n/a |
| Justice | n/a | Services operate through AHS* | n/a |
| Enterprise and Advanced Education | n/a | No eligible funding | n/a |
| Aboriginal Relations | n/a | No eligible funding | n/a |
| Subtotal | | 20,107,078 | |
| | | | |
| **Income & Housing Support** | | | |
| Human Services – Residential Treatment Program Benefit | 2,826 | 4,637,994 | 1,714.54 |
| Homeless Unit | Excluded** | Excluded** | n/a |
| Subtotal | | 4,637,994 | |
| **AHS Contracted Services** | | | |
| **Alberta Health** | | | |
| AHS Contracted Mental Health Services | INA | 26,867,272 | INA |
| AHS Contracted Addiction Services | INA | 15,966,614 | INA |
| Subtotal | | 42,833,886 | |
| TOTAL COSTS FROM ALL SOURCES | | 753,790,668 | |

Notes. *Information on addiction and mental health services provided for justice-involved clients was not received.
**Although physicians do provide services in AHS-operated facilities and programs, most physician payments are not under direct control of AHS. Physician claim data are grouped within AHS direct services to enable comparisons of the costs associated with different services provided to patients. See also Figures 32 and 33.
INA= Information not available

## Table 41

Total costs, AHS direct mental health services by jurisdiction and age ranges, FY 2010–2011

| Jurisdiction | Total | | 0 to 17 | | 18 to 34 | | 35 to 54 | | 55+ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | $ | % | $ | % | $ | % | $ | % | $ | % |
| South | 55,130,443 | 9.63% | 4,732,917 | 9.01% | 16,301,816 | 9.53% | 22,474,903 | 10.26% | 11,620,807 | 8.96% |
| Calgary | 175,922,558 | 30.73% | 22,149,376 | 42.14% | 52,739,869 | 30.83% | 64,685,018 | 29.53% | 36,348,295 | 28.02% |
| Central | 86,966,929 | 15.19% | 6,824,164 | 12.98% | 22,968,710 | 13.43% | 35,470,156 | 16.19% | 21,703,899 | 16.73% |
| Edmonton | 189,354,770 | 33.08% | 13,298,861 | 25.30% | 58,035,005 | 33.93% | 70,791,893 | 32.32% | 47,229,011 | 36.41% |
| North | 65,022,119 | 11.36% | 5,551,229 | 10.56% | 21,017,737 | 12.29% | 25,636,159 | 11.70% | 12,816,994 | 9.88% |
| Alberta | 572,396,819 | 100.00% | 52,556,546 | 100.00% | 171,063,137 | 100.00% | 219,058,129 | 100.00% | 129,719,006 | 100.00% |

Note. % refers to percentage of total AHS direct costs for mental health services within age ranges for each jurisdiction.

## Table 42

Total costs, AHS direct addiction services by service type and age ranges, FY 2010–2011

| Jurisdiction | Total | | 0 to 17 | | 18 to 34 | | 35 to 54 | | 55+ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | $ | % | $ | % | $ | % | $ | % | $ | % |
| Residential and detox services | 31,083,765 | 48.23% | 3,187,453 | 49.48% | 11,265,912 | 45.55% | 13,979,884 | 51.22% | 2,650,516 | 44.32% |
| Outpatient services | 31,521,847 | 48.91% | 3,250,118 | 50.45% | 12,783,399 | 51.69% | 12,382,261 | 45.37% | 3,106,069 | 51.94% |
| Opioid dependence program | 1,841,821 | 2.86% | 4,686 | 0.73% | 684,209 | 2.77% | 929,463 | 3.41% | 223,383 | 3.74% |
| Total | 64,447,433 | 100.00% | 6,442,257 | 100.00% | 24,733,500 | 100.00% | 27,291,608 | 100.00% | 5,979,968 | 100.00% |

Note. % refers to percentage of total AHS direct costs for addiction services within age ranges for each type of service. GAP-MAP obtained some costing information for individuals receiving addiction services in AHS Zones. However, there was missing information in some services categories for certain health zones and/or delivery of some services at a regional or provincial level. For example, for opioid dependence treatment, only Calgary and Edmonton zones provide information such as yearly budgets and number of unique clients. We are not confident that Zones without complete information indeed provide no direct services in these categories; therefore we report only provincial totals for specialist addiction services.

## Table 43

Total expenditures for different types of AHS direct services, by sex and Zone, FY 2010–2011

| Jurisdiction → / ↓Type | South Zone | | Calgary Zone | | Central Zone | |
|---|---|---|---|---|---|---|
| | Males $ | Females $ | Males $ | Females $ | Males $ | Females $ |
| Physician visits | 2,757,032 (10.33%) | 4,534,73 (15.95%) | 16,734,743 (20.09%) | 24,850,689 (26.83%) | 4,902,201 (12.31%) | 7,371,997 (15.64%) |
| Emergency department | 1,157,390 (4.34%) | 982,325 (3.45%) | 3,368,117 (4.04%) | 3,022,268 (3.26%) | 1,638,473 (4.11%) | 1,492,642 (3.17%) |
| Hospital – inpatient | 14,254,136 (53.39%) | 13,047,593 (45.89%) | 38,885,729 (46.69%) | 36,290,841 (39.17%) | 11,655,866 (29.27%) | 13,336,558 (28.29%) |
| Hospital – psychiatric facility | 1,066,413 (3.99%) | 557,252 (1.96%) | 4,710,075 (5.66%) | 2,061,464 (2.23%) | 8,741,380 (21.95%) | 7,122,196 (15.11%) |
| Hospital – outpatient | 861,896 (3.23%) | 1,309,785 (4.61%) | 14,533,226 (17.45%) | 16,946,583 (18.29%) | 615,140 (1.54%) | 691,753 (1.47%) |
| Residential addiction treatment | N/A | N/A | N/A | N/A | N/A | N/A |
| Community mental health services | 6,599,532 (24.72%) | 8,002,356 (28.14%) | 5,051,558 (6.07%) | 9,467,470 (10.22%) | 12,27,4278 (30.82%) | 17,124,480 (36.33%) |
| Outpatient addiction treatment | N/A | N/A | N/A | N/A | N/A | N/A |
| Opioid dependence treatment | N/A | N/A | N/A | N/A | N/A | N/A |

## Table 43
Continued

| Jurisdiction → / Type ↓ | Edmonton Zone | | North Zone | | Alberta | |
|---|---|---|---|---|---|---|
| | Males $ | Females $ | Males $ | Females $ | Males $ | Females $ |
| Physician visits | 16,870,187 (18.89%) | 16,870,187 (18.89%) | 3,478,721 (11.91%) | 5,173,187 (14.44%) | 44,742,885 (14.8%) | 65,567,161 (19.6%) |
| Emergency department | 3,344,452 (3.74%) | 3,344,452 (3.74%) | 1,865,056 (6.39%) | 1,888,401 (5.27%) | 11,373,488 (3.8%) | 10,062,198 (3%) |
| Hospital – inpatient | 31,383,961 (35.14%) | 31,383,961 (35.14%) | 15,105,057 (51.73%) | 15,995,203 (44.65%) | 111,284,750 (36.8%) | 112,198,668 (33.6%) |
| Hospital – psychiatric facility | 11,615,578 (13%) | 11,615,578 (13%) | 2,092,034 (7.16%) | 1,463,696 (4.09%) | 28,225,481 (9.3%) | 19,199,212 (5.8%) |
| Hospital – outpatient | 7,916,979 (8.86%) | 7,916,979 (8.86%) | 468,487 (1.60%) | 700,685 (1.96%) | 24,395,727 (8.1%) | 31,132,623 (9.3%) |
| Residential addiction treatment | N/A | N/A | N/A | N/A | 20,838,032 (8.9%) | 10,201,801 (3.1%) |
| Community mental health services | 18,189,780 (20.36%) | 18,189,780 (20.36%) | 6,190,737 (21.20%) | 10,600,855 (29.59%) | 48,305,885 (16%) | 65,909,272 (19.7%) |
| Outpatient addiction treatment | N/A | N/A | N/A | N/A | 12,645,351 (4.2%) | 18,810,473 (5.6%) |
| Opioid dependence treatment | N/A | N/A | N/A | N/A | 726,387 (0.2%) | 1,107,545 (0.3%) |

Note. GAP-MAP obtained some costing information for individuals receiving addiction services in AHS Zones. However, there was missing information on sex in some services categories for certain health zones and/or delivery of some services at a regional or provincial level. Provincial totals were therefore reported only.

## Table 44

Average physician claim costs for different diagnoses by age group, FY 2009–2010

| Physician Claims | Total | | 0 to 17 | | 18 to 34 | | 35 to 54 | | 55+ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Adjustment disorders | 218 | 216 | 440 | 327 | 196 | 167 | 219 | 234 | 182 | 217 |
| Anxiety disorders | 134 | 129 | 235 | 179 | 119 | 113 | 125 | 129 | 130 | 136 |
| Eating disorders | 498 | 1,120 | 412 | 1,154 | 881 | 1,254 | 312 | 854 | 232 | 350 |
| Mood disorders | 311 | 286 | 427 | 429 | 307 | 249 | 295 | 285 | 321 | 308 |
| Personality disorders | 431 | 587 | 105 | 233 | 425 | 583 | 529 | 688 | 307 | 420 |
| Schizophrenia & other psychotic disorders | 990 | 729 | 763 | 694 | 1,186 | 806 | 1,054 | 843 | 664 | 587 |
| Substance related disorders | 172 | 156 | 180 | 166 | 162 | 153 | 173 | 154 | 178 | 161 |
| Other disorders | 147 | 137 | 187 | 162 | 191 | 143 | 150 | 136 | 115 | 130 |
| Average physician costs | 295 | 277 | 343 | 351 | 326 | 253 | 290 | 281 | 265 | 283 |

## Table 45

Total expenditures and average cost (in $) per service episode, AHS direct services by Zones, FY 2010–2011

| Area → / ↓Type | South | | Calgary | | Central | |
|---|---|---|---|---|---|---|
| | Total Cost | Average Cost | Total Cost | Average Cost | Total Cost | Average Cost |
| Physician visits | 7,290,058 | 218.66 | 41,582,159 | 306.96 | 12,271,494 | 271.90 |
| Emergency department | 2,139,715 | 569.38 | 6,390,385 | 575.66 | 3,131,115 | 525.80 |
| Hospital – inpatient | 27,301,729 | 20,620.64 | 75,183,345 | 18,508.95 | 24,992,424 | 18,390.30 |
| Hospital – psychiatric facility | 1,623,665 | 15,763.74 | 6,771,539 | 16,238.70 | 15,863,577 | 18,998.30 |
| Hospital – outpatient | 2,171,681 | 1,457.50 | 31,479,809 | 2,629.45 | 1,306,893 | 997.63 |
| Residential addiction treatment | N/A | N/A | N/A | N/A | N/A | N/A |
| Community mental health services | 14,684,168 | 3,608.79 | 14,521,056 | 3,961.01 | 29,414,113 | 5,092.47 |
| Outpatient addiction treatment | 3,486,869 | 1,096 | 10,800,858 | 1,208 | 4,146,875 | 885 |
| Opioid dependence treatment | N/A | N/A | N/A | N/A | N/A | N/A |

## Table 45

Total expenditures and average cost (in $) per service episode, AHS direct services by Zones, FY 2010–2011

| Area → / ↓Type | Edmonton | | North | | Alberta | |
|---|---|---|---|---|---|---|
| | Total Cost | Average Cost | Total Cost | Average Cost | Total Cost | Average Cost |
| Physician visits | 40,502,788 | 307.05 | 8,645,007 | 195.55 | 111,510,548 | 283.75 |
| Emergency department | 6,021,015 | 610.71 | 3,753,457 | 504.16 | 22,436,459 | 571.38 |
| Hospital – inpatient | 64,912,434 | 22,531.22 | 31,100,260 | 18,998.33 | 228,054,651 | 19,943.56 |
| Hospital – psychiatric facility | 19,610,183 | 21,246.14 | 3,555,730 | 18,616.39 | 48,177,835 | 19,379.66 |
| Hospital – outpatient | 19,400,795 | 1,503.35 | 1,169,172 | 588.11 | 56,800,118 | 1,874.96 |
| Residential addiction treatment | N/A | N/A | N/A | N/A | 31,083,764 | 4,881.24 |
| Community mental health services | 38,924,751 | 5,320.50 | 16,791,592 | 3,295.70 | 115,365,635 | 4,424.04 |
| Outpatient addiction treatment | 5,922,597 | 591 | 7,164,647 | 1,297 | 31,521,846 | 1,000.34 |
| Opioid dependence treatment | N/A | N/A | N/A | N/A | 1,841,742 | 1,562.12 |

Note. GAP-MAP obtained some costing information for individuals receiving addiction services in AHS Zones. However, there was missing information in some services categories for certain health zones and/or delivery of some services at a regional or provincial level. For example, for opioid dependence treatment, only Calgary and Edmonton zones provide information such as yearly budgets and number of unique clients. We are not confident that Zones without complete information indeed provide no direct services in these categories; therefore we report only provincial totals for specialist addiction services.

## Table 46

Total expenditures for physician claims and acute inpatient care across Alberta by diagnosis, age range, and sex, FY 2010–2011

| Physician Claims | Total | | 0 to 17 | | 18 to 34 | | 35 to 54 | | 55+ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Adjustment disorders | 860,198 | 1,449,610 | 119,362 | 94,070 | 194,940 | 291,601 | 353,558 | 674,249 | 192,338 | 389,690 |
| Anxiety disorders | 6,064,201 | 10,761,532 | 862,781 | 743,236 | 1,402,224 | 2,695,022 | 2,163,342 | 4,223,568 | 1,635,854 | 3,099,706 |
| Eating disorders | 39,358 | 964,747 | 11,944 | 197,341 | 20,261 | 620,523 | 3,435 | 133,252 | 3,718 | 13,631 |
| Mood disorders | 23,193,676 | 41,834,650 | 1,513,603 | 2,043,445 | 5,891,607 | 9,806,341 | 9,075,747 | 17,419,893 | 6,712,719 | 12,564,970 |
| Personality disorders | 687,474 | 1,231,912 | 10,389 | 19,127 | 271,323 | 506,505 | 339,972 | 576,882 | 65,791 | 129,398 |
| Schizophrenia & other psychotic disorders | 6,591,309 | 4,344,398 | 128,120 | 94,376 | 2,665,926 | 1,033,774 | 2,645,985 | 1,815,052 | 1,151,279 | 1,401,197 |
| Substance related disorders | 4,451,134 | 3,177,863 | 73,062 | 70,737 | 1,142,440 | 863,528 | 1,999,710 | 1,358,875 | 1,235,922 | 884,724 |
| Other disorders | 3,385,181 | 2,472,773 | 317,985 | 203,360 | 716,566 | 558,034 | 1,427,201 | 964,220 | 923,429 | 747,160 |
| Total physician costs | 45,272,532 | 66,237,485 | 3,037,245 | 3,465,691 | 12,305,287 | 16,375,328 | 18,008,951 | 27,165,991 | 11,921,049 | 19,230,475 |
| **Acute inpatient care for** | | | | | | | | | | |
| Adjustment disorders | 5,080,879 | 5,778,653 | 514,862 | 751,970 | 2,039,126 | 2,194,940 | 1,910,410 | 2,194,940 | 616,480 | 636,803 |
| Anxiety disorders | 5,254,608 | 8,588,298 | 1,084,111 | 1,404,338 | 1,011,858 | 1,672,894 | 1,459,501 | 2,116,877 | 1,699,139 | 3,394,190 |
| Eating disorders | 313,992 | 5,794,581 | 142,724 | 1,255,968 | 142,724 | 3,853,539 | 28,545 | 570,895 | 0 | 114,179 |
| Mood disorders | 31,935,172 | 50,661,934 | 2,446,641 | 4,762,234 | 8,550,605 | 11,768,454 | 12,590,886 | 18,704,529 | 8,347,040 | 15,426,717 |
| Other disorders | 6,220,475 | 3,166,828 | 5,005,287 | 2,001,833 | 700,092 | 434,545 | 275,685 | 507,581 | 239,410 | 222,869 |
| Personality disorders | 928,765 | 2,488,257 | 20,793 | 55,449 | 464,382 | 1,407,009 | 374,278 | 831,729 | 69,311 | 194,070 |
| Schizophrenia & other psychotic disorders | 38,655,523 | 25,714,314 | 987,192 | 582,713 | 19,193,279 | 7,545,598 | 14,121,737 | 11,342,224 | 4,353,315 | 6,243,779 |
| Substance related disorders | 25,498,714 | 11,966,884 | 587,798 | 371,811 | 7,673,742 | 3,950,867 | 11,161,376 | 5,115,052 | 6,075,797 | 2,529,154 |
| Total inpatient costs | 113,888,127 | 114,159,749 | 10,789,408 | 11,186,317 | 39,775,808 | 32,827,845 | 41,922,418 | 41,383,826 | 21,400,492 | 28,761,761 |

## Table 47

Average hospital inpatient service costs of patients for different diagnoses by age group, fiscal year 2009-2010

| Acute inpatient care for | Total | | 0 to 17 | | 18 to 34 | | 35 to 54 | | 55+ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Adjustment disorders | 7,407 | 7,241 | 7,053 | 7,028 | 7,524 | 7,268 | 7,376 | 7,390 | 7,427 | 6,922 |
| Anxiety disorders | 15,143 | 14,807 | 15,487 | 13,503 | 13,491 | 14,177 | 15,203 | 14,303 | 16,030 | 16,163 |
| Eating disorders | 34,888 | 41,688 | 35,681 | 39,249 | 35,681 | 41,886 | 28,545 | 51,900 | N/A | 28,545 |
| Mood disorders | 20,276 | 21,669 | 17,352 | 20,094 | 19,389 | 20,083 | 20,985 | 21,401 | 21,239 | 24,067 |
| Other disorders | 23,473 | 16,240 | 26,344 | 24,118 | 18,423 | 11,744 | 13,784 | 9,953 | 14,083 | 9,286 |
| Personality disorders | 7,871 | 9,461 | 10,397 | 6,931 | 7,871 | 9,443 | 7,797 | 10,528 | 7,701 | 7,188 |
| Schizophrenia & other psychotic disorders | 29,781 | 28,289 | 24,680 | 26,487 | 30,808 | 29,824 | 29,298 | 28,570 | 28,453 | 26,345 |
| Substance related disorders | 13,435 | 12,840 | 13,359 | 10,623 | 14,645 | 13,718 | 13,146 | 12,852 | 12,632 | 11,987 |
| Average inpatient costs | 19,752 | 20,134 | 20,357 | 18,960 | 21,477 | 20,029 | 19,099 | 20,012 | 17,999 | 20,948 |

## Table 48

Patient encounters provided by AHS Direct Services, recipient by Zone, FY 2010–2011

| Jurisdiction → / ↓Type | South | | Calgary | | Central | |
|---|---|---|---|---|---|---|
| | Episodes | Rate Per 100,000 Population | Episodes | Rate Per 100,000 Population | Episodes | Rate Per 100,000 Population |
| Physician visits | 33,340 | 11,670 | 135,465 | 9,820 | 45,132 | 10,090 |
| Emergency department | 3,758 | 1,320 | 11,101 | 800 | 5,955 | 1,330 |
| Hospital – inpatient | 1,324 | 460 | 4,062 | 290 | 1,359 | 300 |
| Hospital – psychiatric facility | 103 | 40 | 417 | 30 | 835 | 190 |
| Hospital – outpatient | 1,490 | 520 | 11,972 | 870 | 1,310 | 290 |
| Residential addiction treatment | N/A | N/A | N/A | N/A | N/A | N/A |
| Community mental health services | 4,069 | 1,420 | 3,666 | 270 | 5,776 | 1,290 |
| Outpatient addiction treatment | N/A | N/A | N/A | N/A | N/A | N/A |
| Opioid dependence treatment | N/A | N/A | N/A | N/A | N/A | N/A |

## Table 48
Continued

| Jurisdiction → / ↓Type | Edmonton | | North | | Alberta | |
|---|---|---|---|---|---|---|
| | Episodes | Rate Per 100,000 Population | Episodes | Rate Per 100,000 Population | Episodes | Rate Per 100,000 Population |
| Physician visits | 131,908 | 11,350 | 44,208 | 10,010 | 392,993 | 10,570 |
| Emergency department | 9,859 | 850 | 7,445 | 1,690 | 39,267 | 1,060 |
| Hospital – inpatient | 2,881 | 250 | 1,637 | 370 | 11,435 | 310 |
| Hospital – psychiatric facility | 923 | 80 | 191 | 40 | 2,486 | 70 |
| Hospital – outpatient | 12,905 | 1,110 | 1,988 | 450 | 30,294 | 820 |
| Residential addiction treatment | N/A | N/A | N/A | N/A | 6,368 | 170 |
| Community mental health services | 7,316 | 630 | 5,095 | 1,150 | 26,077 | 700 |
| Outpatient addiction treatment | N/A | N/A | N/A | N/A | 31,511 | 850 |
| Opioid dependence treatment | N/A | N/A | N/A | N/A | 1,179 | 30 |

Notes. N/A indicates that the information was not available, or less than 3% of the treatment episodes could be allocated to Alberta specific health zones.
*Zone totals do not add up to the provincial total because of "missing" or "unknown" address information.
% refers to percentage of total treatment episodes within each area.

