

ALBERTA HEALTH SERVICES PERFORMANCE OF THE ADDICTION AND MENTAL HEALTH SYSTEM 2014-15



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Dear reader,

This report provides a high-level assessment of the overall performance of select aspects of Alberta Health Service's addiction and mental health system. This seventh edition of the report continues to focus on measures related to the overall performance of Alberta Health Services, Addiction and Mental Health, including performance measures related to mental health readmissions and children's wait times for community mental health services.

Every year we strive to make improvements to this report. The 2014/15 edition includes all six of the Health Quality Council of Alberta's quality domains with the addition of the safety domain. As well, the 2014/15 report maintains the condensed format of the previous report in response to positive feedback from consulting stakeholders.

This work aligns closely with the values, goals and areas of focus found in the *Creating Connections: Alberta's Addiction and Mental Health Strategy - September 2011* report which references the need for ongoing reporting on the performance of the Addiction and Mental Health system. More specifically this report supports, "Enhance Assurance," one of the five strategic directions in the AMH strategy, focusing on developing "robust and appropriate oversight policies, supporting structure and mechanisms to foster quality and client/patient safety."

As with previous editions, this report is developed in collaboration with a large and diverse group including key stakeholders in the area of Addiction and Mental Health across AHS. We want to thank all those who have reviewed and contributed to the report.

Kathy Huebert

Director, Performance Measurement and Knowledge Exchange, Provincial Addiction and Mental Health

Executive Summary

The seventh edition of the *Performance of the Addiction and Mental Health System in Alberta Health Services* report is a collaborative effort within Addiction and Mental Health (AMH) in Alberta Health Services (AHS). In Alberta, Addiction and Mental Health Services are provided by many entities across the continuum of care including inpatient facilities, outpatient and community services, general practitioners, private psychiatrists and psychologists, as well as various service agencies. The scope of the present report is to provide a high level assessment of the performance of only AHS' addiction and mental health system.

The strategic direction set forth by AMH, AHS and Alberta Health (AH) highlight the importance of performance reporting. *Creating Connections: Alberta's Addiction and Mental Health Strategy*¹ identifies a need to implement a comprehensive system performance framework to monitor, evaluate and report on addiction and mental health outcomes, programs and services. AHS' most recent *Health Plan and Business Plan, 2014-2017*² reiterates the need for accountability and outcome measurement through better quality, better outcomes and better value.

This report uses the Health Quality Council of Alberta's Quality Matrix for Health³ as a framework for reporting. Highlights of findings along the six domains of quality follow.

Accessibility

Over the past 5 years, trends in service volume have varied by service type.

Service volumes steadily increased in mental health telehealth, HealthLink, mental health community/ outpatient, mental health inpatient acute care sites, mental health inpatient psychiatric facilities, directly funded detoxification services and emergency department services. Volumes in contracted detoxification services fluctuated while directly funded addiction residential services and contracted addiction residential services remained stable.

Children were offered an appointment within a timely manner of their initial request to receive scheduled community mental health services.

In 2014/15, 89% of children were offered an appointment within 30 days of their initial request to receive scheduled community mental health services. Since 2011/12, access time has been stable or improved while service demand has increased.

Acceptability

Individuals accessing community addiction and mental health treatment and services were satisfied with the care they received.

In 2014/15, 94% of clients receiving general community addiction and mental health services

were satisfied. Satisfaction levels have been consistently high for the past five years, ranging from 92% to 95% satisfied.

Appropriateness

Patients who experience waits for an alternate level of care (ALC) are often waiting for placement in another facility.

In 2014/15, there were 1,238 patients who spent at least one day on ALC in an adult inpatient psychiatric unit. The total number of bed days used by adult acute inpatient patients requiring ALC in 2014/15 was 52,065; this equates to approximately 150 bed equivalents (at 95% occupancy). Processing patient placement and waiting for placement in a facility accounted for more than 60% of ALC bed days.