## Table 49

Total number of patient days, AHS inpatient services by age, FY 2010–2011

| Area | Total | | 0 to 17 | | 18 to 34 | |
|---|---|---|---|---|---|---|
| | Patient Days | % | Patient Days | % | Patient Days | % |
| South | 30,213 | 8.34% | 1,318 | 6.45% | 9,633 | 8.73% |
| Calgary | 118,560 | 32.73% | 8,435 | 41.27% | 35,999 | 32.61% |
| Central | 51,988 | 14.35% | 2,471 | 12.09% | 14,509 | 13.14% |
| Edmonton | 128,668 | 35.52% | 6,551 | 32.05% | 38,996 | 35.32% |
| North | 28,063 | 7.75% | 1,261 | 6.17% | 9,074 | 8.22% |
| Alberta* | 362,192 | 100% | 20,437 | 100% | 110,394 | 100% |

| Area | 35 to 54 | | 55+ | |
|---|---|---|---|---|
| | Patient Days | % | Patient Days | % |
| South | 11,157 | 9.07% | 8,105 | 7.48% |
| Calgary | 40,087 | 32.57% | 34,039 | 31.43% |
| Central | 20,065 | 16.30% | 14,943 | 13.80% |
| Edmonton | 40,483 | 32.90% | 42,638 | 39.37% |
| North | 9,970 | 8.10% | 7,758 | 7.16% |
| Alberta* | 123,067 | 100% | 108,294 | 100% |

Note: *Zone totals do not add up to the provincial total because of "missing" or "unknown" address information. % refers to percentage of total treatment episodes within each area.

## Table 50

Total number of physician visits, AHS Direct Services, FY 2009–2010

| Area | Total | | 0 to 17 | | 18 to 34 | |
|---|---|---|---|---|---|---|
| | Visits | % | Visits | % | Visits | % |
| South | 112,821 | 8.89% | 11,110 | 10.04% | 29,868 | 8.29% |
| Calgary | 431,914 | 34.02% | 45,615 | 41.23% | 130,321 | 36.19% |
| Central | 162,544 | 12.80% | 12,128 | 10.96% | 37,649 | 10.45% |
| Edmonton | 426,820 | 33.62% | 30,309 | 27.39% | 119,622 | 33.21% |
| North | 119,024 | 9.38% | 10,944 | 9.89% | 34,551 | 9.59% |
| Alberta* | 1,269,523 | 100.00% | 110,646 | 100% | 360,151 | 100% |

| Area | 35 to 54 | | 55+ | |
|---|---|---|---|---|
| | Visits | % | Visits | % |
| South | 45,860 | 9.09% | 25,983 | 8.84% |
| Calgary | 171,049 | 33.89% | 84,929 | 28.88% |
| Central | 67,995 | 13.47% | 44,772 | 15.22% |
| Edmonton | 165,319 | 32.76% | 111,570 | 37.94% |
| North | 48,478 | 9.61% | 25,051 | 8.52% |
| Alberta* | 504,650 | 100% | 294,076 | 100% |

Note: *Zone totals do not add up to the provincial total because of "missing" or "unknown" address information. % refers to percentage of total treatment episodes within each area.

## Table 51

Treatment episodes (patients days from inpatient services, physician visits, and unique individuals) provided by AHS direct services by age Group and Zone, FY 2010–2011

### Age Range: 0 -17: Count of Visits/ Patient Days (Inpatients Only) by Zone and Sex

| Service Provider Type | South Zone | Calgary Zone | Central Zone | Edmonton |
|---|---|---|---|---|
| Patient Days | Patient Days | Patient Days | Patient Days | Patient Days |
| Acute Hospital Inpatients | 1,318 | 8,267 | 2,363 | 6,239 |
| Psychiatric Hospital Inpatients | 0 | 168 | 108 | 312 |
| Visits | Visits | Visits | Visits | Visits |
| Emergency Room | 334 | 1,357 | 664 | 1,016 |
| Acute Hospital Outpatients | 2,593 | 27,318 | 724 | 16,586 |
| Community Mental Health Clinics | 6,537 | 10,336 | 8,349 | 7,012 |
| Physicians | 5,185 | 33,761 | 7,998 | 23,389 |

### Age Range: 0–17: Count of Visits/ Patient Days (Inpatients Only) by Zone and Sex

| Service Provider Type | North Zone | Alberta | |
|---|---|---|---|
| Patient Days | Patient Days | Patient Days | Unique Individuals |
| Acute Hospital Inpatients | 1,219 | 19,406 | 1,120 |
| Psychiatric Hospital Inpatients | 42 | 630 | 18 |
| Visits | Visits | Visits | Unique Individuals |
| Emergency Room | 807 | 4,178 | 3,498 |
| Acute Hospital Outpatients | 957 | 48,178 | 6,180 |
| Community Mental Health Clinics | 6,966 | 39,200 | 3,302 |
| Physicians | 7,050 | 77,383 | 18,725 |

## Table 51
Continued

### Age Range: 18–34: Count of visits/ patient days (inpatients only) by Zone and Sex

| Service Provider Type | South Zone | Calgary Zone | Central Zone | Edmonton |
|---|---|---|---|---|
| Patient Days | Patient Days | Patient Days | Patient Days | Patient Days |
| Acute Hospital Inpatients | 7,178 | 26,157 | 5,093 | 20,174 |
| Psychiatric Hospital Inpatients | 2,455 | 9,842 | 9,416 | 18,822 |
| Visits | Visits | Visits | Visits | Visits |
| Emergency Room | 2,255 | 5,992 | 3,130 | 5,722 |
| Acute Hospital Outpatients | 4,733 | 79,293 | 2,110 | 39,532 |
| Community Mental Health Clinics | 14,428 | 10,225 | 20,353 | 41,304 |
| Physicians | 26,945 | 136,099 | 42,673 | 143,850 |

### Age Range: 18–34: Count of Visits/ Patient Days (Inpatients Only) by Zone and Sex

| Service Provider Type | North Zone | Alberta | |
|---|---|---|---|
| Patient Days | Patient Days | Patient Days | Unique Individuals |
| Acute Hospital Inpatients | 6,043 | 64,645 | 3,491 |
| Psychiatric Hospital Inpatients | 3,031 | 43,566 | 979 |
| Visits | Visits | Visits | Unique Individual |
| Emergency Room | 4,251 | 21,350 | 15,590 |
| Acute Hospital Outpatients | 2,219 | 127,887 | 8,614 |
| Community Mental Health Clinics | 15,115 | 101,425 | 7,766 |
| Physicians | 37,837 | 387,404 | 102,525 |

## Table 51
Continued

### Age Range: 35–54: Count of Visits/ Patient Days (Inpatients Only) by Zone and Sex

| Service Provider Type | South Zone | Calgary Zone | Central Zone | Edmonton |
|---|---|---|---|---|
| Patient Days | Patient Days | Patient Days | Patient Days | Patient Days |
| Acute Hospital Inpatients | 9,132 | 31,038 | 7,992 | 22,578 |
| Psychiatric Hospital Inpatients | 2,025 | 9,049 | 12,073 | 17,905 |
| Visits | Visits | Visits | Visits | Visits |
| Emergency Room | 2,298 | 5,797 | 3,162 | 5,612 |
| Acute Hospital Outpatients | 10,274 | 92,642 | 2,839 | 51,923 |
| Community Mental Health Clinics | 20,568 | 16,552 | 44,405 | 54,792 |
| Physicians | 41,810 | 205,974 | 63,942 | 225,250 |

### Age Range: 35–54: Count of Visits/ Patient Days (Inpatients Only) by Zone and Sex

| Service Provider Type | North Zone | Alberta | |
|---|---|---|---|
| Patient Days | Patient Days | Patient Days | Unique Individuals |
| Acute Hospital Inpatients | 6,915 | 77,655 | 4,263 |
| Psychiatric Hospital Inpatients | 3,055 | 44,107 | 1,054 |
| Visits | Visits | Visits | Unique Individual |
| Emergency Room | 4,193 | 21,062 | 14,060 |
| Acute Hospital Outpatients | 2,106 | 159,784 | 10,051 |
| Community Mental Health Clinics | 23,655 | 159,972 | 9,661 |
| Physicians | 53,443 | 590,419 | 158,731 |

## Table 52

Total number of patient days and encounters by AHS Zone and sex, FY 2010–2011

| Count of Patient Days and Visits | | | | |
|---|---|---|---|---|
| Service Provider Type | South Zone | | Calgary Zone | |
| Patient Days | Male (n, %) | Female (n, %) | Male (n, %) | Female (n, %) |
| Acute Hospital Inpatients | 12,290 (75.5%) | 11,934 (85.65%) | 47,919 (76.71%) | 48,381 (86.25%) |
| Psychiatric Hospital Inpatients | 3,989 (24.5%) | 2,000 (14.35%) | 14,549 (23.29%) | 7,711 (13.75%) |
| Visits | Visits | Visits | Visits | Visits |
| Emergency Room | 2,991 (6.07%) | 2,833 (4.46%) | 7,714 (4.21%) | 7,554 (3.04%) |
| Acute Hospital Outpatients | 10,878 (22.08%) | 12,361 (19.45%) | 105,422 (57.47%) | 125,606 (50.55%) |
| Community Mental Health Clinics | 22,779 (46.23%) | 27,621 (43.47%) | 17,436 (9.51%) | 32,678 (13.15%) |
| Physicians | 12,628 (25.63%) | 20,730 (32.62%) | 52,858 (28.82%) | 82,646 (33.26%) |

| Count of Patient Days and Visits | | | | |
|---|---|---|---|---|
| Service Provider Type | Central Zone | | Edmonton | |
| Patient Days | Male (n, %) | Female (n, %) | Male (n, %) | Female (n, %) |
| Acute Hospital Inpatients | 10,272 (39.17%) | 12,354 (47.95%) | 32,646 (50.33%) | 41,275 (64.70%) |
| Psychiatric Hospital Inpatients | 15,952 (60.83%) | 13,410 (52.05%) | 32,224 (49.67%) | 22,523 (35.30%) |
| Visits | Visits | Visits | Visits | Visits |
| Emergency Room | 4,095 (6.12%) | 4,405 (4.61%) | 7,715 (4.39%) | 6,726 (2.68%) |
| Acute Hospital Outpatients | 3,564 (5.33%) | 3,851 (4.03%) | 524,74 (29.89%) | 93,660 (37.28%) |
| Community Mental Health Clinics | 42,366 (63.30%) | 59,107 (61.81%) | 62,784 (35.76%) | 71,497 (28.46%) |
| Physicians | 16,899 (25.25%) | 28,257 (29.55%) | 52,609 (29.96%) | 79,355 (31.59%) |

| Count of Patient Days and Visits | | | | |
|---|---|---|---|---|
| Service Provider Type | North Zone | | Alberta | |
| Patient Days | Male (n, %) | Female (n, %) | Male (n, %) | Female (n, %) |
| Acute Hospital Inpatients | 9,041 (65.83%) | 10,310 (71.95%) | 113,809 (61.15%) | 126,119 (71.63%) |
| Psychiatric Hospital Inpatients | 4,693 (34.17%) | 4,019 (28.05%) | 72,317 (38.85%) | 49,947 (28.37%) |
| Visits | Visits | Visits | Visits | Visits |
| Emergency Room | 5,003 (11%) | 5,820 (7.92%) | 29,036 (5.50%) | 28,193 (3.80%) |
| Acute Hospital Outpatients | 1,815 (3.99%) | 4,162 (5.66%) | 177,012 (33.56%) | 245,392 (33.07%) |
| Community Mental Health Clinics | 21,368 (46.97%) | 36,590 (49.76%) | 166,733 (31.61%) | 227,493 (30.66%) |
| Physicians | 17,311 (38.05%) | 26,955 (36.66%) | 154,714 (29.33%) | 240,950 (32.47%) |

## Table 53
Telemental health activities by Zone, FY 2010–2011

| Area | Episodes | % | Unique Patients | % |
|---|---|---|---|---|
| AHS direct – Calgary | 281 | 8.52% | 245 | 6.74% |
| AHS direct – Central | 1,523 | 46.17% | 1,494 | 41.08% |
| AHS direct – Edmonton | 1,083 | 32.83% | 1,374 | 37.78% |
| AHS direct – South | 79 | 2.39% | 86 | 2.36% |
| AHS direct – Calgary | 117 | 3.55% | 227 | 6.24% |
| CASA | 216 | 6.55% | 211 | 5.80% |
| Total | 3,299 | 100.00% | 3,637 | 100.00% |

# 7 Synthesis of Findings Across GAP-MAP Data Sources

# 7 Synthesis of Findings Across GAP-MAP Data Sources

Recall from section 4 of this report that the scope of the addiction and mental health problems covered in GAP-MAP was deliberately intended to provide coverage across a broad range of problem severity. Thus, GAP-MAP was designed to describe the full spectrum of relevant programs, services and initiatives in Alberta, ranging from prevention through to engagement with specialty addiction and mental health care and aftercare services. How do GAP-MAP data inform whether Alberta's addiction and mental health system has been designed to respond effectively and efficiently to this full spectrum of acute, chronic and complex needs (Rush, 2010).

This section synthesizes selected results from the three GAP-MAP study components (population survey, survey of programs and services, costing) to generate preliminary answers to this question. Our intent in this chapter is to provide an evidence-informed, system-level perspective on Alberta's publicly-funded addiction and mental health services. First, we provide a series of observations on proportional allocation of services. This subsection integrates GAP-MAP data to illustrate relationships between population prevalence of addiction and mental health problems, unmet need for services, and the types of services used and resourced via provincial funding. Second, we provide a detailed example that uses GAP-MAP data to demonstrate how a needs-based planning for alcohol services could be implemented. Each of these subsections make use of the concept of tiered services, which are described briefly below.

## Tiered Service Models

International research reviewed in section 4 of this report has established that (a) addiction and mental health problems exhibit across a wide spectrum of severity, and (b) many people with these problems engage with non-specialist services, such as primary care physicians, emergency departments, and hospital-based services rather than specialty addiction and mental health service providers. This has spurred the development of so-called "tiered" models for system planning – an approach being used in the UK, other European countries, Australia, and Canada (Rush, 2010). Tiered service models attempt to align tiers of health service delivery with the levels of risk and severity of addiction and mental health problems, using the population health pyramid concept described in Chapter 4 of this report. If systems are in place to monitor problem severity across the population of interest, tiers of service can be defined in order to deliver functional groupings of services to clients/patients across the full range of problem severity, using a variety of providers in the community, in primary care, and in specialty addiction and mental health.

**Rush (2010) defines tiers of services with reference to 'functions':**

*"A function refers to a higher-order grouping of like services or interventions aimed at achieving similar outcomes. A 'function' may be a component along the continuum of care (e.g., outpatient or residential treatment); a multidisciplinary team providing specialized care (e.g., Assertive Community Treatment); a class of interventions (e.g., screening, self-management, pharmacotherapy); a type of risk management/reduction (e.g., emergency medical care, psychosocial crisis intervention, needle exchange); a population-based initiative (e.g., health promotion); or any of a variety of types of general counseling and support (e.g., continuing care, case management, support groups). A function is distinct from a program or service (e.g., primary care) within which a range of functions from more than one tier may be provided. Functions are grouped within tiers that reflect an increasing degree of specialization with respect to the nature of the function provided and the expected competency of the service provider to address mental health, substance use, and/or gambling problems.*

*This increased degree of specialization corresponds to increased problem severity such that the higher the tier, the higher severity but the fewer the number of people in need of the service," (pp. 629-630).*

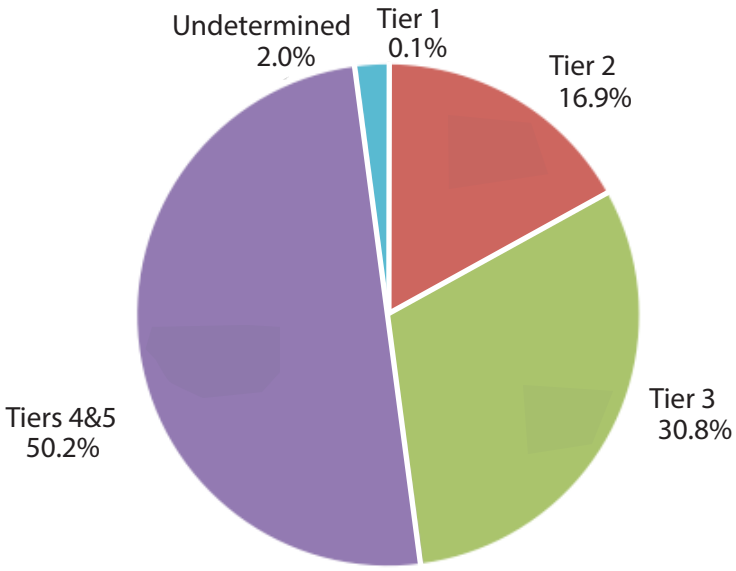
The concept of different functions arranged in a tiered system of care has recently been adopted by AHS and the GoA. Specifically, an AHS project attempting to create a framework for defining fundamental addiction and mental health services has recently produced a tiered model that locates different "fundamental service groupings" (functions) along a continuum of services intended to target different tiers of clients and patients, depending on problem severity.

Table 54 maps AHS fundamental service groupings by tier in relation to available and needed GAP-MAP data. Each tier of service would require additional focused data collection in order to be used for system-level service planning for each functional group of services.

## 7.1 Observations on Proportional Allocation of Services and Resources Across a Tiered System of Care

Integrating the concept of functional tiers of service with existing GAP-MAP data sources allows for a consideration of how Alberta's system of addiction and mental health services is structured in relation to population prevalence, unmet need for services, the extent to which existing services cover the population, and proportional allocation of resources across service tiers.

Figure 52
Proportional costs of AHS direct services, reorganized by tier of service




Note: The size of the Tier 1 share (.1%) is too small to be seen in this figure

# 7 Synthesis of Findings Across GAP-MAP Data Sources

AHS direct service costs were reclassified into tiers of service in order to provide a description of proportional costs at each level of tiered service. Using existing GAP-MAP data, Table 55 and Figure 52 indicate that about 0.1% of costs in 2010–2011 were incurred for Tier 1 (health promotion and illness prevention). Tier 2 services (screening, assessment, addiction and mental health services delivered in primary health care) accounted for about 17% of AHS direct costs. About 31% of costs were incurred for Tier 3 services, and fully 50% of costs were incurred for services provided in Tiers 4 and 5.

Table 56 integrates the three GAP-MAP data sources, including population prevalence and unmet service needs from the general adult population survey, the total number of service episodes provided by AHS direct services, and proportional costs allocated across tiers of service. All figures were recalculated as rates per 100,000 population in order to facilitate comparisons across GAP-MAP data sources.

Inspection of Table 56 allows for the following observations on proportional allocation of services and resources across a tiered system of care:

- About 21,000 of every 100,000 Alberta adults experience at least one addiction or mental health problem, but Tier 2 activities (physician visits) serve only about half of this target population (10,570 service episodes per 100,000 population. Because (a) a smaller number of unique individuals account for these service episodes, and (b) many of these 21,000 Alberta adults would meet screening criteria for common addiction and mental health problems but do not exhibit sufficient problem severity to justify more complex care, we can conclude that Tier 2 activities significantly underserve the general Alberta adult population. Because there is currently no system in place to systematically record provision of Tier 2 services at the provincial level (especially with regard to provision of screening, assessment, and brief interventions for addiction and mental health problems), further work is needed to determine whether resources allocated to this service tier improve coverage of the target population;
- About 10,000 Alberta adults per 100,000 population are estimated to have unmet service needs, and although their needs for service will vary across a continuum of severity and corresponding service tier, it is reasonable to expect that most Alberta adults reporting unmet service needs do not require specialized Tier 4 and 5 services. GAP-MAP's general population survey indicates that these individuals prefer to self-manage their symptoms, and are most in need of counselling and information. However, only about 17% of the total costs of AHS direct services provide the Tier 2 services (information, screening, and brief intervention) that this subpopulation would benefit from;
- Just under 600 Alberta adults per 100,000 population receive Tier 4 and 5 specialized addiction and mental health services via AHS. Most of these services are provided in inpatient and residential care, are designed to serve patients with mood disorders, schizophrenia and other psychotic disorders, and substance related disorders. Direct provision of these services consumes about half of the total costs incurred by AHS;
- AHS direct services generally do not engage in Tier 1 activities (health promotion and disease prevention; this tier accounts for 0.1% of total AHS direct service costs).

## 7.2 Needs-Based Planning For Alcohol Services: A Demonstration Using GAP-MAP Data[17]

### 7.2.1 Overview

Needs-based planning (NBP) is an emerging approach for determining how best to distribute and resource addiction and mental health services using population projections. Dr. Brian Rush, Scientist Emeritus with the Centre for Addiction and Mental Health and Professor, Department of Psychiatry, University of Toronto, is a national and international leader in the field of system planning and needs assessment for addiction and mental health problems. Currently Dr. Rush is leading work on the development of a planning model that will project population demand for substance use services in local health planning regions (including at the provincial level) across Canada. The NBP model attempts to project demand for services by service type (withdrawal, community-based, and residential services) and sub-categories of services within these three service types. Further, work is underway to expand the model to include resource related costs for each of the nine service categories outlined in the model (e.g., the bed capacity required to meet the needs). The NBP model's projections also incorporate the five-tiered model developed by the National Treatment Strategy Working Group (2008; see also Rush, 2010), which has been adopted by AHS.

The estimates of need projected by the NBP model can provide decision-makers with an empirical foundation to guide planning and resource allocation. This may help ensure equitable resource distribution and increase the population impact with the available resources. Further, the NBP model will provide a basis for advocating for additional resources to address identified gaps in service. Such empirically based planning should ultimately improve client- and system-level outcomes.