Efficiency

Mental health patients stayed longer in acute care hospitals than the national average expected length of stay.

In 2014/15, the ratio of actual to expected length of stay was 1.03. Since 2006/07 the ALOS/ELOS ratio for mental health patients has been consistently greater than the ALOS/ELOS ratio for patients with any health condition.

Effectiveness

Over the past three fiscal years, clients/patients have consistently shown moderate to severe acuity at admission.

As expected, admission acuity varied by area of service with acute inpatient and crisis

services having the highest proportion of patients with moderate to severe problems. The level of admission acuity for a given service area was consistent for adults and children and youth over the past three years.

Differences in patterns of improvement were noted for adults and children/youth.

The greatest proportion of adults showed improvement in acute inpatient settings while the greatest proportion of children/youth showed improvement in general community addiction and mental health settings. This has been consistent for the past three years.

The Alberta provincial rate of mental health hospital readmissions was lower than the national rate.

In 2014/15, the mental health readmission rate was 9.3% compared to the latest available national rate of 11.6%. The Alberta rate has declined slightly over the past three years.

Safety

Alberta Health Services is working to understand the issues related to patient and staff safety.

Of the over 4,800 events that were voluntarily reported through the Reporting and Learning System (RLS) for patient safety in 2014/15 on addiction and mental health units, 26% were categorized as problem types of *behaviour*, 24% as a *medication/IV error* and 21% as a *patient accident*.

Background & Purpose

There continues to be a need for greater accountability in health care in Canada. Clients, the public, political leaders and health professionals are all demanding evidence that health services and systems are providing safe, effective, efficient and quality care.⁴ In Alberta, Addiction and Mental Health Services are provided by many entities across the continuum of care including inpatient facilities, outpatient and community services, general practitioners, private psychiatrists and psychologists, as well as various service agencies. The present report addresses this call for evidence by providing a high level assessment of the performance of only Alberta Health Services' (AHS) addiction and mental health system.

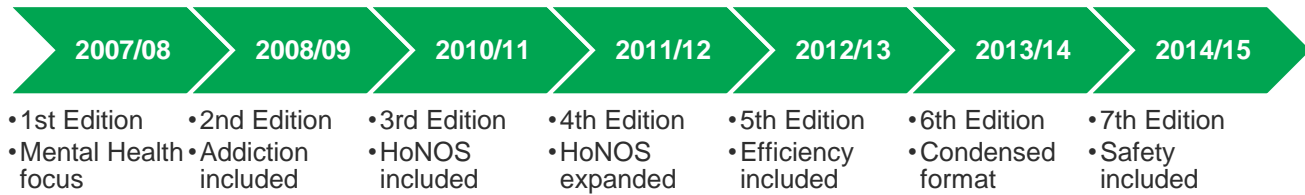
There have been six previous editions of this report (see Figure 1).

- The objective of the first *System Level Performance for Mental Health 2007/08* report was to increase the focus on measuring effectiveness and accountability of the mental health system. The *Performance Monitoring Framework for Alberta's Mental Health System*⁵ was used to guide the selection of specific measures for the report.
- In the 2008/09 edition, the same approach and guiding principles were applied; in addition, there was a purposeful expansion

to include information on the addiction treatment system.

- In 2010/11, the report attempted to strengthen the robustness of the results provided and focused on the four dimensions of accessibility, acceptability, appropriateness and effectiveness, including the addition of Health of the Nation Outcome Scales (HoNOS).
- The 2011/12 edition focused on the same dimensions as the previous report with an expansion of HoNOS outcome reporting.
- In the 2012/13 edition, the dimension of efficiency was included in the report.
- The 2013/14 edition had a change in format to be shorter in response to feedback from stakeholders regarding the need for more timely information. The condensed format of the report remained in line with its primary purpose of accountability, high level performance and transparency.
- The 2014/15 edition maintains the condensed format of the previous report, includes the addition of the safety domain and marks the first year that all six quality domains are included. In this report, addiction services results are integrated into appropriate AMH service areas rather than reported as a separate service category.

Figure 1: Changes in Reporting on the Performance of the Addiction and Mental Health System in Alberta Health Services



Collaborative Effort

The development of this report is a collaborative effort of key stakeholders in the area of addiction and mental health across Alberta Health Services (AHS). The efforts to produce this report embody AHS' core values of respect and engagement. A key impetus for the need and content for this report has always been the feedback provided by addiction and mental health stakeholders.

Where possible, information was pulled from provincial data repositories or existing reporting mechanisms. In such cases, the burden of information collection was minimized, and consistent extraction of data was possible. When the information was not readily available, representatives from the five AHS zones (South, Calgary, Central, Edmonton and North) provided the relevant information from various local sources.

Aligns with Broader Strategy

The report continues to be published in response to strategic priorities designed to guide health care services in Alberta. The strategic direction set forth by Addiction and Mental Health (AMH), AHS and Alberta Health (AH)

highlight the importance of performance reporting. *Creating Connections: Alberta's Addiction and Mental Health Strategy*¹ identifies a need to implement a comprehensive system performance framework to monitor, evaluate and report on addiction and mental health outcomes, programs and services, including the six dimensions of quality (acceptability, accessibility, appropriateness, effectiveness, efficiency and safety).

AHS' most recent *Health Plan and Business Plan, 2014-2017*² reiterates the need for accountability and outcome measurement through better quality, better outcomes and better value.

Further rationale for creating this report is to communicate performance results and facilitate knowledge exchange, as these are important components of a culture of evaluation, learning, growth and commitment to improvement. Moreover, the adage of "what gets measured gets changed" is a reminder to bring into focus those priority areas where change is desired.

The Alberta Quality Matrix for Health was used as a framework for reporting.³ In this report,

measures are presented for all six health quality domains (accessibility, acceptability, appropriateness, efficiency, effectiveness and safety). This approach ensures that the report focuses on a wide range of perspectives related to overall quality of the system.

This report can be accessed online:

<http://www.ahs.ca/amh/Page2773.aspx>

For more information or to obtain technical information (e.g., methods), contact Kathy Huebert at:

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Table 1 identifies the measures presented in this report.

Table 1: Measures Presented in the 2014/15 Performance of the Addiction and Mental Health System in Alberta Health Services Report

Health Quality Dimension	Measure	Description of Measure
Accessibility	Service utilization	<ul style="list-style-type: none"> Service volume and rate per 100,000 population for community and outpatient addiction and mental health services; mental health inpatient services, addiction residential and detoxification services; opioid dependency services; mental health telehealth; mental health emergency department services; mental health Health Link calls; and addiction and mental health beds.
	Wait times for services	<ul style="list-style-type: none"> Wait times for children and youth accessing community mental health services.
Acceptability	Client satisfaction	<ul style="list-style-type: none"> Client satisfaction with general community addiction and mental health services.
Appropriateness	Alternate Level of Care	<ul style="list-style-type: none"> Number of patients, diagnostic profile, bed equivalents, and days spent on Alternate Level of Care (ALC).
Efficiency	Actual compared to expected length of stay	<ul style="list-style-type: none"> Actual length of stay (ALOS) compared to expected length of stay (ELOS) for mental health clients in acute care. <ul style="list-style-type: none"> ALOS/ELOS ratio by disorder.
Effectiveness	Treatment outcomes	<ul style="list-style-type: none"> Problem severity ratings at admission and change in problem severity at discharge for adults and children/youth in crisis urgent, acute inpatient, community addiction and mental health and extended rehabilitation/support services.
	Hospital Readmissions	<ul style="list-style-type: none"> 30 day unplanned readmission rates for mental illness overall and by diagnosis. Proportion of clients visiting the emergency department for substance use and/or mental health problems following acute care discharge within 30 days.
Safety	Patient Safety	<ul style="list-style-type: none"> Type and outcome of incidents reported in the Reporting & Learning System for Patient Safety (RLS) system.