To demonstrate how such a model may be employed in Alberta, we have (a) used GAP-MAP population data on alcohol problems and have inserted them into the NBP model, and (b) obtained AHS service utilization data for alcohol problems and have also inserted them into the NBP model. The resulting projections are intended as an example to demonstrate the value of using an empirical approach to service and system-level planning efforts. The projections reported in this section are not intended to be used for current planning or decision making as there are several limitations with the application of these data and the model, and the NBP model is still in draft form. It is expected, however, that these limitations could be eliminated or reduced in future work so that the projections are more meaningful for actual planning.

### 7.2.2 Applying GAP-MAP Data to the Needs-Based Planning Model

**Step 1: Categorize the population by problem severity/tier**

The first step of a NBP model requires empirical estimates of the size of the population in need of services.

[17] We are grateful to Dr. Brian Rush and Chantal Fougere of the Centre for Addiction and Mental Health (Ontario) for providing expert consultation and review of this section of the GAP-MAP report, and for providing permission to use needs-based planning materials under development.

The model uses several questions from the CCHS 1.2 survey to assess problem severity in the Canadian population. The population is then stratified into five categories based on the five health tiers.[18] The categories or tiers generated by Rush et al. (2013) are mutually exclusive; a person assigned to Category/Tier 3 would not appear in any other category/tier. The tiers also align with a population pyramid concept wherein the less severe the problem, the greater the size of the population. Thus, the base of the pyramid comprises the least severe and greatest number of people and the top of the pyramid comprises the most severe and the smallest number of people.

The same process of assessing problem severity in the population and distributing the population into five tiers was employed using data obtained from GAP-MAP's Addiction and Mental Health Service Needs Opinion Survey. This GAP-MAP survey included questions to address harmful alcohol use according to the Alcohol Use Disorders Identification Test (AUDIT).[19] In addition to the AUDIT questions, there were several questions in the GAP-MAP survey that assessed mental health and service utilization. These GAP-MAP questions were used to stratify the population by problem severity into the five tiers. Efforts were made to align this categorization as closely as possible with the NBP model. Research literature was used to further inform the categorization of the GAP-MAP data. The description of the five tiers is outlined in Table 57. [20]

This mapping of GAP-MAP information to the NBP model is a key step and it is recognized that the definitions for the GAP-MAP are not a simple match to the definitions proposed by the NBP. This is, in part, due to the different questions used in the GAP-MAP survey compared to the survey questions used for the NBP model,[21] though it is worth mentioning that several of the questions were the same. Despite these discrepancies, the definitions provided for GAP-MAP still serve as a reasonable basis for making distinctions between tiers for the purpose of demonstrating how GAP-MAP data can be used with the NBP approach to inform service planning.

The model assumes the intensity of required treatment supports increases as the category/tier increases. The NBP model provides detailed descriptions of what treatment functions are associated with each tier, which helps clarify the definitions of tiers in the context of substance use. A summary of the functions carried out in various service settings are outlined in the following table that was created by Rush et al (2013). Further, an assumption of the NBP model is that the population needs associated with the tiers are "nested." For example, a person categorized in Tier 3 will also require functions associated with Tiers 2 and 1. Rush et al. (2013) and Rush (2010) provide more detail on the conceptualization of the tiered model of health that is not presented in this report.

[18] Rush et al. (2013) conceptualize the tiered framework as being grouped by problem severity of cases, rather than treatment services.

[19] The projection results in our demonstration are limited to alcohol use and misuse and do not include other substances; whereas the NBP model is intended to provide projections for all substance use and therefore a broader population. Despite this limitation, within the area of substance misuse, alcohol harms are the most common focus for addiction treatment services and should provide sufficient projected numbers to demonstrate how readers can use GAP-MAP data to forecast need for different services using the NBP model.

[20] It is important to note that the NBP model does not provide projections for the first tier of the five-tier model.

[21] The NBP model used questions from the Canadian Community Health Survey 1.2

**Step 2: Estimate need in general population**

Once the categorization of population into tiers is complete, the next step is to analyze the data to provide estimates of the size of the population in each of the previously defined tiers.[23] The Alberta adult population (3,059,008) in need of alcohol treatment services by tier is reflected in Table 59. The table indicates that 6.7% of respondents, or an estimated 204,954 Alberta adults are in the Tier 2 category and require treatment services/functions associated with that tier. The table also shows that 0.7% of respondents, or an estimated 21,413 Alberta adults, are in the Tier 4 category. As noted earlier, these results align with the population pyramid concept wherein decreases in population size are associated with increases in problem severity or tier.[24]

**Step 3: Estimate treatment seeking among the population with potential substance problem**

The developers of the NBP model reviewed research literature to determine the proportion of the population who will seek help on their own (with or without referral) or are mandated to treatment. The developers of the NBP model refers to this as "naturalistic help-seeking." This does not include those who are identified as needing treatment through interventions such as screening, brief intervention and referrals or liaison and referral programs. It is important to point out the model does acknowledge there will be a number of people entering treatment who are referred from such programs; however, the NBP approach leaves it to the jurisdiction using the model to determine those rates.

The research literature used by the NBP model projects that naturalistic help-seeking varies by tier with help seeking increasing as problem severity/tier increases. These rates are provided in the fourth column (% seeking help) in Table 60. Results from Table 60 estimate that over 4,000 Albertans in Tier 2 will seek treatment, 2,019 Albertans in Tier 3 will seek treatment, and so on. The NBP approach assumes that the proportion of people seeking help within each Tier increases as problem severity increases.

**Step 4: Project the types of services that will be needed by those seeking treatment.**

The NBP model categorizes substance use services into three categories:

1. Withdrawal management services (e.g., detoxification)
2. Community services and supports (e.g., outpatient care)
3. Residential services and supports (e.g., inpatient care)

Again, since this exercise is meant as an example to demonstrate how GAP-MAP data may be used within a NBP model to inform service planning, it is beyond the scope of this exercise to provide category definitions, i.e., we have assumed that these terms will be recognizable to stakeholders who are familiar with addiction and mental health services.[25] Extensive consultation through a Delphi process was undertaken by Rush et al. (2013) with experts across Canada to project the proportions of clients, for each severity category, that would access each of the services defined in the model, in an ideal treatment system.

[23] Again, the NBP model only aims to project service demand for Tiers 2 through 5, therefore, estimates for Tier 1 are not presented in the following results

[24] Refer to Table 1 for definitions of each in relation to GAP-MAP data

The result of these consultations represent expert consensus estimates of what proportion of people seeking help will need withdrawal management, community, or residential services, organized by severity category. These proportions are represented in the second, fourth and sixth columns in Table 61. Moreover, people seeking help may need to access services in more than one of the three major service types; therefore, percent totals between service categories may be greater than 100.

Table 61 contains a wealth of information. First, Table 61 provides the total projected number of Alberta adults seeking help for alcohol problems by service type. For instance, across all Tiers 3,376 people are estimated to require withdrawal management services. Within this service type, the majority of people will fall in the Tier 4 and Tier 5 categories (and will require withdrawal management services associated with that tier). Second, the table shows that a person in the higher tiers (e.g., Tier 4 or 5) requires a broad range of service. For instance, there are 1,185 people in the Tier 5 category projected to be seeking alcohol treatment; 90% of them will require withdrawal services, 100% will require community services and 70% will require residential services. Thus, those 1,185 people account for 2,585 services needed (bearing in mind that this estimate this does not account for multiple episodes within a service type). The numbers presented in Table 61 are intended to show how such a model can be employed and should not be used for planning purposes at this point (several limitations would need to be addressed first).

**Step 5: Identifying gaps in service by comparing projections to service utilization data**

The NBP model provides the crucial steps in projecting the number of people who will seek treatment. The next step of applying the model relies on each service provider, or the holder of broader administrator data, to provide service utilization data that can then be used to identify gaps in service. If the service provider/ data administrator can provide utilization data for service types that match closely with the service definitions of the NBP model, gaps can be identified by taking the total projected need and subtracting service utilization numbers. The utilization numbers should be for individuals and not for total number of visits within the year, as the model does not project episodes of care but rather the number of people seeking care by service type. It is important to note that the model is used for publicly-funded programs; the gap analysis would not include private, for-profit agencies.

If service utilization numbers are available, the following table (Table 62) may be created. Note the service utilization numbers provided in Table 62 are hypothetical. The results, based on hypothetical utilization numbers, suggest that the current level of withdrawal management services is meeting the anticipated need of those seeking help.

The hypothetical results suggest that the current level of withdrawal management services is meeting the anticipated need of those seeking help. The hypothetical results suggest the current level of community services and supports is over-delivering services (by 1,104). The hypothetical results suggest the current level of residential services and supports is under-delivering services (by 772).

[25] It is worth noting that the NBP report (Rush et al., 2013) does provide extensive detail on the types of services and treatment associated with each of the three categories above. In fact, the NBP provides three sub-categories within each of these service types in accordance with intensity of treatment.

**Step 6: Estimating costs**

The work of the NBP model is still underway. Part of this work includes estimating resource costs (e.g., beds, staffing) associated with the different service types. It may be that costs can also be estimated if this information can be attained by the service provider in a manner that aligns with the model.

Table 63 is a completely hypothetical exercise, but still an informative one, which demonstrates the final step of using empirical data (such as provided by GAP-MAP) in a needs-based planning model to estimate need. Table 63 provides hypothetical costs of providing each service type (keep in mind that this model does not account for referrals through Screening, Brief Intervention, Referral to Treatment ("SBIRT") or liaisons, etc. that would need to be factored in as well for more accurate estimates nor does it account for multiple visits). Based on a series of hypothetical estimates, the resources allocated to withdrawal management services appear to be adequate to meet the projected demand from those seeking treatment – at least with respect to the need for those services estimated by GAP-MAP's population survey of adults. Resources allocated to community services and supports are over-resourced. However, the resources allocated to residential services and supports are under-resourced. Based on these results, a decision-maker would be able to shift resources accordingly from community services and supports to residential services and supports; however, that would still leave approximately $120,000 required to meet projected demand from naturalistic help seeking. Such information could then be used to advocate for funding to ensure this anticipated need is met.

## Limitations

There are several limitations to this example of how GAP-MAP data can be used in a needs-based planning model to guide service planning:

1. We did not project multiple service utilization over the course of one year or across tiers
2. We did not provide estimates for referrals to treatment from screening and brief intervention programs or addiction liaison programs in health services. We acknowledge that this is part of estimating treatment demand and suggests that these estimates are best determined within a jurisdiction, as there is no Canada-wide standard screening, assessment, and referral to treatment process currently in place.
3. It does not account for internet/mobile support in the projected estimates or mutual aid resources (Alcoholics Anonymous, Narcotics Anonymous) and natural supports (family).
4. Several populations (First Nations living on reserve, populations in institutions, and homeless populations) were not included in the GAP-MAP population survey (or the 2002 CCHS 1.2 survey), and were therefore not included in the estimates produced by the model. Exclusion of these populations from the NBP model and GAP-MAP may have significant implications for estimating required service capacity. For example, the table of hypothetical costs generated by the planning model estimates that 3,376 unique cases per year would require withdrawal management services. However, since this estimate is based on telephone survey that doesn't provide coverage of marginalized alcohol users, planning estimates for this service would need to be adjusted significantly higher, taking into account existing surveillance information on rates of withdrawal management for homeless populations.

The first limitation can be overcome by determining the average number of services used by a unique client by service type. It is assumed this information is available to the service provider. To address the second limitation, there would need to be a concerted effort to develop screening and brief intervention resources and the model may be helpful in estimating the impact of these resources on the treatment system. The second limitation would also require health service providers (e.g., physicians and PCNs) to determine estimates of referral from sources such as SBIRT or liaison services. This information may be available to the service provider. The third limitation relates to interventions that are difficult to monitor at this point, and would require further exploration to determine if they could be incorporated into such a model. Internet/ mobile services need to be developed and evaluated before they can be incorporated into the model.

The final two limitations are currently being addressed by the GAP-MAP study group and the NBP group being led by Dr. Rush. Collectively, we are working on developing better estimates of need and supply of opiate substitution services currently considered within community treatment. The team also hopes to incorporate estimates from homeless and First Nations populations in the next iteration of the model.

## Conclusion

It is important to emphasize the NBP model is still under development and the information presented in this report pertains only to the key pieces of the NBP work that were necessary to demonstrate the value of such using a NBP approach with GAP-MAP data to guide decision-making about alcohol services. The NBP model and report provides much more context and detail on this approach. Further, there are several limitations to the model as well as limitations associated with applying GAP-MAP data to the model that were noted above but not explored in depth. However, it is anticipated that many of the limitations could be resolved so that such a model could provide more meaningful projections that could be incorporated into planning.

Caveats aside, this exercise demonstrates how to employ the NBP model and the empirical estimates that the model generates. The discussion and analysis of the results from the model are brief, but it is assumed that decision-makers would be able to explore these results in more depth to enhance understanding of service demand and provide insight into service planning. Further, the results may be used to advocate for funding. It is also anticipated that regular use of the model could also result in refinements and enhancements of the model to optimize its use in the Alberta context. It would be important to evaluate the application of the model in Alberta and share the results with other jurisdictions also exploring how to incorporate it into their planning processes (e.g., BC, Quebec, and Nova Scotia).

## 7.3 Corresponding Data Tables for the Synthesis of Findings

### Table 54

Draft version of AHS' fundamental service groupings in relation to available and needed GAP-MAP data

| | Tier 1 | Tier 2 |
|---|---|---|
| AHS 'basket of services' initiative description | • Health promotion<br>• Illness prevention | • Screening/assessment<br>• Early identification, brief intervention and/or referral<br>• Primary health care |
| Available GAP-MAP data | • Partial data on provincial costs allocated to prevention and promotion initiatives | • Provincial and regional physician encounter rates for relevant ICD-diagnosed conditions<br>• Provincial and regional physician billing costs for relevant diagnosed conditions |
| Information currently not available or collected | • Provincial and regional estimates of reach (numbers of individuals served) and effectiveness (tracking of population outcomes) | • Provincial and regional rates of reach and effectiveness of screening, and delivery of brief interventions |
| | **Tier 3** | **Tier 4 & 5** |
| AHS 'basket of services' initiative description | • Comprehensive assessment and intake services<br>• Psychiatric consultation<br>• Community services and walk-in clinics<br>• Crisis response services<br>• Outpatient, day, and home services | • Facility-based psychiatric and emergency services<br>• Assertive community treatment<br>• Specialized clinics and programs<br>• Long term, residential, or specialized inpatient care |
| Available GAP-MAP data | • Provincial and regional patient encounter rates for relevant ICD-diagnosed conditions<br>• Number of provincial and regional programs and services and their characteristics<br>• Provincial and regional physician billing costs for relevant diagnosed conditions | • Provincial and regional patient encounter rates for relevant ICD-diagnosed conditions<br>• Number of provincial and regional programs and services and their characteristics<br>• Provincial and regional physician billing costs for relevant diagnosed conditions |
| Information currently not available or collected | Comprehensive referral (continuity of care) and outcome data | Comprehensive referral (continuity of care) and outcome data |

## Table 55

AHS direct services (FY 2010–2011) reclassified into service tiers

| AHS Direct Service | Tier | Costs | Costs by Tier | Dedicated Public Sector Beds |
|---|---|---|---|---|
| Addiction prevention | 1 | 100,000 | 835,838 (0.1%) | n/a |
| Physician visits | 2 | 111,510,548 | 111,510,548 (16.9%) | n/a |
| Hospital outpatient | 3 | 56,800,118 | 203,687,599 (30.8%) | n/a |
| Community mental health clinics | 3 | 115,365,635 | | 514 |
| Outpatient addiction services | 3 | 31,521,846 | | n/a |
| Emergency department | 4 and 5 | 22,436,459 | 331,594,451 (50.2%) | n/a |
| Addiction residential and detox services | 4 and 5 | 31,083,764 | | 830 |
| Hospital inpatient | 4 and 5 | 228,054,651 | | n/a |
| Hospital psychiatric | 4 and 5 | 48,177,835 | | 1515 |
| Opioid dependence program | 4 and 5 | 1,841,742 | | n/a |
| Other costs | Undetermined | 13,329,962 | 13,329,962 (2.0%) | n/a |

## Table 56

Population coverage and proportional expenditures, by tier

| Alberta adults with any addiction and/or mental health problem as estimated by GAP-MAP's population survey, as of 2012 | | | Service Tier (FY 2010–2011) | | | |
|---|---|---|---|---|---|---|
| | | | Tier 1* | Tier 2 | Tier 3 | Tier 4&5 |
| | | | GAP-MAP Estimated % of Total AHS Direct Service Costs (FY 2010–2011) | | | |
| | | | 0.1% | 16.9% | 30.8% | 50.2% |
| Prevalence per 100,000 population | Prevalence per 100,000 population | Prevalence per 100,000 population | Total Number of AHS Direct Services Provided Per 100,000 Population in FY 2010–2011, as Estimated by GAP-MAP | | | |
| | | | Not applicable | 10,570** | 10,570** | 580 |
| | | | Total Number of Dedicated Public Sector Addiction and Mental Health Treatment Beds Per 100,000 Population | | | |
| 20,900 | 3,302 | 10,178 | Not applicable | Not applicable | Not applicable | 93.5 |

Operationalization of tiers:

Tier 1 = health promotion and illness prevention

Tier 2 = physician visits

Tier 3 = emergency department, community addiction and mental health clinics, outpatient hospital services

Tiers 4 and 5 = inpatient hospitalization, psychiatric hospitalization, residential addiction treatment, opioid dependence program

*No provincial tracking of number of service encounters and/or unique clients accessing this tier of service is currently available.

**Physician visits only. No provincial tracking of number of service encounters involving screening and brief intervention and/or unique clients accessing this tier of service is currently available.

## Table 57

Categorizing GAP-MAP population survey data by service tier using the NBP model

| Tier 1 | Service Tier (FY 2010–2012 NBP Case Definitions[22] Using CCHS 1.2 and Other Indicators) | GAP-MAP Case Definitions (Using AUDIT Cut-Offs and Other Indicators) |
|---|---|---|
| Tier 1: Prevention and support | **Definition:** "Respondents were abstainers and light to moderate drinkers or drug users. These are people who need no treatment interventions per se, but rather, primary prevention and harm reduction through health promotion, and exposure to reduced stigma and discrimination programs." | **Definition:** A score of less than 8 on the AUDIT, which suggests that alcohol use is not problematic. Intervention focus: education about alcohol use to remind them to remain alert about alcohol use, including health promotion, and exposure to reduced stigma and discrimination programs. |
| Tier 2: Early intervention | **Definition:** "Respondents were heavy/binge drinkers or heavy drug users who reported few problems related to their substance use and did not meet the DSM criteria for alcohol or drug dependence." | **Definition:** A score of 8-15 on the AUDIT, which suggests the potential for hazardous alcohol use. |
| Tier 3: Risk reduction | **Definition:** "Respondents experienced four or more substance use related problems OR met the criteria for substance abuse or dependence." | **Definition:** A score of 16-19 on the AUDIT, which suggests possible harmful use or dependence. |
| Tier 4: Treatment of abuse and dependence | **Definition:** "Respondents experienced several substance use related problems or met the criteria for substance abuse or dependence." As well, respondents felt they needed help or received help for substance use or mental health or had significant interference in their life as a result of substance use. | **Definition:** A score of 20 or greater on the AUDIT, which indicates possible alcohol dependence. Respondents in this category also reported needing or receiving help for substance use or mental health, or believed they have a mental health or addiction problem that has not been diagnosed by a health professional. |
| Tier 5: Treatment of complex co-occurring disorders | **Definition:** "Respondents in this top category were judged to be in need of specialized and intensive medical/psychiatric service functions. People placed in this category met all the criteria of Category 4." As well, respondents in this category met DSM criteria for two or more mental health diagnoses or had one or more mental health disorders with significant interference or had a physical or mental health condition that reduced ability in one of the areas of home, work, school or leisure. | **Definition:** A score of 20 or greater on the AUDIT, which indicates possible alcohol dependence. Respondents in this category also reported that they received a mental health diagnosis from a health professional in the past year. |

[22] Quoted material from Rush et al. (in progress). Development of a needs-based planning model for substance use services and supports in Canada.

## Table 58

Service functions by tier, as determined by the NBP model (used with permission from Dr. Brian Rush)

| Function | Prevention and health promotion; addressing stigma and discrimination | Harm reduction | Early identification and intervention | Provision of information, engagement and linkage supports, outreach |
|---|---|---|---|---|
| Tier 5: Treatment of complex co-occurring disorders | X | X | X | X |
| Tier 4: Treatment of abuse or dependence | X | X | X | X |
| Tier 3: Risk reduction | X | X | X | X |
| Tier 2: Early intervention | X | X | X | X |
| Tier 1: Prevention and support | X | X | | |

| Function | Problem identification, assessment of strengths/needs individualized treatment support planning | Delivery of substance-specific and biopsychosocial interventions and supports | Delivery of substance-specific and highly integrated psychosocial, medical, and psychiatric interventions/ supports | Continuing care and recovery monitoring |
|---|---|---|---|---|
| Tier 5: Treatment of complex co-occurring disorders | X | X | X | X |
| Tier 4: Treatment of abuse or dependence | X | X | X | X |
| Tier 3: Risk reduction | X | X | | X |
| Tier 2: Early intervention | | | | X |
| Tier 1: Prevention and support | | | | |

## Table 59

Estimated Alberta adult population in need of alcohol services*

| Tier | GAP-MAP Estimated % in Need | GAP-MAP Estimated # In Need |
|---|---|---|
| Tier 2: Early intevention | 6.7 | 204,954 |
| Tier 3: Risk reduction | 1.1 | 33,649 |
| Tier 4: Treatment of abuse/ dependence | 0.7 | 21,413 |
| Tier 5: Treatment of complex co-occurring disorders | 0.1 | 3,059 |

*Based on a provincial population of 3,059,008 adults.

## Table 60

Estimated Alberta adult population seeking help for alcohol problems*

| Tier | Estimated % in Need | Estimated # in Need | Estimated % Seeking Help* | Estimated # Seeking Help* |
|---|---|---|---|---|
| Tier 2: Early intevention | 6.7 | 204,954 | 2 | 4,099 |
| Tier 3: Risk reduction | 1.1 | 33,649 | 6 | 2,019 |
| Tier 4: Treatment of abuse/ dependence | 0.7 | 21,413 | 13 | 2,784 |
| Tier 5: Treatment of complex co-occurring disorders | 0.1 | 3059 | 32.5 | 994 |

Total population: 3,059,008 adults.

* Naturalistic help-seekers directed to treatment support services. This does not account for generic services (e.g., screening, brief assessment, and referral to treatment).

## Table 61

Projected number of Alberta adults seeking alcohol treatment services by service type in a given year

| Tier (Population Seeking Service) | % Receiving Withdrawal Services | # Projected to Receive Withdrawal Services | % Receiving Community Services and Supports | # Projected to Receive Community Services and Supports | % Receiving Residential Services and Supports | # Projected to Receive Residential Services and Supports |
|---|---|---|---|---|---|---|
| Tier 2 (4,885) | 5% | 205 | 100% | 4,099 | 5% | 205 |
| Tier 3 (2,406) | 30% | 606 | 100% | 2,019 | 20% | 404 |
| Tier 4 (3,317) | 60% | 1,670 | 100% | 2,784 | 40% | 1,113 |
| Tier 5 (1,185) | 90% | 895 | 100% | 994 | 70% | 696 |
| Total (11,793) | | 3,376 | | 9,896 | | 1,722 |

## Table 62

Gap analysis

| | Required Capacity | Total # of Unique Cases per year* | Gap |
|---|---|---|---|
| Withdrawal management services | 3,376 | 3,376 | 0 |
| Community services and supports | 9,896 | 11,000 | -1,104 |
| Residential services and supports | 1,722 | 1,000 | 772 |

*Based on a provincial population of 3,059,008 adults.

## Table 63

Hypothetical cost in resources, projected differentials

| | Required Capacity | Total # of Unique Cases Per Year* | Gap | Associated Cost in Resources Per Case | Differential Cost in Resources */- |
|---|---|---|---|---|---|
| Withdrawal management services | 3,376 | 3,376 | 0 | $200 | $0 |
| Community services and supports | 9,896 | 11,000 | -1,104 | $100 | -$110,400 |
| Residential services and supports | 1,722 | 1,000 | 772 | $300 | +$231,600 |
| Total | | | | | **-$121,200** |

*Based on a provincial population of 3,059,008 adults.

# 8 Conclusions and Limitations: Toward a System-Wide Planning Model

# 8 Conclusions and Limitations: Toward a System-Wide Planning Model

## 8.1 Conclusions

To our knowledge, GAP-MAP is the first project in Alberta's history that has attempted to produce a detailed, comprehensive, and systematic description of provincially funded addiction and mental health services in relation to population need. As well, GAP-MAP provided for the first time, a reasonably comprehensive and complete listing of publicly funded addiction and mental health programs, services, and initiatives in the database accompanying this report.

Results from the project support nine general conclusions about addiction and mental health services in Alberta. Many of these conclusions are consistent with longstanding observations made by interested stakeholders about Alberta's system of care for these health conditions. However, GAP-MAP went beyond anecdotal observations by providing systematic empirical data on the scope of current issues, and synthesized data sources to provide examples of how needs-based planning for addiction and mental health could be undertaken in the future. Nine conclusions are supported by the project:

**1. Existing services do not provide sufficient care to meet the needs of Alberta adults**

- Of surveyed adults who met criteria for a past-year addiction or mental health problem, almost half (48.7%) reported unmet needs for one or more services – either they needed but didn't receive any services, or didn't receive enough service. This is equivalent to 311,355 people (about 1 in 10 Alberta adults), or more adults than the populations of Red Deer, Lethbridge, Wood Buffalo, and Medicine Hat combined.
- Unmet needs for counselling are most commonly reported. Although half of surveyed AHS direct and contracted services provide counselling, many qualified counsellors operate privately, outside the system of publicly-funded care. The second most common reason underlying perceived unmet need for care is inability to afford services.
- Most surveyed programs and services (49% and 67% of AHS direct and contracted services, respectively) indicated that more people sought services than the program/service had resources to accommodate.
- Self-help support groups may be an informal source of support in addition to, or instead of formal services; however, self-help participation was not assessed within GAP-MAP.

**2. Services are mainly operated on a reactive, acute-care model that requires Albertans to seek care at physician offices and specialty clinics**

- After counselling, the next most commonly reported unmet service need is for information about addiction and mental health problems, treatments, or available services. About one-quarter (24.6%) of surveyed Alberta adults with a past-year addiction or mental health problem reported unmet needs for information, which is equivalent to 157,276 people, or about 1 in 20 Alberta adults.

- Although 86% of AHS direct services surveyed indicate that they provide information to clients, accessibility of this service is limited to regular office hours: only 25% and 15% of surveyed programs reported that they are open to Albertans after 5 pm on weekdays and on weekends, respectively.
- Technologies are underutilized for reaching target populations. Less than one-third of surveyed AHS direct programs report that they provide screening and assessment, treatment, peer support, and/or post-treatment follow-up using the telephone, and only 2% of these services reported using the internet for these activities.
- Over half (51.9%) of AHS direct and contracted programs surveyed reported that they use one or more criteria to refuse client entry, but less than 30% of surveyed programs indicated that they connect clients with another appropriate service on refusal.

**3. System resources are heavily invested in providing inpatient, residential, and crisis services**

- More than 80% of AHS direct service costs in 2010–2011 were accounted for by Tier 3–5 services (i.e. inpatient, residential, and crisis services), mainly delivered to patients with mood disorders, schizophrenia/other psychotic disorders, and substance-related disorders.
- These services appear to be functioning reasonably well: perceived unmet needs for hospital care and medication were estimated at 12% and 14% among adults with a past-year diagnosed mental health problem, respectively – these were low rates of unmet need relative to other services for this subgroup (e.g., unmet need for counselling).
- Physician visits accounted for about 17% of AHS direct costs, but screening, assessment, and brief intervention in primary care (Tier 2 activities) are underutilized: no more than 15% of Alberta adults who met screening criteria for past-year depression or alcohol problems reported that a health professional told them that they had an addiction or mental health problem in the same time period.
- Health promotion and disease prevention (Tier 1 services) accounted for 0.1% of total AHS direct service costs. Although some prevention and promotion initiatives were supported by other funding, there was no evidence that Tier 1 services were differentially supported by GoA funding allocations.

**4. There is wide variation in the costs of providing acute inpatient care for different conditions**

- Inpatient care accounts for the largest proportion of AHS spending, but average patient costs for providing hospitalization in acute care and psychiatric facilities varied widely by condition, from about $7,000 per treated patient for providing inpatient care for adjustment disorders to about $38,000 per treated patient for providing inpatient care for eating disorders. Further work is needed to account for condition-specific variation in costs of providing specialty addiction and mental health care.

**5. System resources are heavily invested in providing care for adults**

- In FY 2010–2011, about 10% of AHS direct service costs were consumed by children and youth under the age of 18, and services provided for children and youth accounted for less than 10% of patient days and physician visits.
- About half of AHS direct and contracted programs surveyed indicated that they exclude children and adolescents and/or refer them elsewhere, respectively.
- Less than 10% of AHS direct and contracted programs surveyed reported that they arrange for child care for clients if needed.
- The scope of the project precluded a systematic description of child and youth unmet needs for services. This information is required in order to engage in system-level planning for child and youth services.

**6. Programs and services require assistance for continuous improvement**

- Although over 90% of surveyed programs indicated that they record client demographic information in a database, only 23.5% of surveyed AHS direct programs reported that they systematically record post-program outcome information.
- Over 78% of surveyed AHS direct and contracted service clusters agreed or strongly agreed that additional support or resources are needed to track client outcomes and to obtain information that can document program effectiveness.

**7. System resources are heavily invested in providing care for mental health problems and may be under-invested in addiction services**

- Of the estimated $753.8 million spent by the province in 2010–2011, mental health services consumed over 80% of the total costs; addiction services consumed about 13% of total provincial costs. Specialist addiction services provided in residential and detoxification units, outpatient, and opioid dependence programs account for about 7% of total patient encounters within AHS direct services.
- These proportional costs and service utilization rates are inconsistent with population-based service need. The past-year prevalence of diagnosed mental health problems and depression were 3% and 11.9%, respectively, representing about 91,000 and 360,000 adults. Past-year prevalence of diagnosed addictions and alcohol problems were almost as high at 1.9% and 8.5%, representing about 58,000 and 260,000 adults, respectively. Further work is needed to determine whether existing costing profiles are optimally distributed to serve the needs of Albertans with addictions, or whether additional resources are required for this purpose.

**8. Supportive services for people with addiction and mental health problems are not well-integrated into addiction and mental health care**

- Depending on problem severity, 13%–28% of surveyed Alberta adults with past-year addiction and mental health problems (up to ~127,000 people) report unmet needs for social interventions (help to sort out practical issues such as housing or money problems), and skills training (help to improve ability to work, to care for oneself, to use one's time or to meet people).
- Less than half of surveyed AHS direct programs provide social interventions and skills training.
- Many supportive services are contracted to third-party providers outside of the AHS system, or are provided directly or via third-party contracts administered by a range of GoA Ministries (e.g., Human Services, Education).
- Many providers offer these services incidentally (i.e., they provide supports to addiction and mental health clients but also to many other client populations), and therefore do not record specific information about clients with addiction and mental health issues. Thus, it is difficult to accurately estimate the magnitude and quality of supportive services provided for Albertans living with addiction and mental health problems.

**9. Neither AHS nor the GoA uses standardized nomenclature to define specialty addiction and mental health programs and services**

- Each AHS Zone and GoA ministry defines activities delivered to people experiencing addiction and mental health problems using different terms and varying definitions. What "counts" as a program, service, initiative, and/or appropriate target population varies across regions and ministries, making it difficult to combine information across the province in a meaningful way.
- This is especially problematic for supportive services and target populations. Of the 415 third-party AHS contracts identified by GAP-MAP, over 60% were eliminated from costing estimates because they could not be specifically identified as providing services for GAP-MAP's target population. That is, they provided services intended for people with many disabilities and health challenges, in addition to those experiencing addiction or mental health problems.
- Consultations revealed concerns about the limited scope of the health conditions included in the project, and many stakeholders expressed misgivings about ambiguities in the system regarding where specialty addiction and mental health services begin and end in relation to generic supportive services for the broad range of health and social problems.

## 8.2 Limitations and Future Directions

Although GAP-MAP represents an attempt to comprehensively describe provincially funded addiction and mental health services in relation to population need, there are several limitations to this work that are important to identify. Each limitations suggests future directions for expanding on and improving the work started in the project.

**1. Restricted coverage of youth, high-risk populations, and people involved with the justice system**

Youth services were only systematically examined in two GAP-MAP components, specifically, the costing analyses and the survey of programs and services. This precluded the project from generating population-based estimates of the prevalence of addiction and mental health problems among children and youth, as well as estimates of unmet service needs in this population. Future collection of such information is vital to empirically confirm common observations that system resources are not optimally allocated to services for this target population and to inform needs-based planning efforts across the full age spectrum.

Beyond the issue of documenting youth needs for relevant services, GAP-MAP's population survey did not provide adequate coverage of socially marginalized Albertans – many of whom would be missed in a population survey using random digit dialling methods. Consequently, GAP-MAP prevalence and unmet need for services estimates represent the lower bounds of these variables. Future work could provide targeted coverage of high risk populations in order to more accurately estimate their needs for addiction and mental health services and to determine whether current resources are optimally allocated to reduce costs and improve client health. This limitation is especially pertinent for considering harm reduction services. Although the current Provincial Strategy and Action Plan does mention harm reduction, it does not concretely lay out how harm reduction services fit into the overall addiction and mental health service system as a focal area of programming.

Finally, despite our best efforts, GAP-MAP was not able to obtain precise information on clients receiving services for addiction and mental health problems from the criminal justice system.

**2. Other missing voices**

No systematic consultation or data collection was undertaken with patients currently served by the addiction and mental health system, nor with advocacy groups and NGO stakeholders. Their perspectives on system-level planning are important to consider. Bringing a consumer perspective to bear on service planning at the system level is required in future work, and is entirely consistent with GAP-MAP's efforts to document perceived needs for services in the Alberta general population.

GAP-MAP was also limited because it did not specifically focus on service needs and system planning for Aboriginal peoples. The limited timeline and scope of the project precluded examining the many complex issues associated with addiction and mental health services for this population, including: the role of federal funding programs and organization of services in relation to provincial capacity to provide care, special needs for culturally sensitive services that focus on trauma and social dislocation, and the role of traditional culture as a source of resilience. Focused work is required in the future to carefully examine all of these issues.

**3. Restricted coverage of Albertans experiencing common addiction and mental health problems but who are not currently engaged by services**

The scope of the addiction and mental health problems covered in GAP-MAP was deliberately intended to provide coverage across a broad range of problem severity. A wide scope was necessary, given that the parameters of the project were set to include the full spectrum of relevant programs, services and initiatives in Alberta, ranging from prevention through to engagement with specialty addiction and mental health care and aftercare services. However, the GAP-MAP population survey only systematically examined alcohol problems and depression using clinical screening instruments that stratified the Alberta adult population in relation to problem severity. Other addictive behaviours (e.g., tobacco use and gambling) were not considered from this perspective in the project, nor were sub-clinical mental health problems (e.g., anxiety symptoms, preclinical psychotic symptoms). Future work could expand on GAP-MAP to obtain population-based estimates of a broader range of addiction and mental health problems stratified by problem severity. This would facilitate needs-based service planning across a wide range of severity for an expanded set of relevant health conditions.

**4. Costing estimates were restricted to Alberta public funding**

Only a partial picture of the costing profile of Alberta-based addiction and mental health services was provided by GAP-MAP. Omitted were non-government funded services available in the province, as well as programs, services, and initiatives funded through municipal, federal, or other mechanisms. A particularly important omission was that the project did not obtain data on provision of private, for-profit counselling services. Future work should systematically attempt to document the extent to which public and private services contribute to serving Albertans with addiction and mental health problems, and to explore the kinds of barriers to access that would need to be addressed in order to promote optimal usage of available services.

**5. Data sources were not integrated over time**

GAP-MAP data sources were not lined up to describe the state of Alberta's addiction and mental health services in relation to population need during the same temporal period. Specifically, primary costing information was obtained for FY 2010–2011, which was not aligned over time with either the population survey data (collected in 2012) or the survey of programs and services (collected in 2013). Changes to the service system and resource allocations occurring later than 2010–2011 would not be reflected in current GAP-MAP costing estimates. As well, new events (e.g., natural disasters in the province) will have an impact on population needs for addiction and mental health services, and these will not be reflected in current GAP-MAP population estimates of prevalence and unmet service needs. Future work should attempt to coordinate data sources in order to provide estimates of service needs, system capacity, and costs that align more closely in time.

**6. Restricted coverage of programs and services in the South and (to a lesser extent) Calgary**

GAP-MAP's survey of programs and services obtained low coverage rates for the South and (to a lesser extent) Calgary. This is understandable in light of the flooding that occurred in these areas of the province during data collection. However, we caution that few conclusive statements can be drawn from GAP-MAP data provided in these regions. Future work should attempt to provide full coverage in order to provide a more complete description of eligible programs and services in these areas.

## 8.3 Toward a System-Wide Planning Model

Historically, addiction and mental health service planning has been determined by available funding, as reflected in the expansion and/or contraction of services and special initiatives depending on priorities and budgets. Like most jurisdictions around the world (Pirkis et al., 2007), Alberta's approach to determining strategic priorities and allocating resources for addiction and mental health services has traditionally emphasized (1) consultations, discussions, and priority-setting exercises that focus on balancing available budgets with the stated priorities of various interest groups, service providers, and government stakeholders, combined with (2) comparing services in Alberta with other jurisdictions thought to be providing good services (usually by conducting one or more environmental scans),

The approach taken in GAP-MAP marks a sharp departure from these historical practices. Our intention in conducting this project was to demonstrate the value of a planning approach that emphasizes evidence-informed discussions about priorities for organizing and delivering addiction and mental health services. The term "evidence-informed" refers to the need for system managers and policy makers to inform their strategic planning efforts by using reliable, current data that describe:

- prevalence and severity of addictions and mental disorders in the community,
- levels of treatment need in various populations in the community and in service systems,
- what kinds of treatments and other services are routinely provided to various client populations at the provincial level and at the operational level of service zones, and
- financial resources received to deliver services in the community and the clinic.

In gathering this information, the intention is to encourage readers to consider the value of working toward an Alberta-based system-wide planning model for addiction and mental health services. Such a model (a) refers to what the entire system of services 'should' be, rather than what it currently is, (b) provides concrete descriptions of care packages (baskets of screening, assessment, intervention, follow up activities) that can be shared across regions, and uses ongoing, reliable data on (c) the number of people who need prevention and treatment services, as well as (d) current demand for those services and (e) resources needed. Despite the many limitations associated with GAP-MAP, we believe that the results presented here will be strategically valuable for laying the groundwork required to fully develop an Alberta-based system-wide planning model for addiction and mental health services.

# A Appendix A: Supportive Services

# Appendix A: Supportive Services

## Overview

Throughout the execution of GAP-MAP, the project team repeatedly heard from stakeholders about their concerns regarding the role of supportive services in the addiction and mental health service system. This Appendix compiles key information and data that could be used in subsequent work to focus specifically on clarifying these services and how they relate to specialist care for addiction and mental health problems in Alberta.

## Main Conclusions

- Depending on the nature of the problem, about 13%–28% of Alberta adults with past-year addiction and mental health problems (up to ~127,000 people) report unmet needs for social interventions (i.e., help to sort out practical issues such as housing or money problems), and skills training (i.e., help to improve ability to work, to care for yourself, to use your time or to meet people).
- Many supportive services are contracted to third-party providers outside of the AHS system. GAP-MAP estimated that $42,833,886 was spent on these contracted services in FY 2010–2011.
- These service providers are part of a broad patchwork of generic supportive services in the province. Some of this patchwork is targeted explicitly to serve clients with addiction and mental health problems; other elements provide support to other conditions.
- Many stakeholders consulted during GAP-MAP expressed misgivings about ambiguities in the system regarding where specialty addiction and mental health services begin and end in relation to generic supportive services for the broad range of health and social problems.

## A.1 Briefing Note Prepared for the GAP-MAP Advisory Panel Regarding Project Scope

### Background

On August 23, 2012 the Advisory Panel approved a description of the project's scope stating that: For the purposes of this project a program or service is deemed to be eligible for inclusion in GAP-MAP if it either:

(a) explicitly identifies individuals with an addiction or mental health problem or both, or people at risk of addiction or mental health problems, as its target population; or

(b) explicitly intends to prevent, treat, or ameliorate the effects of an addiction or mental health problem; or

(c) both (a) and (b).

In addition, the Advisory Panel specified the exclusion of particular problems and types of programs and services targeted to specific health conditions, including:

- Fetal Alcohol Spectrum Disorders (FASD)
- Neurological impairments such as Alzheimer's Disease and Traumatic Brain Injury
- Developmental disorders such as autism
- Services that an individual with an addiction or mental health problem might receive but that are not specifically mandated for people with addiction and mental health problems (e.g., AISH is targeted to people with severe disabilities, and although some mental illnesses may qualify a person to receive AISH, because its mandate is broader and not specialized for people with addictions or mental health problem, it is not eligible for inclusion in GAP-MAP).
- Prevention activities that do not specify the prevention of an addiction or mental health problem as a specific outcome of interest. (e.g., prevention activities that are aimed at enhancing resilience but do not specify that they are attempting to boost resilience as a means to prevent addiction or mental health problems would not be eligible for inclusion in GAP-MAP).

## Concerns Arising During Consultation

A number of stakeholders have expressed concerns regarding the narrow scope of the eligible programs/services and conditions to be included in GAP-MAP. The essence of their concern is that the project may not provide a comprehensive snapshot of the relevant programs and services. Some examples:

- **Human Services.** The current inclusion and exclusion rules have excluded many childhood psychological conditions, including developmental delays, mental retardation, and autism. At our initial meeting with this ministry to start the process of identifying their relevant programs and services, senior representatives expressed the view that virtually all of their programs and services are provided to clients who have mental health or addiction issues in their case history. Moreover, some mental health services (e.g., counselling) offered in this ministry do not require a diagnosis or are offered to individuals with sub-clinical problems.
- **Alberta Hospital Ponoka.** The current inclusion and exclusion rules have excluded childhood and later-life neurological impairments, including traumatic brain injury and dementia. At our initial meeting with AHS Zone representatives, stakeholders from the Provincial Brain Injury pro gram expressed the view that brain injuries are, by definition, mental health problems and thus should be included.