Accessibility

Health services are obtained in the most suitable setting in a reasonable time and distance.

—Health Quality Council of Alberta, 2005

Service Utilization

Alberta Health Services (AHS) Addiction and Mental Health (AMH) provides a continuum of services for people with addiction and/or mental health problems. These services include providing information, prevention and health promotion, and an array of treatment services. Also available are specialized programs that target key populations (e.g., youth, Aboriginal people, business and industry).

Although information was not available for all treatment settings accessed by Albertans, a substantial portion of the services provided were available for analyses in this report. These include:

Community and outpatient addiction and mental health services are offered across the province to help Albertans with addiction and mental health problems in urban and rural community clinics as well as hospital outpatient settings. Services include assessment, therapeutic interventions such as counselling and medication, outreach and day programs, and after care support. These services do not include overnight stays and can be provided by a multi-disciplinary team of therapists, psychiatrists, nurses and social workers.

Another term sometimes used for these services is ambulatory care.

In addition, opioid dependency services are offered in Edmonton and Calgary in an outpatient setting. These clinics provide opioid substitution treatment (i.e., methadone or buprenorphine to individuals dependent on opioid drugs).

Inpatient, residential and detoxification services are offered in facilities (e.g., acute care hospitals, psychiatric facilities and directly funded or contracted residential and detoxification treatment facilities) across the province. Services provide a safe environment for clients to stabilize and offer intensive counselling in a structured environment. Services are provided by a range of health care professionals to support complex needs. Admissions to these services include overnight stays.

Emergency department services are offered across the province. Emergency departments are a common point of entry for people with a mental health or substance use problem or patients with physical illness who have co-morbid psychological problems. These services

provide assessment and emergency medical care.

Mental health Telehealth services are province-wide services provided to clients/patients through the use of video conferencing technology.

Health Link services provides 24/7 telephone nurse advice and general health information, including mental health, for Albertans.

Monitoring service utilization is an important component for service planning. However, it is important to consider issues that impact capacity (e.g., staffing and facility issues). Knowing the number of individuals and services provided across the addiction and mental health continuum helps to inform program and resource planning as well as helping to define the burden of care for people affected with addiction and mental health problems in Alberta.

Measures

Service Utilization

- Service volumes (e.g., number of visits, enrolments, admissions, etc.) for the various addiction and mental health service types.
- Rate (unique individuals per 100,000 population) served by the various addiction and mental health service types.
- Number of AMH beds staffed and operated by AHS for the various bed types.

AMH provides a number of diverse services across the addiction and mental health continuum in Alberta. Technical challenges exist in the collection and reporting of data regarding services. In some portions of the continuum, standardized reporting is available and accessible. In other portions, consistent methods of quantifying service volumes are more difficult to report. For example, legacy systems may allow for the determination of number of visits to a service, while others may only allow for a count of enrolments.

As information systems become integrated, the ability to report consistent service volumes will evolve. Where reconciliation of service delivery processes is unavailable, counts of distinct individuals are provided to quantify the number of Albertans who receive services in particular areas of the continuum. Further, rates per 100,000 population are provided where possible to allow for comparison taking into account Alberta population. For more information or to obtain technical information on methods, please contact Kathy Huebert at:

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Key Results

- Since 2011/12, the number of AMH beds staffed and operated by AHS has increased (see Table 2).
- Over the past five years, trends in service volume have varied by service type (see Table 3 to Table 6).

- Service utilization increased for mental health Telehealth, Health Link, mental health community/outpatient, mental health emergency department services, mental health inpatient acute care services, mental health inpatient psychiatric facilities, direct detoxification services and opioid dependency services (though the rate of individuals per 100,000 population remained stable).
- Service volume in contracted detoxification services fluctuated while directly funded addiction residential services and contracted addiction residential services remained stable.
- The service volume for children receiving community mental health services has increased steadily since 2009/10 (see Figure 2 in Wait Times section).