## Questions and Concerns for Discussion

**Defining prevention and amelioration**

- Many programs engage in activities that could be broadly construed as prevention or promotion of well-being. For example, providing parent skills training, or providing respite for caregivers of people with disabilities, or anger management workshops for those whose children have been apprehended by the legal system all may help reduce the likelihood of mental health or addictions. Although some key stakeholders have argued that most if not all of the work that is

undertaken or funded by Human Services could qualify as either prevention or amelioration if a broader interpretation is accepted, it is important to note that such programs typically do not explicitly identify mental health or addiction prevention outcomes of interest.

**Facilities and programs with mixed eligibility**

- Some facilities offer a mixture of programs that do and do not qualify under the current GAP-MAP inclusion/exclusion rules. For example, the Centennial Centre offers some programs that would qualify (senior's mental health, concurrent disorders, telemental health, adult psychiatry), and others (e.g., brain injury rehabilitation) that would not qualify.
- Some programs are designed to meet the needs of a mixture of populations that do and do not qualify under the current inclusion/exclusion rules. For example, Complex Needs (administered by Human Services) provides funding for supports to children who have mental health problems such as problems resulting from trauma (which would currently qualify), but primarily serves children with physical or developmental disorders (which would not currently qualify). However, many of the same services are offered to these two groups of children.

The preceding points suggest that the current inclusion/exclusion rules may not reflect the ways that "mental health and addiction services" are currently defined by key stakeholders in this system. This directly impacts the buy-in and credibility of GAP-MAP – it is important the project be consistent with how the system sees itself in order for stakeholders and respondents to see participating as worthwhile and meaningful. This issue will also impact the perceived usefulness and relevance of the project's deliverables for all stakeholders and decision makers.

## Scope to be Clarified

Should GAP-MAP only focus on specialized addiction and mental health programs and services for a narrower set of problems and disorders or should it strive to be comprehensive of all issues of mental health and the full range of upstream prevention and amelioration initiatives?

## Options

The current project timeline and budget precluded expanding the scope of the programs and services to be described. Because of this, there are two viable options available to address these issues in future iterations of GAP-MAP:

1. Maintain the current scope, but acknowledge the types of programs and services that will be excluded

- An implication of this is that we will be underestimating both service coverage and costs in the opinion of some key stakeholders

2. Enumerate the excluded categories of programs and services but exempt them from participating in the Survey of Programs and Services.
    - Costing estimates could either be included or not for the excluded programs and services.

## A.2 GAP-MAP Population Survey Data on Access and Perceived Need for Supportive Services

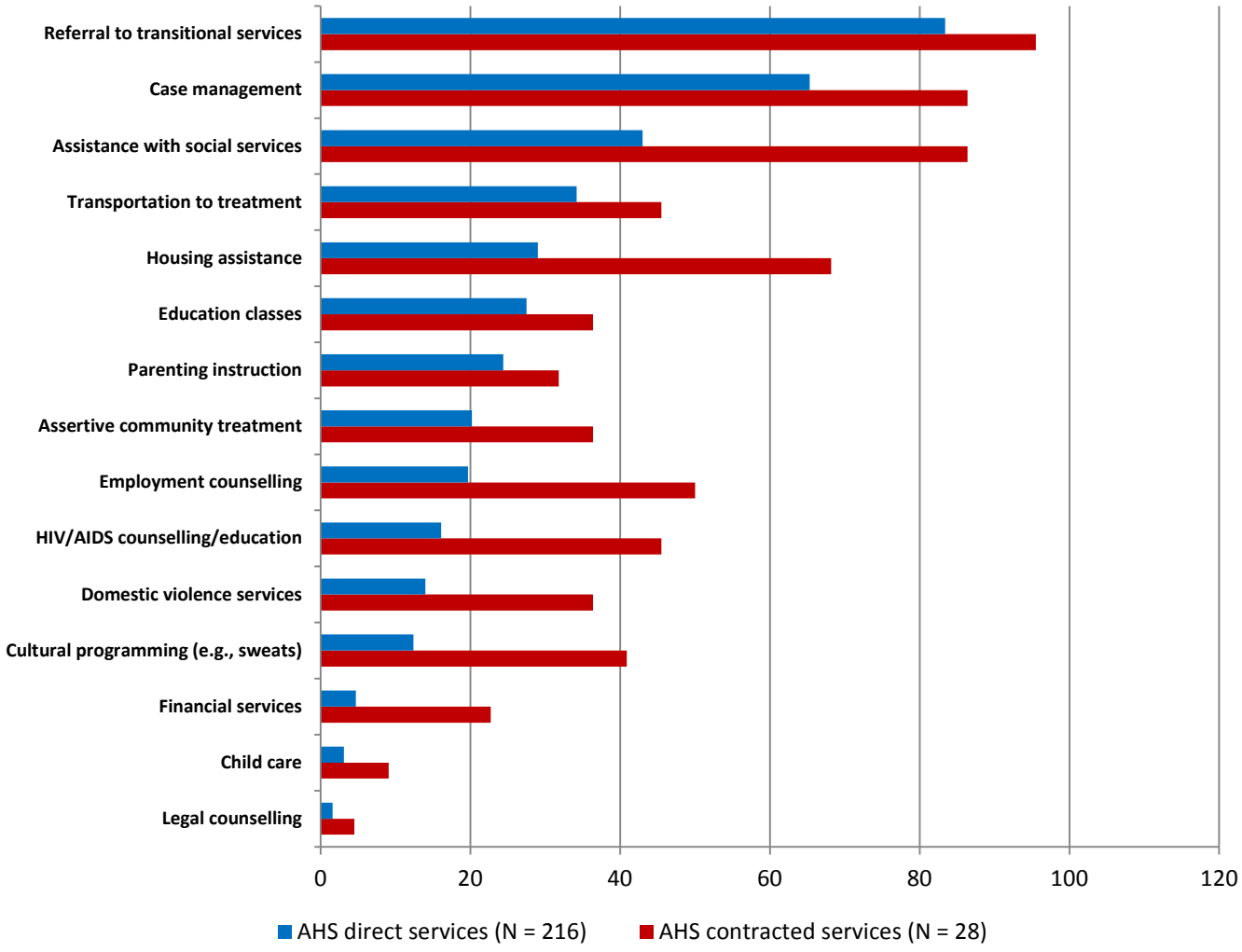
Two categories of service assessed in GAP-MAP's Addiction and Mental Health Service Needs Opinion Survey focused specifically on supportive services. These included social interventions (i.e., help to sort out practical issues such as housing or money problems), and skills training (i.e., help to improve your ability to work, to care for yourself, to use your time or to meet people). This section provides descriptive information on help-seeking, perceived need, and unmet need for these supportive services. As in the main body of this report, results are presented for the entire Alberta population, and then separately for survey respondents who did and did not meet criteria for any addiction or mental health disorder, followed by respondents meeting GAP-MAP criteria for depression (PHQ+), alcohol problems (AUDIT+), and for respondents with past-year diagnosed addictions and mental health problems.

Tables 64 and 65, following, indicate that unmet needs for social interventions and skills training are common among Alberta adults with mental health problems. Of respondents meeting GAP-MAP criteria for any disorder, 18.5% and 20.0% reported unmet need for social interventions and skills training, respectively (estimates of up to ~127,000 adults). Moreover, 23.6% and 28.6% of adults meeting GAP-MAP criteria for depression and diagnosed mental health problems, respectively, reported unmet need for social interventions (an estimated 85,904 and 26,246 adults, respectively). Regarding skills training, 26.5% and 28.1% of adults meeting GAP-MAP criteria for depression and diagnosed mental health problems, respectively, reported unmet need for social interventions (an estimated 96,461 and 26,246 adults, respectively). Lower proportions of adults meeting screening criteria for alcohol problems reported unmet needs for social interventions and skills training (13.9% and 13.3%, respectively, an estimated ~30,000 adults).

## A.3 GAP-MAP Programs and Services Data on Capacity to Provide Supportive Services

Data on AHS direct and contracted services with respect to social interventions and skills training indicate that 38.0% and 48.6% of surveyed programs provide these interventions to clients. Note that these estimates are derived from exactly the same questions as used in the population survey. Figure 53 provides a detailed description of the specific types of supportive activities provided by AHS direct and contracted services.

Figure 53
Percentage of AHS direct and contracted services offering different supportive activities




As shown in Figure 53, the most common supportive services offered by surveyed AHS direct programs were referrals to transitional services, case management, transportation to treatment, and assistance with social services. The most common supportive services offered by surveyed AHS contracted programs were referrals to transitional services, assistance with social services, case management, and housing assistance.

In general, Figure 53 indicates that AHS contracted services which were surveyed generally offer more supportive services than AHS direct services.

## Table 64

Help-seeking, perceived need, and unmet need for social interventions (i.e., help to sort out practical issues such as housing or money problems)

| Group | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Alberta (N = 6,000) | 88.3 | 2,710,281 | 5.5 | 168,245 | 1.7 | 52,003 | 4.1 | 125,419 |
| No disorder (n = 4,542) | 92.7 | 2,243,039 | 3.4 | 82,269 | 0.8 | 19,357 | 2.9 | 70,171 |
| Any disorder (n = 1,199) | 72.0 | 460,320 | 13.9 | 88,867 | 4.6 | 29,409 | 8.9 | 56,901 |
| Depressed (n = 688) | 64.9 | 236,237 | 17.6 | 64,064 | 6.0 | 21,480 | 10.8 | 39,312 |
| Alcohol problems (n = 500) | 79.9 | 207,753 | 11.1 | 28,862 | 2.8 | 7,280 | 6.3 | 16,381 |
| Diagnosed MH problem (n = 180) | 58.3 | 53,502 | 21.3 | 19,547 | 7.3 | 6,699 | 12.4 | 11,379 |
| Diagnosed addiction (n = 115) | 59.2 | 34,408 | 15.2 | 8,834 | 10.5 | 6,103 | 14.3 | 8,311 |

## Table 64
Continued

| Group | Any Perceived Need for This | | Received This Service | | Unmet Need (Unserved and Underserved) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Alberta (N = 6,000) | 11.4 | 348,727 | 5.8 | 177,422 | 7.2 | 220,249 |
| No disorder (n = 4,542) | 7.1 | 171,797 | 3.8 | 91,948 | 4.2 | 101,626 |
| Any disorder (n = 1,199) | 27.5 | 175,817 | 13.6 | 86,949 | 18.5 | 118,277 |
| Depressed (n = 688) | 34.6 | 125,945 | 16.8 | 61,152 | 23.6 | 85,904 |
| Alcohol problems (n = 500) | 20.2 | 52,523 | 9.0 | 23,401 | 13.9 | 36,142 |
| Diagnosed MH problem (n = 180) | 40.9 | 37,534 | 19.7 | 18,079 | 28.6 | 26,246 |
| Diagnosed addiction (n = 115) | 40.1 | 23,207 | 24.9 | 14,172 | 25.7 | 14,937 |

## Table 65

Help-seeking, perceived need, and unmet need for skills training (i.e., help to improve your ability to work, to care for yourself, to use your time or to meet people)

| Group | No Need for Services | | Not Met (Unserved) | | Partially Met (Underserved) | | Fully Met Need | |
|---|---|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Alberta (N = 6,000) | 87.1 | 2,676,632 | 6.0 | 183,540 | 1.5 | 52,003 | 4.8 | 146,832 |
| No disorder (n = 4,542) | 92.6 | 2,240,619 | 3.3 | 79,849 | 0.8 | 19,357 | 3.1 | 75,010 |
| Any disorder (n = 1,199) | 66.9 | 427,714 | 15.6 | 99,736 | 4.4 | 29,409 | 11.9 | 76,081 |
| Depressed (n = 688) | 56.5 | 205,661 | 20.0 | 72,800 | 6.5 | 21,480 | 15.0 | 54,600 |
| Alcohol problems (n = 500) | 8.3 | 209,313 | 10.8 | 28,082 | 2.4 | 7,280 | 6.0 | 15,601 |
| Diagnosed MH problem (n = 180) | 52.1 | 47,812 | 22.0 | 20,189 | 6.0 | 6,699 | 18.5 | 16,977 |
| Diagnosed addiction (n = 115) | 51.3 | 29,816 | 19.3 | 11,217 | 10.5 | 6,103 | 22.1 | 12,845 |

## Table 65
Continued

| Group | Any Perceived Need for This | | Received This Service | | Unmet Need (Unserved and Underserved) | |
|---|---|---|---|---|---|---|
| | % | Estimated population size | % | Estimated population size | % | Estimated population size |
| Alberta (N = 6,000) | 12.5 | 382,376 | 6.4 | 195,777 | 7.5 | 229,426 |
| No disorder (n = 4,542) | 7.5 | 181,476 | 3.8 | 91,948 | 4.1 | 99,207 |
| Any disorder (n = 1,199) | 32.2 | 205,865 | 16.4 | 104,851 | 20.0 | 127,867 |
| Depressed (n = 688) | 42.1 | 153,245 | 21.5 | 78,260 | 26.5 | 96,461 |
| Alcohol problems (n = 500) | 19.7 | 51,223 | 8.4 | 21,841 | 13.3 | 34,582 |
| Diagnosed MH problem (n = 180) | 47.5 | 43,591 | 24.5 | 22,.484 | 28.1 | 25,797 |
| Diagnosed addiction (n = 115) | 48.7 | 28,305 | 29.4 | 17,088 | 26.6 | 15,460 |

# B

# Appendix B: Material for Population Survey

# Appendix B: Material for Population Survey

## Gap Analysis of Public Mental Health and Addictions Programs (GAPMAP): Addiction and Mental Health Service Needs Opinion Survey

## Introduction

Hello, my name is (FIRST NAME) and I'm calling from Ipsos Reid the national public opinion research company. Today we are conducting a survey on behalf of the School of Public Health at the University of Alberta and we'd like to include your views. Let me assure you that I'm not trying to sell you anything and your responses are confidential.

This survey will take approximately 12 minutes to complete, depending on your answers.

**S1. For this survey, we would like to speak to the person in your household who is 18 years of age or older, and who has had the most recent birthday. Would that be you?**

Yes

No

DK/NS

Refused

[IF YES, CONTINUE]

[IF NO, ALLOW RESPONDENT TO SEEK THE HOUSEHOLD MEMBER WITH THE NEXT BIRTHDAY AND REINTRODUCE]

[IF DK/NS OR REF THANK & TERMINATE]

## Information & Consent

Before we begin, I'm required to read you some background information.

We are conducting a study called the Addiction and Mental Health Service Needs Opinion Survey on behalf Dr. Cameron Wild of the School of Public Health at the University of Alberta.

We are asking 6,000 randomly selected Albertans about their opinions about and experiences with mental health and addiction services in the past year. A wide variety of viewpoints are important to this study. The results of the study will help assess how well the service needs of Albertans are currently being met.

Taking part in this survey is your choice. If there are any questions that you do not wish to answer please feel free to point these out to me and we will go on to the next question. You have the right to end the interview at any time.

Your name is not needed, and no one can identify individual answers in this study. Your answers to the survey will be kept private. Reports based on this study will only present results in group form. Any information you provide will be used only for the research purposes.

Only the University of Alberta researchers will have access to the survey results. They will store the data in a locked cabinet and on secure servers at the University for 5 years.

There may be no direct benefit to you for taking part. If you wish, I can give you some numbers to call to get help about the things this survey asks about. (PROVIDE AHS HELPLINE NUMBER UPON REQUEST OR IF RESPONDENT SEEMS UPSET: Addiction & Mental Health 24 hour Helpline: 1-866-332-2322)
The Research Ethics Office at the University of Alberta has reviewed this study and given it ethical clearance. If you have any questions or concerns about your rights as a participant, or how this study is being conducted, you may contact the University of Alberta's Research Ethics Office. This office has no affiliation with the study investigators. If you have any concerns questions about this study I can give you the phone number of the Ethics Board or the researchers. (PROVIDE NUMBERS FOR RESEARCH ETHICS OFFICE AND CAM WILD UPON REQUEST: University of Alberta Research Ethics Office, 780-492-2615 / Dr. Cameron Wild, Principal Investigator, Professor, School of Public Health, University of Alberta, 780-492-6752)

**S2. May I continue?**

Yes

No

[IF YES, CONTINUE. IF NO, THANK & TERMINATE.]

(IF NECESSARY – THAT IS, IF SPECIFICALLY ASKED: Your phone number will not be shared with the University of Alberta. Only your responses to the questions in this survey will be provided.)

(IF NECESSARY – THAT IS, IF SPECIFICALLY ASKED: The information gathered for this study may be looked at again in the future to help us answer other study questions. If so, the Ethics Board will first review the study to ensure the information will be used in an ethical manner.

(SHOULD RESPONDENTS REQUIRE ANY FURTHER INFORMATION, PLEASE REFER THEM TO THE CLIENT CONTACT BELOW.) [THE INFORMATION BELOW ALONG WITH CONTACT INFO FOR THE AHS HELPLINE, RESEARCH ETHICS OFFICE AND DR. CAMERON WILD SHOULD BE PROVIDED TO INTERVIEWERS ON A FLYSHEET AND GIVEN TO RESPONDENTS AS REQUIRED]

## INTERVIEWER INSTRUCTIONS FOR ADDITIONAL INFORMATION

Should any respondent wish to speak with someone to verify the survey process, to ask questions, or to provide comments about the survey, please provide the following contact information:

Jody Wolfe, Project Coordinator, School of Public Health, University of Alberta

- Toll free: 1-866-492-4550

- In Edmonton: 780-492-6757

# B Appendix B: Material for Population Survey

**GENDER [RECORD, DO NOT ASK]**

Male
Female

**AGE. Into which of the following age groups do you fall? (READ LIST)**

18 to 34
35 to 54
55 or older
Don't know/ Refused

[THANK & TERMINATE IF DK/REF. TRACK QUOTAS.]

[Part A. General Well-being and Functioning]

[Personal Wellbeing Index]

A1. The first question is about your current satisfaction with various aspects of your life. Thinking about your own life and personal circumstances, how satisfied are you with [INSERT FIRST ITEM]? Please use a 0 to 10 scale where 0 means completely dissatisfied, 5 means neutral and 10 means completely satisfied. How about with [INSERT NEXT ITEM]? (REPEAT SCALE ONLY IF NECESSARY)

Your life as a whole [ALWAYS FIRST]
[DO NOT RANDOMIZE ORDER]
Your standard of living
Your health
What you are achieving in life
Your personal relationships
How safe you feel
Feeling part of your community
Your future security
Your spirituality or religion

0 to 10
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

[Kessler-6]

A2. During the past 4 weeks, how much of the time did you feel [INSERT FIRST ITEM]. Would you say (READ SCALE)? How about [INSERT NEXT ITEM]? (REPEAT QUESTION AND/OR SCALE ONLY IF NECESSARY)

[DO NOT RANDOMIZE ORDER]
So sad nothing could cheer you up
Nervous
Restless or fidgety

Hopeless
That everything was an effort
Worthless
None of the time
A little of the time
Some of the time
Most of the time, or
All of the time
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[General Health Questionnaire-12]**

A3. Again, considering the last 4 weeks, have you [INSERT FIRST ITEM] more so than usual, about the same as usual, less so than usual or much less than usual? How about [INSERT NEXT ITEM]? (REPEAT QUESTION AND/ OR SCALE ONLY IF NECESSARY)

[DO NOT RANDOMIZE ORDER]
Been able to concentrate on what you're doing
Lost much sleep over worry
Felt you were playing a useful part in things
Felt capable of making decisions about things
Felt constantly under strain
Felt you couldn't overcome your difficulties
Been able to enjoy your normal day-to-day activities
Been able to face up to your problems
Been feeling unhappy and depressed
Been losing confidence in yourself
Been thinking of yourself as a worthless person
Been feeling reasonably happy, all things considered
More so than usual
About the same as usual
Less so than usual
Much less than usual
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[Canadian Community Health Survey – Mental Health (2012) Well-Being Indicators]**
A4. In general would you say your physical health is (READ SCALE)?

Excellent
Very good
Good

Fair, or
Poor
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

A5. And, in general would you say your mental health is (READ SCALE)?
Excellent
Very good
Good
Fair, or
Poor
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[Part B. Addiction and Mental Health Needs 1]**

[Patient Health Questionnaire – 9 (PHQ-9, modified)]
B7A. In the last year, have you been bothered by any of the following problems for at least 2 weeks or more in a row? The first one is [INSERT FIRST ITEM]? (DO NOT READ SCALE) How about [INSERT NEXT ITEM]? (REPEAT QUESTION AND READ SCALE ONLY IF NECESSARY)

[DO NOT RANDOMIZE ORDER]
Little interest or pleasure in doing things
Feeling down, depressed, or helpless
Trouble falling or staying asleep, or sleeping too much
Feeling tired or having little energy
Poor appetite or overeating
Feeling bad about yourself – or that you are a failure or have let yourself or your family down
Trouble concentrating on things, such as reading the newspaper or watching television
Moving or speaking so slowly, or the opposite – being so fidgety or restless that other people could have noticed
Thoughts that you would be better off dead, or of hurting yourself in some way

Yes
No
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[IF 'YES IN B7A, ASK B7B] [ASK B7A AND B7B IN A LOOP FOR EACH ITEM]**

B7B. Think about the period when you experienced this problem for at least two weeks. How often were you bothered by it? Would you say (READ SCALE)? (FOR SUBSEQUENT PROBLEMS: How long were you bothered by this problem?) (REPEAT FULL QUESTION AND SCALE AS NECESSARY)

Several days
More than half the days, or
Nearly every day
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[ASK B8 IF SEVERAL DAYS, MORE THAN HALF THE DAYS OR NEARLY EVERY DAY TO ANY ITEM IN B7B, ELSE SKIP TO NEXT SECTION]**

B8. How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people? Would you say (READ SCALE)?

Extremely difficult
Very difficult
Somewhat difficult
Not difficult at all
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[Part C. Service Utilization and Unmet Needs]**

C1A. In the past 12 months, please indicate if you received each of the following kinds of help did you receive [INSERT FIRST ITEM] because of problems with your emotions, mental health or use of alcohol or drugs? [INSERT FIRST ITEM] Would you say: Yes, No – but I think that I needed this kind of help in the past 12 months, or No – I did not need this kind of help in the past 12 months? How about [INSERT NEXT ITEM]? (REPEAT QUESTION AND/OR SCALE ONLY IF NECESSARY)

[DO NOT RANDOMIZE ORDER]
Information about these problems, treatments, or available services
Medication or tablets to help you with these problems
Hospital care – overnight or longer – because of these problems
Counselling outside of a hospital including any kind of help to talk through your problems
Help to sort out practical issues such as housing or money problems
Help to improve your ability to work, to care for yourself, to use your time or to meet people
Help to reduce the risk of harm related to using drugs, such as needle exchanges, testing for diseases that can be passed on through drug use, and so on

Yes, in the past 12 months
No, but I think I needed this kind of help in the past 12 months
No, I did not need this kind of help in the past 12 months
Don't know
Prefer not to say/ do not wish to answer

**[IF 'YES, IN THE PAST 12 MONTHS' IN C1A, ASK C1B] [ASK C1A AND C1B IN A LOOP FOR EACH ITEM]**
C1B. Do you think you got as much [INSERT CORRESPONDING ITEM TO C1A] as you think you needed? (DO NOT READ LIST)

[Corresponding items for insertion]
Information
Medication
Hospital care
Counselling
Help to sort out practical issues
Help to improve your ability to work, care for yourself, use your time or meet people
Help to reduce the risk of harm related to using drugs

Yes
No
Don't know
Prefer not to say/ do not wish to answer

**[ASK C1C IF 'NO, BUT I THINK I NEEDED THIS KIND OF HELP IN THE PAST 12 MONTHS' TO ANY ITEM IN C1A OR 'NO' TO ANY ITEM IN C1B]**

C1C. Please indicate if each of the following reasons has stopped you from getting any or enough of these kinds of help in the past 12 months? [INSERT FIRST ITEM] (IF NECESSARY: Our scale is yes or no). How about [INSERT NEXT ITEM]?

[DO NOT RANDOMIZE ORDER]
I preferred to manage myself
I didn't think anything would help
I didn't know where to get help
I was afraid to ask for help or what others would think of me
I couldn't afford the money
I asked but didn't get help

Yes
No
Don't know
Prefer not to say/ do not wish to answer

**[ASK C1D IF 'YES, IN THE PAST 12 MONTHS' TO COUNSELLING OUTSIDE OF A HOSPITAL INCLUDING ANY KIND OF HELP TO TALK THROUGH YOUR PROBLEMS ITEM IN C1A]**

C1D. You indicated that you received counselling. At the start of counselling, did your counsellor give you a choice about what psychotherapy approach he or she would use to treat your problem?
(DO NOT READ LIST)

Yes
No
Don't know
Prefer not to say/ do not wish to answer

C2.In your opinion, which of the following is the most important reason for a therapist to choose a treatment approach for a mental health problem? (READ LIST) (ACCEPT ONE RESPONSE ONLY)

[DO NOT RANDOMIZE ORDER]
The therapist has seen it work with other patients
It can be tailored to the client's needs
Systematic research shows it is effective in reducing symptoms
It fits the therapist's perspective and training
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[Part D. Family Mental Health Impact]**

[Family Service Needs (Developed for this Survey)]
The next few questions are about your family members or other people in your household who are younger than 18 years old. These include your children, step-children, brothers and sisters, cousins, nieces, or nephews, or other children who live with you most of the time.

D1. How many of the people who live with you most of the time are under the age of 12?
[RECORD NUMBER: RANGE=0 to 20]
Don't know
Refused (Prefer not to say/ do not wish to answer)

D2. How many of the people who live with you most of the time are aged 12 to 17?
[RECORD NUMBER: RANGE=0 to 20]
Don't know
Refused (Prefer not to say/ do not wish to answer)

[IF 0 (ZERO), DK OR REF IN D1 AND 0 (ZERO), DK OR REF IN D2, SKIP TO NEXT SECTION]

D3A. Has a health professional ever said that a child who lives with you most of the time has an addiction? (DO NOT READ SCALE)

Yes
No
Don't know
Refused (Prefer not to say/ do not wish to answer)

[IF YES IN D3A, ASK D3B]

D3B. How many of them? (ONLY IF NECESSARY: For how many children who live with you have you been told by a health professional that they have an addiction?)

[NUMERIC RESPONSE: RANGE=0 TO 20]
Don't know

Prefer not to say/ do not wish to answer

D4. Do you think a child who lives with you most of the time has an addiction that has not been diagnosed by a professional? (DO NOT READ SCALE)

Yes
No
Don't know
Prefer not to say/ do not wish to answer

D5A. Has a health professional ever said that a child who lives with you most of the time has a mental health problem? (DO NOT READ SCALE) (IF YES: how many of them?)

Yes
No
Don't know
Refused (Prefer not to say/ do not wish to answer)

[IF YES IN D5A, ASK D5B]

D5B. How many of them? (ONLY IF NECESSARY: For how many children who live with you have you been told by a health professional that they have a mental health problem?)

[NUMERIC RESPONSE: RANGE=0 TO 20]
Don't know
Prefer not to say/ do not wish to answer

D6. Do you think a child who lives with you most of the time has a mental health problem that has not been diagnosed by a professional? (DO NOT READ SCALE)

Yes
No
Don't know
Prefer not to say/ do not wish to answer

**[Part B. Addiction and Mental Health Needs 2]**
For the next section, please remember that if there are any questions that you do not wish to answer, just say so and we will go on to the next question.

*[Self-Reported Problems (Developed for this survey)]*

B9A. Has a health professional ever told you that you have an addiction? (DO NOT READ SCALE) (IF YES:

Would that be in the past 12 months or longer ago?)
Yes, in the past 12 months
Yes, but not in the past 12 months
Yes (SELECT THIS ONLY IF RESPONDENT DOES NOT WANT TO SPECIFY THE TIME PERIOD)
No
Don't know
Prefer not to say/ do not wish to answer

**[ASK B9B IF 'YES, IN THE PAST 12 MONTHS', 'YES, BUT NOT IN THE PAST 12 MONTHS' OR 'YES' IN B9A]**
B9B. What did the health professional call the addiction problem or problems?
(RECORD VERBATIM)
Don't know
Prefer not to say/ do not wish to answer

B10A. Do you think you have ever had an addiction problem that has not been diagnosed by a professional? By addiction problem I mean misuse of things like alcohol, street drugs, or prescription medications to get high, or engaging in behaviours like gambling, video gaming, exercise, sex, shopping, or work in a way that creates problems in life. (DO NOT READ LIST) (IF YES: Would that be in the past 12 months or longer ago?)

Yes, in the past 12 months
Yes, but not in the past 12 months
Yes (SELECT THIS ONLY IF RESPONDENT DOES NOT WANT TO SPECIFY THE TIME PERIOD)
No
Don't know
Prefer not to say/ do not wish to answer

**[ASK B10B IF 'YES, IN THE PAST 12 MONTHS', 'YES, BUT NOT IN THE PAST 12 MONTHS' OR 'YES' IN B10A]**
B10B. What would you call the addiction problem or problems that you have had?

(RECORD VERBATIM)
Don't know
Prefer not to say/ do not wish to answer

**B11A. Has a health professional ever told you that you have a mental disorder? (DO NOT READ SCALE) (IF YES: Would that be in the past 12 months or longer ago?)**

Yes, in the past 12 months
Yes, but not in the past 12 months
Yes (SELECT THIS ONLY IF RESPONDENT DOES NOT WANT TO SPECIFY THE TIME PERIOD)
No

Don't know
Prefer not to say/ do not wish to answer

**[ASK B11B IF 'YES, IN THE PAST 12 MONTHS', 'YES, BUT NOT IN THE PAST 12 MONTHS' OR 'YES' IN B11A]**

B11B. What was the diagnosis?

(RECORD VERBATIM)
Don't know
Prefer not to say/ do not wish to answer

B12A. Do you think you have ever had a mental health problem that has not been diagnosed by a professional? (DO NOT READ SCALE) (IF YES: Would that be in the past 12 months or longer ago?)

Yes, in the past 12 months
Yes, but not in the past 12 months
Yes (SELECT THIS ONLY IF RESPONDENT DOES NOT WANT TO SPECIFY THE TIME PERIOD)
No
Don't know
Prefer not to say/ do not wish to answer

**[ASK B12B IF 'YES, IN THE PAST 12 MONTHS' OR 'YES, BUT NOT IN THE PAST 12 MONTHS' OR 'YES' IN B12A]**

B12B. What would you call the problem or problems that you have had with your mental health?

(RECORD VERBATIM)
Don't know
Prefer not to say/ do not wish to answer

*[AUDIT]*

B1. How often do you have a drink containing alcohol? Would you say (READ SCALE UNTIL INTERRUPTED)?

Never
Monthly or less
2 to 4 times a month
2 to 3 times a week, or
4 or more times a week
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[IF NEVER IN B1 SKIP TO NEXT SECTION]**

B2. How many drinks containing alcohol do you have on a typical day when you are drinking? (READ SCALE UNTIL INTERRUPTED)

1 or 2
3 or 4
5 or 6
7, 8, or 9
10 or more
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

B3. How often do you have six or more drinks on one occasion? Would you say (READ SCALE UNTIL INTERRUPTED)?

Never
Less than monthly
Monthly
Weekly, or
Daily or almost daily
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[IF NEVER IN B3 SKIP TO B5]**
**[IF DK OR PREFER NOT TO SAY IN B1 AND B2 AND B3, SKIP TO THE NEXT SECTION]**

B4. How often during the last year have you [INSERT FIRST ITEM]? Would you say (READ SCALE UNTIL INTERRUPTED)? How about [INSERT NEXT ITEM]? (REPEAT QUESTION AND/OR SCALE ONLY IF NECESSARY)

[DO NOT RANDOMIZE ORDER]
Found that you were not able to stop drinking once you had started
Failed to do what was normally expected from you because of drinking
Needed a first drink in the morning to get yourself going after a heavy drinking session
Had a feeling of guilt or remorse after drinking
Been unable to remember what happened the night before because you had been drinking

Never
Less than monthly
Monthly
Weekly, or
Daily or almost daily
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

B5. Have you or someone else been injured as a result of your drinking? (READ SCALE)

Yes, during the last year
Yes, but not in the last year
No
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

B6. Has a relative, friend, doctor or another health worker been concerned about your drinking or suggested you cut down? (READ SCALE)

Yes, during the last year
Yes, but not in the last year
No
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

**[Part E. Demographics]**

Finally, I just have a few questions to ask for our statistical calculations. Please be assured, all information will be kept completely confidential.

E1. How old are you today?

RECORD AGE [RANGE: 18 TO 120]
Don't know
Refused (Prefer not to say/ do not wish to answer)

E2. Which of the following best describes your employment status? (READ LIST UNTIL INTERRUPTED) (ACCEPT ONE RESPONSE ONLY)

Employed 30 hours a week or more
Employed less than 30 hours per week
Unemployed
Student
Retired
Not working due to disability
Other
(DO NOT READ) Don't know
(DO NOT READ) Prefer not to say/ do not wish to answer

E3. What is the highest level of education you have attained? (READ LIST UNTIL INTERRUPTED) (ACCEPT ONE RESPONSE ONLY)

Grade 9 or less
Some high school
High school diploma
Some university, college or post-secondary trades/technical school
College or post-secondary trades/technical diploma
Completed university undergraduate degree
Completed university graduate or professional degree
(DO NOT READ) Don't know

(DO NOT READ) Prefer not to say/ do not wish to answer

E4. What is your current marital status? (READ LIST IF NECESSARY) (ACCEPT ONE RESPONSE ONLY)

Married or common law
Separated or divorced
Widowed
Single (never been married)
(DO NOT READ) Don't know

(DO NOT READ) Prefer not to say/ do not wish to answer

**Thank you very much for your time and co-operation. Have a nice evening.**

C

# Appendix C: Material for Survey of Programs and Services

# Appendix C – Material for Survey of Programs and Services

## GAPMAP Survey of Programs - Part A (Edmonton Zone)

Page #1

Part A. This section should be completed by the senior administrator responsible for the program or facility cluster's organizational structure, finances, and human resources.

On the next page you will be asked to identify the cluster(s) to which you have been assigned. If you are not sure which cluster you are responding on behalf of, please refer to the Excel document "GAPMAP_Edmonton Zone_respondent list" found here http://www.knowmo.ca/Home/GAPMAP.aspx.

If you experience any technical difficulties with this survey please contact the Survey Coordinator, Jody Wolfe:

E-mail: jody.wolfe@ualberta.ca

Page #2

☑ I am a manager for one or more of the following clusters in the Edmonton Zone (Check all that apply):(Cluster)

Clusters include services or programs based in a specific site/facility as well as parent-based programming operating in multiple sites/facilities.

- ☐ A. Aubry; Addiction Recovery Centre Edmonton
- ☐ A. Aubry; Edmonton Youth Addiction Services
- ☐ A. Aubry; Edmonton Adult Addiction Services
- ☐ A. Aubry; Henwood Treatment Centre
- ☐ A. Aubry; Youth Residential Addiction Services - Crowsnest House
- ☐ A. Aubry; Youth Residential Addiction Services -Santa Rosa
- ☐ A. Aubry; Youth Residential Addiction Services -Jasper House
- ☐ A. Aubry; Adult Addiction Services
- ☐ C. Mummery; Northgate Health Centre
- ☐ C. Mummery; Stan Woloshyn Building
- ☐ C. Mummery; Child Adolescent Mental Health Clinics
- ☐ C. Mummery; Child Acute Inpatient
- ☐ C. Mummery; Child Inpatient, Day Programs, Outpatient, and Tertiary Outreach
- ☐ C. Mummery; Learning Development
- ☐ C. Mummery; School-Based Services
- ☐ D. Tchida; Alberta Hospital Edmonton
- ☐ D. Tchida; Alberta Hospital Edmonton Forensic Assessment and Community Services
- ☐ D. Tchida; Adult Acute Inpatient
- ☐ D. Tchida; Adult Psychiatric Intensive Care
- ☐ J. Kelland; Facilities Assessment Team
- ☐ J. Kelland; Wellness and Recovery Supports
- ☐ J. Kelland; Adult Crisis Services
- ☐ J. Kelland; Diversion Services
- ☐ J. Kelland; Housing and Residential Supports
- ☐ J. Kelland; Wellness, Recovery Supports
- ☐ J. Clark; East Edmonton Health Centre/Edmonton Mental Health Centre
- ☐ J. Clark; Edmonton 108 Street Building/Edmonton Mental Health Clinic Intake and Intensive Care
- ☐ J. Clark; University of Alberta Hospital
- ☐ J. Clark; Community Adult Assessment Treatments Services
- ☐ J. Clark; Emergency Mental Health Team
- ☐ J. Clark; Outpatient Mental Health
- ☐ J. Clark; Shared Collaborative Services
- ☐ J. Clark; Geriatric Psychiatry Services
- ☐ J. Clark; Inner City Services
- ☐ L. Urichuk; Edmonton Early Psychosis Intervention Clinic

Page #3

Looping Info

•This page is part of the loop for question Cluster which loops through pages 3 - 6

The following questions ask about the following cluster of programs:
{{ Cluster }}

Page #4

Looping Info

•This page is part of the loop for question Cluster which loops through pages 3 - 6

{{ Cluster }} Organizational Structure and Budget

1a. Tell us about {{ Cluster }}. This cluster...Check only one.

- ○ is operated by AHS
- ○ receives funding from AHS, but operates independently of AHS
- ○ receives no funding from AHS, nor is operated by AHS

1b. How would you describe the location of {{ Cluster }}? This cluster is...Check all that apply.

- ☐ located in an acute care hospital that provides services in addition to mental health/addictions
- ☐ located in a community clinic that provides services in addition to mental health/addictions
- ☐ located in a criminal justice facility
- ☐ located in a university, other than a university hospital
- ☐ a free-standing facility, specifically dedicated to mental health/addictions
- ☐ delivered in multiple sites or is a mobile service
- ☐ Other, please specify... _____

2. Tell us about the addiction and mental health funding sources for {{ Cluster }}. (NOTE: no individual program will be identified in reporting)

2.a. For this study "Last fiscal year" refers to the April 1, 2010-March 31, 2011 fiscal year. If it is not possible to report on the 2010-2011 fiscal year, please report on the most recent year for which you have complete information.

I will be reporting on fiscal year:

- ○ 2012-2013
- ○ 2011-2012
- ○ 2010-2011 (preferred reporting period)
- ○ 2009-2010
- ○ Other, please specify... _____

2.b. What was the annual budget for addiction and mental health programs and services within {{ Cluster }} last fiscal year?

_____

- ○ This is the actual amount
- ○ This is an estimate

2.c. What is the total amount of dollars that you received last fiscal year from the Alberta government and/or AHS for addiction and mental health services?

_____

- ○ This is the actual amount
- ○ This is an estimate

2.d. What percentage of your annual addiction and mental health budget for the last fiscal year was derived from funds from the Alberta government and/or AHS?

_____

- ○ This is the actual amount
- ○ This is an estimate

Page #5

Looping Info

•This page is part of the loop for question Cluster which loops through pages 3 - 6

Personnel of {{ Cluster }}

1. Please tell us about the numbers of addiction/mental health clinical staff at {{ Cluster }} who have direct client contact. Additionally, select whether this is an actual count or estimate for each question.Please exclude administrative staff who do not have any direct contact with clients.

1.a. Current number of addiction/mental health clinical staff (individuals) who are employed in this cluster as .4 FTE or greater.

# _____

- Actual count
- Best estimate

1.b. Current number of addiction/mental health clinical staff (individuals) who are employed in this cluster as .3 FTE or less.

# _____

- Actual count
- Best estimate

1.c. Current number of FTEs for addiction/mental health clinical staff.

# _____

- Actual count
- Best estimate

1.d. Current number of FTEs for addiction/mental health clinical staff that are VACANT.

# _____

- Actual count
- Best estimate

1.e. How many clinical staff FTE positions split across multiple programs/services?

# _____

- Actual count
- Best estimate

2. Does {{ Cluster }} have one or more psychiatrists embedded in the program?

- Yes, we have one or more psychiatrists on staff
- Yes, we partner with one or more psychiatrists who are not employees of this program or service
- No
- Not sure

3. Does {{ Cluster }} have one or more general physicians embedded in the program (not psychiatrists)?

- Yes, we have one or more physicians on staff
- Yes, we partner with one or more physicians who are not employees of this program or service
- No
- Not sure

Page #6

Looping Info

•This page is part of the loop for question Cluster which loops through pages 3 - 6

Needs of {{ Cluster }}

1. How strongly do you agree or disagree with each of the following statements? {{ Cluster }} needs additional support or resources to improve:

| | Disagree Strongly | Disagree | Uncertain | Agree | Agree Strongly | Not Applicable |
|---|---|---|---|---|---|---|
| Documenting service needs of clients | ○ | ○ | ○ | ○ | ○ | ○ |
| Tracking and evaluating outcomes of clients over time | ○ | ○ | ○ | ○ | ○ | ○ |
| Obtaining information that can document program effectiveness | ○ | ○ | ○ | ○ | ○ | ○ |
| Automating client records for billing and financial applications | ○ | ○ | ○ | ○ | ○ | ○ |
| Evaluating staff performance and organization functioning | ○ | ○ | ○ | ○ | ○ | ○ |
| Implementation of evidence based practices | ○ | ○ | ○ | ○ | ○ | ○ |
| Mointoring and optimization of evidence based practices | ○ | ○ | ○ | ○ | ○ | ○ |
| Identifying appropriate evidence based practices | ○ | ○ | ○ | ○ | ○ | ○ |
| Improving the recording and retrieval of financial information | ○ | ○ | ○ | ○ | ○ | ○ |
| Generating timely "management" reports on clinical, financial, and outcome data | ○ | ○ | ○ | ○ | ○ | ○ |
| Generating timely reports that integrate data from multiple sources | ○ | ○ | ○ | ○ | ○ | ○ |



2. Tell us about the interest and participation in research of {{ Cluster }}.

| | Yes | No | Not sure |
|---|---|---|---|
| This cluster of programs/services has participated in one or more formal research projects in the past | ○ | ○ | ○ |
| This cluster of programs/services would consider participating in one or more formal research projects in the future | ○ | ○ | ○ |

This completes the questions for {{ Cluster }}.

Page #7

Optional Comments and Feedback

5. In your opinion, what 3 actions deserve the highest priority in order to better support Albertans with addiction and mental health needs?

_____
_____
_____

6. In your opinion, whose needs are not being met by the current mental health and addiction system in Alberta, and why?

_____
_____
_____

Page #8

If you have completed the survey, press the "SUBMIT" button below to finalize your responses. After submitting, you will have an opportunity to print a copy of your responses for your records.

# GAPMAP Survey of Programs - Part B (Edmonton Zone)

Page #1

Part B. This survey should be completed by one or more persons knowledgeable about the program/service's purpose, activities, policies and procedures, and caseloads.