Table 2: AHS Reported AMH Beds Staffed and in Operation 2011/12 to 2014/15

Bed type	2011/12	2012/13	2013/14	2014/15
Addiction	802	810	855	883
Community Mental Health	522	539	579	601
Standalone Psychiatric	918	978	967	955
Acute Care Psychiatric	631	624	646	660
Total	2,873	2,951	3,047	3,099

Table 3: Total Service Volume and Rate (Unique Individuals Served per 100,000 Population) for Emergency Department, Alberta, 2010/11 to 2014/15

Service Type		2010/11	2011/12	2012/13	2013/14	2014/15
ED – Mental Health	Visits	72,532	80,233	84,604	90,703	94,946
	Rate (individuals per 100,000)	1,328	1,434	1,448	1,485	1,498

Table 4: Total Service Volume and Rate (Calls, Clients per 100,000 Population) for Mental Health Technology Based Services and Interventions, Alberta 2010/11 to 2014/15

Service Type		2010/11	2011/12	2012/13	2013/14	2014/15
Calls to 408-LINK using Mental Health protocols	Calls	11,189	11,381	11,452	13,151	13,484
	Rate (Calls per 100,000)	300	300	294	328	327
Mental Health Telehealth	Clients*	**3,637	**5,015	5,899	6,456	7,830
	Rate (Clients per 100,000)	97	132	152	161	190

*Clients may be counted more than once.

** Protection of Children Abusing Drugs program is not included in 2010/11 and 2011/12.

Table 5: Total Service Volume and Rate (Unique Individuals Served per 100,000 Populations) for Community/Outpatient Addiction and Mental Health by Service Type, Alberta, 2010/11 to 2014/15

Service Type		2010/11	2011/12	2012/13	2013/14	2014/15
Addiction Community	Visits	153,544	165,400	157,159	151,829	*140,918
	Rate (individuals per 100,000)	970	968	920	891	838
Mental Health Community/Outpatient	Individuals**	96,667	99,253	101,537	102,877	104,696
	Rate (individuals per 100,000)	2,590	2,619	2,611	2,567	2,540
Opioid Dependency Program	Enrolments	392	344	403	374	579
	Rate (individuals per 100,000)	37	35	34	34	35

* During the 2014/15 fiscal year, select Edmonton addiction clinics transitioned information systems in a phased manner. When clinics transitioned systems, data regarding visits were no longer available. This means the 2014/15 results are a conservative estimate of the number of visits for this fiscal year. Reporting from the new system (related to number of visits) is expected to be available starting 2015/16.

** Number of individuals reflects clients who accessed at least one mental health community or outpatient clinic within the fiscal year.

Table 6: Total Service Volume and Rate (Number of Unique Individuals Served per 100,000 Population) for Inpatient, Residential & Detoxification by Service Type, Alberta, 2010/11 to 2014/15

Service Type		2010/11	2011/12	2012/13	2013/14	2014/15
Mental Health Inpatient Acute Care Sites	Discharges	18,649	19,278	19,955	21,008	21,429
	Rate (individuals per 100,000)	391	396	401	409	405
Mental Health Inpatient Psychiatric facilities	Discharges	3,415	3,330	3,592	4,010	4,151
	Rate (individuals per 100,000)	79	76	79	86	86
Addiction Direct Residential	Admissions	2,227	2,219	2,246	2,269	2,316
	Rate (individuals per 100,000)	55	56	57	60	63
Addiction Contracted Residential	Admissions	2,933	2,920	2,861	2,698	2,698
	Rate (individuals per 100,000)	79	78	78	71	Not available
Addiction Direct Detoxification	Admissions	6,789	7,618	7,813	7,709	8,807
	Rate (individuals per 100,000)	93	103	113	120	168
Addiction Contracted Detoxification	Admissions	4,544	4,127	4,149	3,246	4,203
	Rate (individuals per 100,000)	102	95	94	79	Not available

Wait Times for Services

Providing uninterrupted service and minimizing delays are key components of an accessible health care system. Prompt intervention can avert crises and prevent the need for more intensive forms of care. Delays in service can have deleterious effects for people with addiction and mental illness and their families. Wait times are an important measure of service access.⁶

Wait times may be measured for different service types and for different age brackets. Children's (aged 0-17) wait times are reported in alignment with Alberta Health Services (AHS) addiction and mental health performance measures.

Measures

Wait Times

- Proportion of children (aged 0-17) who were offered scheduled level community mental health services within 30 days.
- Proportion of children (aged 0-17) who received scheduled level community mental health services within 30 days.
- Proportion of children (aged 0-17) who received community addiction services.

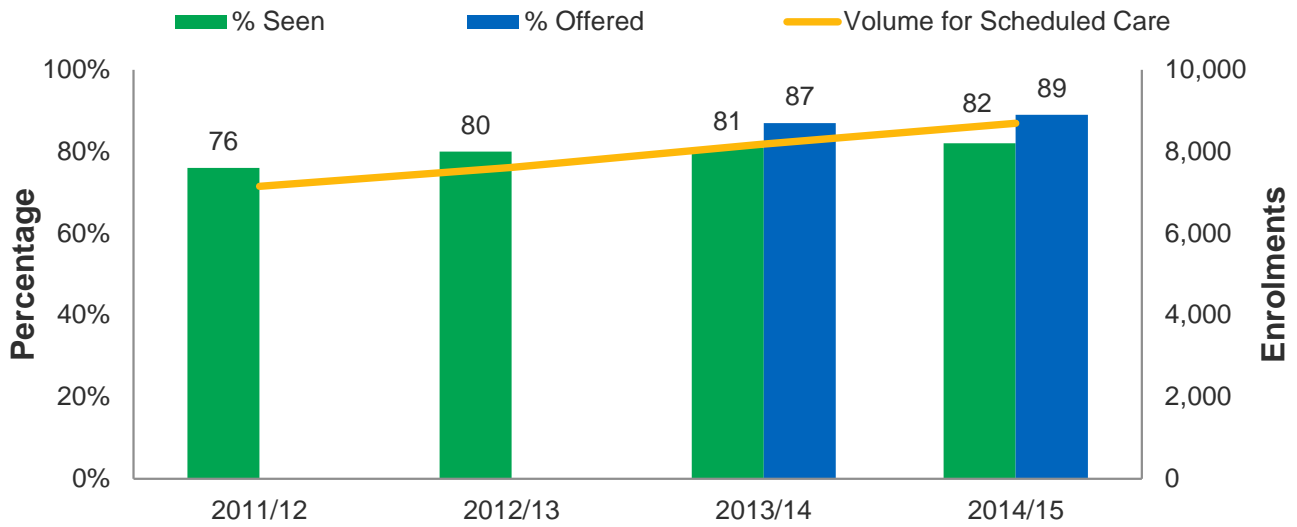
Reporting on wait time includes measures of both the proportion of children offered services within 30 days and the proportion who received services within 30 days.⁷ The proportion of children offered services within 30 days (% offered) was calculated as the difference

between service request and first appointment offered; this wait time reflects the ability of the system to offer treatment. The proportion of children who received services within 30 days (% seen) was calculated based on the difference between service request and first appointment received; this wait time factors in client scheduling needs. In this report, both measures are reported for scheduled level community mental health services. Only the proportion of children who received service within 30 days is reported for community addiction services.