On the next page you will be asked to select the programs/services to which you have been assigned. If you do not know which programs/services you are supposed to be responding on behalf of, please contact the manager that sent you this survey. The complete list of programs/services and respondents can be found here: http://www.knowmo.ca/Home/GAPMAP.aspx.

If you experience any technical difficulties while completing this survey, please contact the Survey Coordinator, Jody Wolfe:

E-mail: jody.wolfe@ualberta.ca

☑ I am a manager for one or more of the following programs/services:(Program)

The names of program/service managers are provided in parentheses as a guide. If you are not sure which program(s) you are responding for, please contact your manager.

- ☐ (B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton
- ☐ (B. Blackburn) Opioid Dependency Program @Edmonton Adult Addiction Services
- ☐ (C. Gaida) Adult Crisis @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (C. Gaida) Inner City Police and Crisis Team (ICPACT) @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (C. Gaida) Police and Crisis Team (PACT) @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (C. Gaida) Rural Police and Crisis Team (RPACT) @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (C. Gaida) Community Support Team @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (C. Gaida) Diversion @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (C. Gaida) Youth Diversion @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (C. King) Adult Day Treatment @Edmonton Adult Addiction Services
- ☐ (C. King) Youth Outpatient- Action 22 @Edmonton Adult Addiction Services
- ☐ (C. King) Enhanced Services for Women @Edmonton Adult Addiction Services
- ☐ (C. King) Family Violence @Edmonton Adult Addiction Services
- ☐ (C. King) Inner City Mobile (Mobile Services) @Edmonton Adult Addiction Services
- ☐ (C. King) Young Adult Treatment @Edmonton Adult Addiction Services
- ☐ (C. King) Adult Outpatient Counselling @Edmonton Adult Addiction Services
- ☐ (C. King) Adult Addiction Services @Strathcona or Blackfoot
- ☐ (C. King) WestView Addiction Services @WestView Health Centre
- ☐ (C. King) Leduc Addiction Service @Leduc Neighborhood Centre
- ☐ (C. King) St. Albert Addiction Service @St Albert Provincial Building
- ☐ (C. King) Ft. Saskatchewan Addiction Service @Ft. Saskatchewan Health Centre
- ☐ (C. King) Addiction Mental Health Clinic @North East Community Health Centre
- ☐ (C. King) Addictions and Mental Health Clinic @East Edmonton Health Centre/Edmonton Mental Health Centre
- ☐ (C. Mummery) Northgate Children's Crisis Mobile Response @Northgate Health Centre
- ☐ (C. Mummery) Spruce Grove Mental Health Clinic @Stan Woloshyn Building
- ☐ (C. Mummery) Stollery Consultation/Liaison @University of Alberta Hospital
- ☐ (C. Mummery) Children Community Mental Health Clinic @Morinville Provincial Building
- ☐ (C. Mummery) Northgate Children's Community Mental Health Clinic @Northgate Health Centre
- ☐ (C. Mummery) St. Albert Children's Community Mental Health Clinic @ St. Albert Provincial Building (St. Albert Office)
- ☐ (C. Mummery) Sherwood Park Children's Community Mental Health @Strathcona County Health Centre
- ☐ (C. Mummery) Child Adolescent Psychiatry Acute Care - Unit C35 C36 @Royal Alexandra Hospital
- ☐ (C. Mummery) Child Psychiatry Day Programs @Glenrose Rehabilitation Hospital
- ☐ (C. Mummery) Child and Adolescent Psychiatry Ambulatory Clinics and Programs @Glenrose Rehabilitation Hospital
- ☐ (C. Mummery) Units 301,302 Child Adolescent Inpatient Programs @Glenrose Rehabilitation Hospital
- ☐ (C. Mummery) Tertiary Community Outreach Programs [Transition Youth, Community Extension, Bridging] @Glenrose Rehabilitation Hospital and Royal Alexandra Hospital
- ☐ (C. Mummery) Mental Health Support Services [funded by Student Health Partnership Services] @Various schools
- ☐ (C. Staniforth) Prevention Health Promotion @Edmonton Youth Addiction Services
- ☐ (C. Staniforth) Youth Outpatient Counselling @Edmonton Youth Addiction Services
- ☐ (C. Staniforth) Mobile Services @Edmonton Youth Addiction Services
- ☐ (C. Staniforth) SafeCom @Edmonton Youth Addiction Services
- ☐ (C. Staniforth) Youth Intensive Day Treatment @Edmonton Youth Addiction Services
- ☐ (G. Walmsley) Addiction Residential Services @Henwood Treatment Centre
- ☐ (J. Coulombe) Fort Saskatchewan Mental Health Clinic - Community Adult Assessment Treatment Services [CAATS] @Fort Saskatchewan Health Centre
- ☐ (J. Coulombe) Morinville Mental Health Clinic @Morinville Provincial Building
- ☐ (J. Coulombe) Northgate Community Mental Health Services (CAATS) @Northgate Health Centre
- ☐ (J. Coulombe) St. Albert Mental Health Clinic - Community Adult Assessment Treatment Services @St. Albert Provincial Building
- ☐ (J. Koning) Cornerstone Apartments @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (J. Koning) Anderson Hall @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (J. Koning) Facilities Assessment Team @Edmonton 108 Street Building/Edmonton Mental Health Clinic

- ☐ (J. Mason) Intake – Edmonton @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (J. Mason) Level 3 Intensive Care @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (J. Mason) Level 2 Active Treatment @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (J. Mason) Short Term Treatment Program @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (J. Mason) Geriatric Psychiatry Services @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (J. Mason) Shared Care Collaborative Service @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (K. Hay) Employment and Education Supports @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (K. Pepin) Adult Day Support Program @WestView Health Centre
- ☐ (K. Pepin) Social Vocational Programs @Alberta Hospital Edmonton
- ☐ (K. Poong) Mental Health Services @Boyle McCauley Health Centre
- ☐ (K. Poong) Inner City – CAATS @Boyle Street Community Services
- ☐ (K. SolbergWells) Units 8-1A, 8-1B, 8-2A Psychiatric Rehabilitation @Alberta Hospital Edmonton
- ☐ (K. SolbergWells) Unit 8-2B Stars @Alberta Hospital Edmonton
- ☐ (K. SolbergWells) Unit 12-A: Young Adult Rapid Evaluation Treatment and Reintegration Service @Alberta Hospital Edmonton
- ☐ (K. SolbergWells) Unit 12-B: Alternate Level of Care Transition Unit @Alberta Hospital Edmonton
- ☐ (K. SolbergWells) Unit 10 – 1 A: Acute Assessment Treatment @Alberta Hospital Edmonton
- ☐ (K. SolbergWells) Unit 10 – 2: Acute Assessment Treatment @Alberta Hospital Edmonton
- ☐ (K. SolbergWells) Unit 10 – 2A: Acute Assessment Treatment @Alberta Hospital Edmonton
- ☐ (K. SolbergWells) Unit 10 – 1: PICU @Alberta Hospital Edmonton
- ☐ (L. Black) Children's Mental Health Community Clinic @Fort Saskatchewan Health Unit
- ☐ (L. Black) Child and Adolescent Community Mental Health Clinic @Leduc Community Hospital
- ☐ (L. Black) Learning Development Clinic @East Edmonton Health Centre and Grey Nuns Hospital
- ☐ (L. Magnussen) Community Mental Health Clinic [CAATS] - South Team @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (L. Magnussen) Leduc Mental Health Clinic @Leduc Community Hospital
- ☐ (L. Magnussen) Sherwood Park Mental Health Clinic @Strathcona County Health Centre
- ☐ (M. Boily) Stony Plain Addiction and Mental Health Clinic [Adult Mental Health] @Stony Plain - WestView Health Centre
- ☐ (M. Knox) WRAP @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (M. Knox) Pathways Day Program @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (M. Knox) Transitional Youth Transitions to Independence/Challenge by Choice @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (M. McKall) DiverseCity [Housing] @Edmonton 105 Street Building
- ☐ (M. McKall) HOST - Housing Outreach Stabilization Team @ Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (M. McKall) Mental Health Support Homes @Plaza 124 Building
- ☐ (M. Tayloo) Eating Disorder Program - Unit 4F4 @University of Alberta Hospital
- ☐ (M. Tayloo) Division of Psychology @University of Alberta Hospital
- ☐ (M. Tayloo) Inpatient Group Therapy and Rehab Team @University of Alberta Hospital
- ☐ (M. Tayloo) Acute Adult Inpatient Mental Health - Units 4F3 and 4G2 @University of Alberta Hospital
- ☐ (M. Tayloo) Adult Ouptatient [Day programs, Evening programs, Psychiatry, Resident clinics] @University of Alberta Hospital
- ☐ (P. Coulson) Unit G62 [General Adult Psychiatry] @Royal Alexandra Hospital
- ☐ (P. Coulson) Emergency Mental Health Team, SOA Unit [Safe Observation Assessment] @Royal Alexandra Hospital
- ☐ (P. Coulson) Adult Outpatient [groups, day program, psychiatry] @Royal Alexandra Hospital
- ☐ (S. Aylwin) Units 3-1, 3-2, 3-4 Forensic Rehabilitation @Alberta Hospital Edmonton
- ☐ (S. Aylwin) Unit 3-3 Phoenix Program @Alberta Hospital Edmonton
- ☐ (S. Aylwin) Unit 3-5 Forensic Acute @Alberta Hospital Edmonton
- ☐ (S. Aylwin) Unit 3-6 Turning Point Program Forensic Psychiatry @Alberta Hospital Edmonton
- ☐ (S. Aylwin) Unit 3-7 Remand Assessment (Acute Assessment) @Alberta Hospital Edmonton
- ☐ (S. Aylwin) Counterpoint House Community Geographic Team @Alberta Hospital Edmonton – [FACS]
- ☐ (S. Aylwin) Young Offenders Specialty Services) Centrepoint @Alberta Hospital Edmonton – [FACS]
- ☐ (S. Aylwin) Corrections Transition/NCR/FRRP @Alberta Hospital Edmonton - Forensic Assessment and Community Services
- ☐ (S. Purdon) Edmonton Early Psychosis Intervention Clinic @Edmonton 108 Street Building/Edmonton Mental Health Clinic
- ☐ (T. Palmquist) Youth Residential @Youth Residential Addiction Services - Crowsnest House
- ☐ (T. Palmquist) Youth Stabilization @Youth Residential Addiction Services - Santa Rosa
- ☐ (T. Palmquist) Youth Protection of Children Abusing Drugs [PChAD] @Youth Residential Addiction Services - Jasper House

Page #3

Simple Skipping Information

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 3. Does the program named above provide services a... = Yes then Skip to Page 4

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 3. Does the program named above provide services a... = No then Skip to Page 5

Branching Information

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

Service Setting of {{ Program }}

1. When did the program/service named above start?

2. Will the program/service named above be operating in the 2013-2014 fiscal year?

- ○ Yes, as it is now
- ○ Yes, but some parts of it will be different
- ○ No
- ○ Don't know

3. Does the program named above provide services at more than one location?

- ○ Yes
- ○ No

Page #4

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

Service Setting of {{ Program }}

3.a. Please provide information on the community/communities where the activities of the program/service named above take place and its operating hours.

| Community | Street Address | Hours per week available to clients |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

| Services available after 5pm on weekdays | Services available weekends |
|---|---|
| • Yes<br>• No | • Yes<br>• No |
| • Yes<br>• No | • Yes<br>• No |
| • Yes<br>• No | • Yes<br>• No |
| • Yes<br>• No | • Yes<br>• No |
| • Yes<br>• No | • Yes<br>• No |

Page #5

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

Service Setting of {{ Program }}

4. How would you describe the location(s) of program/service named above? This program/service is...Check all that apply.

- ○ located in an acute care hospital that provides services in addition to mental health/addictions
- ○ located in a community clinic that provides services in addition to mental health/addictions
- ○ located in a criminal justice facility
- ○ located in a university, other than a university hospital
- ○ a free-standing facility, specifically dedicated to mental health/addictions
- ○ a mobile service
- ○ Other, please specify... _____

Page #6

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

People Served Within {{ Program }}

1. Tell us about the specific groups that the program/service named above targets, accepts, or excludes.

| | This program/service is specifically designed to serve this group (targets) | This program/service accepts, but is not specifically designed to serve this group (accepts) | This program/service excludes and/or refers these clients to other programs/services (excludes) |
|---|---|---|---|
| Children | ○ | ○ | ○ |
| Adolescents | ○ | ○ | ○ |
| Adult women | ○ | ○ | ○ |
| Pregnant or post-partum women | ○ | ○ | ○ |
| Adult men | ○ | ○ | ○ |
| Seniors or older adults | ○ | ○ | ○ |
| "At risk" populations (e.g., history of violence, involvement with child services, etc.) | ○ | ○ | ○ |
| First Nations, Metis, or Inuit peoples | ○ | ○ | ○ |
| Other cultural groups (e.g., newcomers) | ○ | ○ | ○ |
| Incarcerated offenders | ○ | ○ | ○ |
| Clients mandated to treatment by the justice system | ○ | ○ | ○ |
| People with alcohol use problems or dependence | ○ | ○ | ○ |
| People experiencing major depression | ○ | ○ | ○ |
| People with concurrent mental health and substance abuse problems | ○ | ○ | ○ |
| People with HIV/AIDS | ○ | ○ | ○ |
| Gay, lesbian, or transgendered people | ○ | ○ | ○ |
| People with physical disabilities | ○ | ○ | ○ |
| People with developmental disabilities | ○ | ○ | ○ |
| Other | ○ | ○ | ○ |

Please specify the "other" that the program/service named above targets, accepts or excludes, if applicable.

_____

2. Which of the following mental health problems does the program/service named above provide services for? Check all that apply.

- ☐ Not applicable
- ☐ This is a generalist program that addresses any mental health problem
- ☐ Depression
- ☐ Other mood disorders (e.g., bipolar disorder)
- ☐ Anxiety disorders

- ☐ Schizophrenia or other delusional disorders
- ☐ Personality disorders
- ☐ Phobias
- ☐ Other (specify) _____
- ☐ Not sure

☑ 3. Which of the following addiction problems does the program/service named above provide services for? Check all that apply.

- ☐ Not applicable
- ☐ This is a generalist program that addresses any addiction problem
- ☐ Illicit drugs (e.g., cocaine, meth, etc.)
- ☐ Alcohol
- ☐ Tobacco
- ☐ Prescription drug misuse
- ☐ Gambling
- ☐ Eating disorders
- ☐ Sex
- ☐ Video gaming
- ☐ Work
- ☐ Other (specify) _____
- ☐ Not sure

4. Does the program/service named above provide activities in a language other than English?

- ○ Yes: Please specify language(s) _____
- ○ No
- ○ Not sure

Page #7

Looping Info
•This page is part of the loop for question Program which loops through pages 3 - 18

Activities of {{ Program }}

1. Which ONE tier best represents the main focus of the program/service named above? Check only one.

- Tier 1: Health promotion and prevention
- Tier 2: Screening, brief intervention, support, and relapse management
- Tier 3: Short term clinical intervention, support, and relapse management
- Tier 4: Intense longer term treatment, rehabilitation and associated supports, and relapse management for complex needs
- Tier 5: Specialized treatment, rehabilitation and associated supports, relapse management
- Not sure

2. What types of activities are offered by the program/service named above? Check all that apply.

- Information about mental health or addiction problems, treatments, or available services
- Medication to help with mental health or addiction problems
- Hospitalization overnight or longer
- Residential treatment overnight or longer
- Counselling outside of a hospital including any kind of help to talk through problems
- Help to sort out practical issues such as housing or money problems
- Help to improve clients' ability to work, to undertake self-care, to use their time or to meet people
- Help to reduce the risk of harm related to using drugs, such as needle exchanges, testing for diseases that can be passed on through drug use, etc.
- Short-term crisis support, stabilization, or follow-up

3. What type of core service is the program/service named above? Check all that apply.

- Prevention, promotion, screening
- Early identification/early intervention
- Respite services/community supports
- Emergency and crisis services
- Non-residential treatment services
- Residential treatment services
- None of the above
- Not sure

Page #8

Looping Info
•This page is part of the loop for question Program which loops through pages 3 - 18

Activities of {{ Program }}

3. Are the following counselling and therapy activites routinely provided by the program/service named above?

| | Yes | No | Not sure |
|---|---|---|---|
| Individual therapy/counselling | ○ | ○ | ○ |
| Group therapy/couselling | ○ | ○ | ○ |
| Family therapy/counselling | ○ | ○ | ○ |
| 12-Step or support groups | ○ | ○ | ○ |
| Relaxation training | ○ | ○ | ○ |
| Recreation therapy/counselling | ○ | ○ | ○ |
| Aftercare therapy/counselling | ○ | ○ | ○ |
| Relapse prevention groups | ○ | ○ | ○ |

4. Are the following medical activities routinely provided by the program/service named above?

| | Yes | No | Not sure |
|---|---|---|---|
| Prescribing or monitoring medications | ○ | ○ | ○ |
| ECT or other brain stimulation therapies | ○ | ○ | ○ |
| Medical diagnosis, testing or treatment | ○ | ○ | ○ |
| Medically supported detoxification | ○ | ○ | ○ |
| Non-medically supported detoxification | ○ | ○ | ○ |
| Methadone maintenance therapy | ○ | ○ | ○ |
| Prenatal care | ○ | ○ | ○ |
| Smoking cessation (e.g., nicotine replacement) | ○ | ○ | ○ |
| Acupuncture | ○ | ○ | ○ |

Page #9

Looping Info
•This page is part of the loop for question Program which loops through pages 3 - 18

Activities of {{ Program }}

5. Are the following supportive activities routinely provided by the program/service named above?

| | Yes | No | Not sure |
|---|---|---|---|
| Referral to transitional services | ○ | ○ | ○ |
| Assertive community treatment | ○ | ○ | ○ |
| Assistance with obtaining social services | ○ | ○ | ○ |
| Case management services | ○ | ○ | ○ |
| Employment counselling | ○ | ○ | ○ |
| Housing assistance | ○ | ○ | ○ |
| HIV/AIDS counselling, education, support | ○ | ○ | ○ |
| Transportation assistance to treatment | ○ | ○ | ○ |
| Domestic violence services | ○ | ○ | ○ |
| Child care | ○ | ○ | ○ |
| Education classes | ○ | ○ | ○ |
| Legal counselling | ○ | ○ | ○ |
| Financial services | ○ | ○ | ○ |
| Parenting instruction | ○ | ○ | ○ |
| Cultural programming (e.g., sweat lodges, etc.) | ○ | ○ | ○ |

6. Are the following screening and testing activities routinely provided by the program/service named above?

| | Yes | No | Not sure |
|---|---|---|---|
| Brief mental health screening/assessment | ○ | ○ | ○ |
| Brief addiction screening/assessment | ○ | ○ | ○ |
| Drug/alcohol urine screening | ○ | ○ | ○ |
| Blood alcohol testing | ○ | ○ | ○ |
| TB screening | ○ | ○ | ○ |
| HIV testing | ○ | ○ | ○ |
| Hepatitis testing | ○ | ○ | ○ |
| STD testing | ○ | ○ | ○ |
| Pregnancy testing | ○ | ○ | ○ |

Page #10

Looping Info
•This page is part of the loop for question Program which loops through pages 3 - 18

Activities of {{ Program }}

7. Are the following harm reduction activities routinely provided by the program/service named above?

| | Yes | No | Not sure |
|---|---|---|---|
| Safe injection education/information | ○ | ○ | ○ |
| Overdose prevention | ○ | ○ | ○ |
| Needle exchange programming | ○ | ○ | ○ |
| Reducing drinking programming (e.g., Drinking Decisions) | ○ | ○ | ○ |
| Crack kits | ○ | ○ | ○ |

8. Are the following prevention activities routinely provided by the program/service named above?

| | Yes | No | Not sure |
|---|---|---|---|
| Early childhood screening, support or enhancement | ○ | ○ | ○ |
| School-based resiliency | ○ | ○ | ○ |
| Stigma reduction | ○ | ○ | ○ |
| Workplace mental health promotion | ○ | ○ | ○ |
| Public awareness or social marketing campaigns | ○ | ○ | ○ |
| Mental health first aid training | ○ | ○ | ○ |
| Awareness and education workshops, sessions, or training | ○ | ○ | ○ |

Page #11

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

Activities of {{ Program }}

9. Does the program/service named above offer the following technology-based services to clients? Check all that apply.

| | Via the telephone | Via the internet |
|---|---|---|
| Screening or assessment | ☐ | ☐ |
| Treatment | ☐ | ☐ |
| Peer support (moderated or unmoderated) | ☐ | ☐ |
| Follow-up post-treatment | ☐ | ☐ |

10. Are there any other activities routinely provided by the program/service named above?

Please specify _____

Page #12

Simple Skipping Information

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 1. At any time before treatment or service deliver... = Yes then Skip to Page 13

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 1. At any time before treatment or service deliver... = No then Skip to Page 14

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 1. At any time before treatment or service deliver... = Not sure then Skip to Page 14

Branching Information

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 1. At any time before treatment or service deliver... = No then Hide (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 1.a. In the previous question you stated that you...

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 1. At any time before treatment or service deliver... = Not sure then Hide (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 1.a. In the previous question you stated that you...

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

How does {{ Program }} handle clients?

1. At any time before treatment or service delivery begins are one or more standardized measures or instruments administered at the the program/service named above?

- ◯ Yes
- ◯ No
- ◯ Not sure

Page #13

Branching Information

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 2. At the time of discharge or exit from the progr... = No then Hide (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 2.a. In the previous question you stated that you ...

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 2. At the time of discharge or exit from the progr... = Not sure then Hide (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 2.a. In the previous question you stated that you ...

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

How does {{ Program }} handle clients?

1.a. In the previous question you stated that you administer one or more standardized measures or instruments. What do you use these measure or instruments for? Check all that apply.

- ☐ Screening to decide if a problem exists or more assessment is needed
- ☐ Treatment planning
- ☐ As a baseline to help evaluate the outcome of treatment
- ☐ Not sure

Page #14

Simple Skipping Information

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 2. At the time of discharge or exit from the progr... = Yes then Skip to Page 15

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 2. At the time of discharge or exit from the progr... = No then Skip to Page 16

• If (loop:"(B. Blackburn) Addiction Services: Adult Detoxification @Addiction Recovery Centre Edmonton") 2. At the time of discharge or exit from the progr... = Not sure then Skip to Page 16

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

How does {{ Program }} handle clients?

2. At the time of discharge or exit from the program, are one or more standardized measures or instruments administered at the program/service named above?

- Yes
- No
- Not sure

Page #15

Looping Info

•This page is part of the loop for question Program which loops through pages 3 - 18

How does {{ Program }} handle clients?

2.a. In the previous question you stated that you use one or more standardized measures or instruments upon client discharge. What do you use these measures or instruments for? Check all that apply.

- ☐ Discharge planning
- ☐ To help evaluate the outcomes of treatment
- ☐ Not sure

Page #16

Looping Info
•This page is part of the loop for question Program which loops through pages 3 - 18

How does {{ Program }} handle clients?

3. At the time of discharge or exit from the program/service named above, clients are provided with...Check all that apply.

- [ ] Aftercare planning
- [ ] Transition planning
- [ ] None of the above

4. Does the program/service named above enter the following kinds of information into a database that could be used to create group-level reports about your clients?

| | Yes | No | Not sure |
|---|---|---|---|
| Standard information about clients (e.g., age, sex, etc.) | ○ | ○ | ○ |
| Screening or assessment scores | ○ | ○ | ○ |
| Program participation and completion | ○ | ○ | ○ |
| Post-program outcomes based on follow-ups | ○ | ○ | ○ |
| Whether clients are new or returning | ○ | ○ | ○ |

Page #17

Looping Info
•This page is part of the loop for question Program which loops through pages 3 - 18

How does {{ Program }} handle clients?

5. Clients would be refused entry to the program/service named above if they... Check all that apply.

- ☐ Are intoxicated
- ☐ Have not been clean for a minimum period of time
- ☐ Have goals other than abstinence
- ☐ Are not self-referred
- ☐ Do not have a physician's referral
- ☐ Are taking prescription medication
- ☐ Are not motivated to make changes
- ☐ Have a co-occurring addiction
- ☐ Other (specify) _____
- ☐ Not sure
- ☐ Not applicable

5.a. What action does the program/service named above take if an individual is refused entry? Check all that apply.

- ☐ Provide information about other programs or services
- ☐ Provide information about other programs or services for which they would qualify
- ☐ Directly connect with another program or service by telephone, fax, or personal introduction/referral
- ☐ No formal policies or consistent practices exist in regards to non-eligibility
- ☐ Other (specify) _____
- ☐ Not sure
- ☐ Not applicable

6. Clients would be terminated before the end of their service episode with the program/service named above if they...Check all that apply.

- ☐ Show lack of engagement in program/service activities
- ☐ Have poor attendance
- ☐ Show no evidence of progress or improvement
- ☐ Are disruptive or interfering with other clients
- ☐ Are violent or threatening
- ☐ Have medical needs that are interfering with program/service effectiveness and cannot be met within this program
- ☐ Have addiction or mental health needs that are interfering with program/service effectiveness and cannot be met within this program
- ☐ Are in an emotional state that is interfering with program/service effectiveness
- ☐ Other (specify) _____
- ☐ Not sure
- ☐ Not applicable

Page #18

Looping Info
•This page is part of the loop for question Program which loops through pages 3 - 18

Admissions and Waitlists for {{ Program }}

In the 2010-2011 fiscal year (or the most recent year you report on completely), please tell us about the people who accessed the program/service named above for addiction, mental health, or concurrent disorder treatment.

Count every admission and re-admission in this 12 month period. If a person was admitted 3 times, count this as 3 admissions. For outpatient clients or support groups, consider an admission to be the initiation of a treatment program or service episode, not individual treatment visits.
If data for this time period are not available, use the most recent 12 month period.

1. What was the total number of admissions for the program/service named above in the past fiscal year?

Admissions: _____

- This is the actual number
- This is an estimate
- We don't record this

2. What is the maximum number of clients the program/service named above could serve on any given day?

Clients: _____

- This is the actual number
- This is an estimate
- We don't record this
- There is no limit on the number of clients we could serve

3. How many people are on the waitlist for the program/service named above as of today?

People: _____

- This is the actual number
- This is an estimate
- We don't record this

4. How many days does someone spend on the waitlist, on average, before entering the program/service named above?

Days: _____

- This is the actual number
- This is an estimate
- We don't record this

6. In the 2010-2011 fiscal year (or the most recent year you can report on completely), overall, would you say...(Pick the option that reflects what has been true for your program/service most of the time in this period)

- More people came to your program/service than you had resources for.
- About as many people came to your program/service as you had resources for.
- Fewer people came to your program/service than you had resources for.

This completes the questions for {{ Program }}

Page #19

If you have completed the survey, press the "SUBMIT" button below to finalize your responses. After submitting, you will have an opportunity to print a copy of your responses for your records.

# Glossary

## Addiction problems

Refers to misuse of licit or illicit substances, or engagement in other behaviours, in a way that is deemed to be excessive, uncontrolled, risky, or harmful to oneself or others. For GAP-MAP's general adult population survey, diagnosed addiction problems were identified when respondents were told by a health professional that they have an addiction problem, as well as responses to a structured clinical screening instrument designed to detect alcohol problems. For the purposes of GAP-MAP's survey of programs and services, addiction services were identified by relying on each program, service, or initiative's labelling of itself as providing activities to change addictions and addictive behaviours. For GAP-MAP's costing analyses, we relied on the definitions of substance abuse and substance dependence proposed by the American Psychiatric Association for the Diagnostic and Statistical Manual (4th Edition), i.e., "maladaptive patterns of substance use leading to clinically significant impairment or distress".

## Program

Represents a mandate ... to achieve goals and outcomes that address the identified needs of a target group within a jurisdiction. Programs are delivered through a collection of services that contribute to the program goals and comply with the program strategy. (http://www.mgs.gov.on.ca/stdprodconsume/groups/content/@mgs/@goits/documents/resourcelist/251598.pdf).

## Mental health problems

Included a variety of common and rare mental disorders. For GAP-MAP's general adult population survey, diagnosed mental health problems were identified when respondents were told by a health professional that they have a mental health problem, as well as responses to a structured clinical screening instrument designed to detect depression. For the purposes of GAP-MAP's survey of programs and services, mental health services were identified by relying on each program, service, or initiative's labelling of itself as providing activities to change mental health status. For GAP-MAP's costing analyses, we relied on the proposed by the American Psychiatric Association for the Diagnostic and Statistical Manual (4th Edition): "a mental disorder is a health condition characterized by significant dysfunction in an individual's cognitions, emotions, or behaviours that reflects a disturbance in the psychological, biological, or developmental processes underlying mental functioning," For the purposes of this project, treatment of underlying neurological disorders such as dementia and traumatic brain injury were not included as eligible mental health problems.

# Glossary

As shown in Figure 53, the most common supportive services offered by surveyed AHS direct programs were referrals to transitional services, case management, transportation to treatment, and assistance with social services. The most common supportive services offered by surveyed AHS contracted programs were referrals to transitional services, assistance with social services, case management, and housing assistance.

In general, Figure 53 indicates that AHS surveyed contracted services generally offer more supportive services than AHS direct services.

### Publicly funded

All programs, services, and policies provided by AHS and its subcontractors and the GoA and its subcontractors, and, all programs, services, and policies that receive partial or full GoA funding for their mental health or addiction-related activities, but are administered by a non-governmental organization.

### Service

The provision of specific outputs that satisfy the needs of clients and contribute to the achievement of program goals. (http://www.mgs.gov.on.ca/stdprodconsume/groups/content/@mgs/@goits/documents/resourcelist/251598.pdf).

## References

Allen, J. P., Litten, R. Z., Fertig, J. B., & Babor, T. (1997). A review of research on the alcohol use disorders identification test (AUDIT). *Alcoholism: Clinical and Experimental Research* , 21, 613–619.

Andrews, G., Henderson, S., & Hall, W. (2001). Prevalence, comorbidity, disability and service utilisation. *British Journal of Psychiatry* 178, 145–153.

Bijl, R. V. & Ravelli, A. (2000). Psychiatric morbidity, service use, and need for care in the general population: Results of the Netherlands mental health survey and incidence study. *American Journal of Public Health*, 90, 602–607.

Block, R., Slomp, M., Jacobs, P., & Ohinmaa, A. (2005). The direct public-sector costs for mental health in Alberta. *Healthcare Management Forum,* 18, 25–28.

Block, R., Slomp, M., Patterson, S., Jacobs, P., Yim, R., Ohinmaa, A., & Dewa, C. (2008). The impact of integrating mental and general health services on mental health budgetary parity in Alberta. *Psychiatric Services*, 59, 860–863.

Callaghan, R. C. & Macdonald, S. A. (2009). Changes in the rates of alcohol- and drug-related hospital separations for Canadian provinces: 1996-2005. *Canadian Journal of Public Health*, 100, 393–396.

Cawthorpe, D., Wilkes, T. C., Guyn, L., Li, B., & Lu, M. (2011). Association of mental health with health care use and cost: A population study. *Canadian Journal of Psychiatry*, 56, 490–494.

Cherry, N., Beach, J., & Burstyn, I. (2012). Physician diagnosed mental ill-health in male and female workers. *Occupational Medicine*, 62, 435–443.

Codony, M., Alonso, J., Almansa, J., Bernert, S., de Giorlamo, G., de Graaf, R., Hario, M. J., Kovess, V., Vilagut, G., & Kessler, R. C. (2009). Perceived need for mental health care and service use among adults in Western Europe: Results of the ESEMeD Project. *Psychiatric Services*, 60, 1051–1058.

Conigrave, K. M., Saunders, J. B., & Reznik, R. B. (1995). Predictive capacity of the AUDIT questionnaire for alcohol-related harm. *Addiction*, 90, 1479–1485.

Cunningham, J. A. & Blomqvist, J. (2006). Examining treatment use among alcohol-dependent individuals from a population perspective. *Alcohol & Alcoholism*, 41, 632–635.

Cunningham, J. A., Wild, T. C., Cordingley, J., van Mierlo, T., & Humphreys, K. (2010). Twelve-month follow up results from a randomized controlled trial of a brief personalized feedback intervention for problem drinkers. *Alcohol & Alcoholism*, 45, 258–262.

# References


Dobson, K. S. (2002). A national imperative: Public funding of psychological services. *Canadian Psychology*, 43, 65–75.

Drummond, D. C., Oyefeso, N., Phillips, T., Cheeta, S., Deluca, P., Perryman, K., Winfield, H., Jenner, J., Cobain, K., Galea, S., Saunders, V., Fuller, T., Pappalardo, D. Baker, O., & Christoupoulos, A. (2005) *Alcohol Needs Assessment Research Project (ANARP): The 2004 National Alcohol Needs Assessment for England*. London: Department of Health.

Druss, B. G., Wang, P. S., Sampson, N. A., Olfson, M., Pincus, H. A., Wells, K. B. & Kessler, R. C. (2007). Understanding mental health treatment in persons without medical diagnoses. *Archives of General Psychiatry*, 64, 1196–1203.

Esposito, E., Wang, J., Adair, C. E., Williams, J. V. A., Dobson, K., Schopflocher, D., Mitton, C., Newman, S., Beck, C., Barbui, C., & Patten, S. (2007). Frequency and adequacy of depression treatment in a Canadian population sample. *Canadian Journal of Psychiatry*, 52, 780–788.

Galea, S., Nandi, A., & Vlahov, D. (2004). The social epidemiology of substance use. *Epidemiologic Reviews*, 26, 36–52.

Goldberg, D. & Williams, P. (1988). *A User's Guide to the General Health Questionnaire*. Slough: NFER Nelson

Harris, M., Buckingham, W. J., Pirkis, J., Groves, A., & Whiteford, H. (2012). Planning estimates for the provision of core mental health services in Queensland, 2007 to 2017. *Australian and New Zealand Journal of Psychiatry*, 46, 982–994.

International Wellbeing Group (2006). *Personal Wellbeing Index*. Melbourne: Australian Centre on Quality of Life, Deakin University.

Jacobs, P., Dewa, C., Lesage, A., Vasiliadis, H., Escober, C., Mulvale, G., & Yim, R. (2010). *The Cost of Mental Health and Substance Abuse Services in Canada.* Edmonton, AB: Institute of Health Economics.

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine*, 32, 959–976.

Kohn, R., Saxena, S., Levav, I., & Sacareno, B. (2004). The treatment gap in mental health care. *Bulletin of the World Health Organization*, 82, 858–866.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16, 606–613.

# References


Maisto, S. A., Conigliaro, J., McNeil, M., Kraemer, K., & Kelley, M. E. (2000). An empirical investigation of the factor structure of the AUDIT. *Psychological Assessment*, 12, 346–353.

Martin, L. J., Houston, S., Yasui, Y., Wild, T. C., & Saunders, L. D. (2011). All-cause and HIV-related mortality rates among HIV-infected patients after initiating highly active antiretroviral therapy: The impact of Aboriginal ethnicity and injection drug use. *Canadian Journal of Public Health*, 102, 90–96.

McNab, C. & Meadows, G. (2005). The general-practice users' perceived-need inventory ('GUPI'): A brief general practice tool to assist in bringing mental healthcare needs to professional attention. *Primary Care in Mental Health*, 3, 93–101.

Meadows, G., Harvey, C., Fossey, E., & Burgess, P. (2000). Assessing perceived need for mental health care in a community survey: Development of the Perceived Need for Care Questionnaire. *Social Psychiatry and Psychiatric Epidemiology*, 35, 427–435.

Mojtabai, R., Olfson, M., & Mechanic, D. (2002). Perceived need and help-seeking in adults with mood, anxiety, or substance use disorders. *Archives of General Psychiatry*, 77–84..

Morrison, K. B. & Laing, L. (2011). Adults' use of health services in the year before death by suicide in Alberta. *Health Reports*, 22, 5–22.

Moulding, R., Grenier, J., Blashki, G., Ritchie, P., Pirkis, J., & Chomienne, M. (2009). Integrating psychologists into the Canadian health care system: The example of Australia. *Canadian Journal of Public Health*, 100, 45–47.

National Treatment Strategy Working Group. (2008). *A Systems Approach to Substance Use in Canada: Recommendations for a National Treatment Strategy.* Ottawa: National Treatment Strategy Working Group. Available: http://www.nts-snt.ca/2012%20Document%20Library/nts-systems-approach-substance-abuse-canada-2008-en.pdf

Newman, S. C., Bland, R. C., & Thompson, A. H. (2012). Long-term course and outcome in schizophrenia: A 34-year follow-up study in Alberta, Canada. *Psychological Medicine*, 42, 2137–2143.

Newton, A. S., Ali, S., Johnson, D. W., Haines, C., Rosychuk, R. J., Keaschuk, R. A., Jacobs, P., Cappelli, M., & Klassen, T. P. (2010). Who comes back? Characteristics and predictors of return to emergency department services for pediatric mental health care. *Academy of Emergency Medicine*, 17, 177–186.

Newton, A. S., Ali, S., Johnson, D. W., Haines, C., Rosychuk, R. J., Keaschuk, R. A., Jacobs, P., & Klassen, T. P. (2009). A 4-year review of pediatric mental health emergencies in Alberta. *Canadian Journal of Emergency Medicine*, 11, 447–454.

# References


Ngwakongnwi, E., Fradgley, E., Quan, H., Lu, M., & Cawthorpe, D. (2011). Referrals, language proficiency, and enrollment for children's mental health services. *Children and Youth Services Review*, 33, 1994–1998.

Patton, S. B. & Schopflocher, D. (2009). Longitudinal epidemiology of major depression as assessed by the Brief Patient Health Questionnaire (PHQ-9). *Comprehensive Psychiatry*, 50, 26–33.

Pirkis, J., Harris, M., Buckingham, W., Whiteford, H., & Townsend-White, C. (2007). International planning directions for provision of mental health services. *Administration and Policy in Mental Health and Mental Health Services Research*, 34, 377–387.

Plitt, S. S., Gratrix, J., Hewitt, S., Conroy, P., Parnell, T., Lucki, B., Pilling, V., Anderson, B., Choudri, Y., Archibald, C. P., & Singh, A. E. (2010). Seroprevalence and correlates of HIV and HCV among injecting drug users in Edmonton, Alberta. *Canadian Journal of Public Health*, 101, 50–55.

Ratnasingham, S., Cairney, J., Rehm, J., Manson, H., & Kurdyak, P. A. (2012). *Opening Eyes, Opening Minds: The Ontario Burden of Mental Illness and Addictions Report.* An ICES/PHO Report. Toronto: Institute for Clinical Evaluative Sciences and Public Health Ontario.

Regier, D. A., Myers, J. K., Kramer, M., Robins, L. N., Blazer, D. G., Hough, R. L., Eaton, W. W., & Locke, B. Z. (1984). The NIMH Epidemiologic Catchment Area program. Historical context, major objectives, and study population characteristics. *Archives of General Psychiatry*. 41, 934–41.

Reinert, D. F. & Allen, J. P. (2002). The alcohol use disorders identification test (AUDIT): A review of recent research. *Alcoholism: Clinical and Experimental Research*, 26, 272–279.

Rush, B. (2010). Tiered frameworks for planning substance use delivery systems: Origins and key principles. *Nordic Studies on Alcohol and Drugs*, 27, 617–636.

Rush, B., Trembley, J., Fougere, C., Behrooz, R., Perez, W., & Fineczko, J. (2013). Development of a needs-based planning model of substance use services and supports in Canada [DRAFT]. Author: Centre for Addiction and Mental Health, Ontario, Canada.

Rush, B. R., Urbanoski, K. A., Bassani, D., Castel, S., & Wild, T. C. (2010). The epidemiology of co-occurring substance use and other mental disorders in Canada: Prevalence, service use, and unmet needs. In J. Cairney & D. Streiner (Eds.), *Mental Disorder in Canada: An Epidemiological Perspective* (pp. 170–204). Toronto: University of Toronto Press.

Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S. L., de Graaf, R., & Stein, M. B. (2007). Perceived barriers to mental health service utilization in the United States, Ontario and the Netherlands. *Psychiatric Services*, 58, 357–364.

# References


Saunders, J. B., Aasland, O. G., Babor, T. F., De La Fuente, J. R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption- II. *Addiction*, 88, 791–804.

Seppa, K., Makela, R., & Sillanaukee, P. (1995). Effectiveness of the Alcohol Use Disorders Identification Test in occupational health settings. *Alcoholism: Clinical and Experimental Research*, 19, 999–1003.

Slomp, M., Bland, R., Patterson, S., & Whittaker, L. (2009). Three-year physician treated prevalence rate of mental disorders in Alberta. *Canadian Journal of Psychiatry*, 54, 199–202.

Slomp, M., Jacobs, P., Ohinmaa, A., Bland, R., Dewa, C., Block, R., & Wang C. (2012). The distribution of mental health service costs for depression in the Alberta population. *Canadian Journal of Psychiatry,* 57, 564–569.

ten Have, M., de Graaf, R., Ormel, J., Vilagut, G., Kovess, V., & Alonso, J. (2010). Are attitudes towards mental health help-seeking associated with service use? Results from the European study of epidemiology and mental disorders. *Social Psychiatry and Psychiatric Epidemiology*, 45, 153–163.

Urbanoski, K. A., Cairney, J., Bassani, D., & Rush, B. R. (2008). Perceived unmet need for mental health care among Canadians with co-occurring mental and substance use disorders. *Psychiatric Services*, 59, 283–298.

Urbanoski, K. A., Rush, B. R., Wild, T. C., Bassani, D., & Castel, S. (2007). The use of mental health care services by Canadians with co-occurring substance dependence and mental disorders. *Psychiatric Services*, 58, 962–969.

Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the national comorbidity survey replication. *Archives of General Psychiatry*, 62, 629–640.

Wild, T. C., Cunningham, J., & Adlaf, E. (2001). Nonresponse in a follow-up to a representative telephone survey of adult drinkers. *Journal of Studies on Alcohol and Drugs*, 62, 257–261.

Wild, T. C., Cunningham, J. A., & Roberts, A. B. (2007). Controlled study of brief personalized assessment-feedback for drinkers interested in self-help. *Addiction, 102*, 241–250.

Wild, T. C., Roberts, A. B., Cunningham, J., Schopflocher, D., & Pazderka-Robinson, H. (2004). Alcohol problems and interest in self-help: A population study of Alberta adults. *Canadian Journal of Public Health, 95*, 127–132.

Wild, T. C., Wolfe, J., Ibrahim, Q., & Komarnisky, S. (2013). Controlled implementation trial of a brief online alcohol intervention targeting drinkers during the transition out of high school. Manuscript under review.

WHO; World Health Organization (2004). *Mental Health Policy, Plans and Programmes* (Updated Version). Geneva: World Health Organization.