Key Results

- As shown in Figure 2, in 2014/15 a greater proportion of children (89%) were offered scheduled community mental health services within 30 days (% offered) compared to the proportion of clients (82%) who received services within 30 days (% seen).
- Figure 2 also reveals that the proportion of children who received care within 30 days improved from 76% in 2011/12 to 82% in 2014/15 (based on the % seen method).
- Despite increases in service volume (orange line in Figure 2), median wait times decreased by one day in 2014/15 (13 days based on % seen method). As a benchmark, the Canadian Psychological Association suggests access to scheduled level of care service should occur within 4 weeks.⁸

Figure 2: Wait Times and Service Volume (Number of Enrolments) for Children Receiving Scheduled Community Mental Health Services in Alberta, 2011/12 to 2014/15



Note:

- Wait times were specific to youth enrolled in community services and did not capture wait times from other areas of the service continuum (such as cases from select outpatient areas, speciality services, inpatient facilities, general practitioners, private psychiatrists/psychologists, and contracted service agencies).

- In 2014/15, the proportion of youth who received community *addiction* services within 30 days was 96%. The proportion has remained stable since 2005/06.

In 2014/15, 89% of children were offered an appointment within 30 days of their initial request to receive scheduled community mental health services. Access to services has improved since 2011/12 while service demand has been increasing over this time.

Acceptability

Health services are respectful and responsive to user needs, preferences and experiences.

—Health Quality Council of Alberta, 2005

Satisfaction with Services

How clients experience the care they receive is a central dimension of service quality.

Understanding satisfaction can provide insight into how well services are working, client-service provider relations, and appropriateness of the treatment environment. Gaining insight into client experience is important in carrying out Alberta Health Services' (AHS) mission of providing client-centred care. It follows that client experience and satisfaction are integral to AHS Addiction and Mental Health (AMH).¹

Measures

Client Satisfaction

- Proportion of adult clients satisfied with

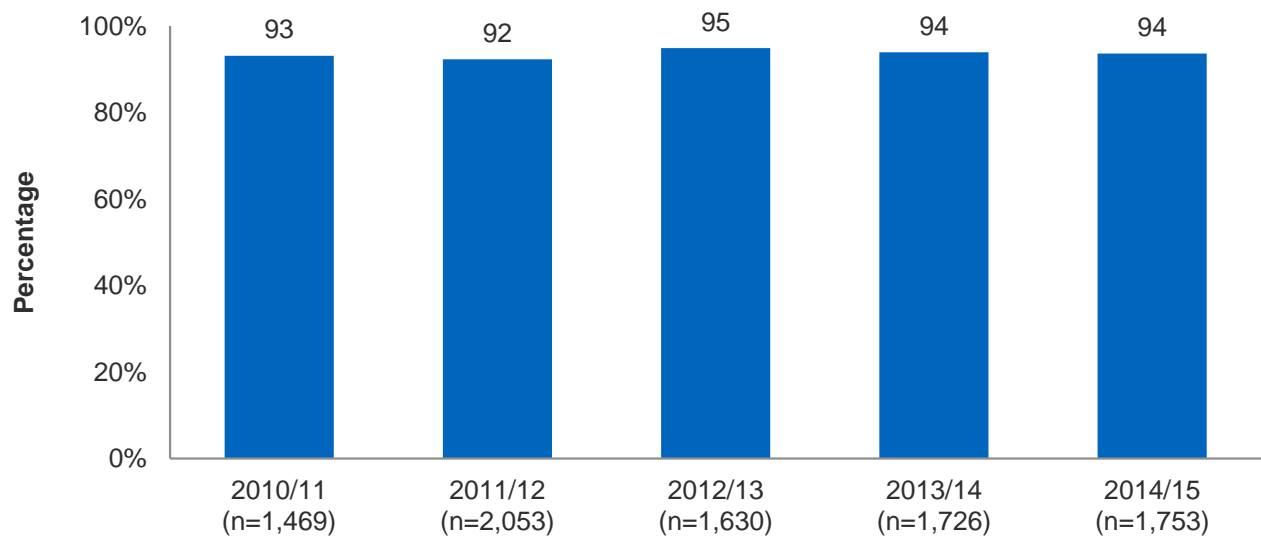
community addiction and mental health services received.

Key Results

Overall Client Satisfaction

- In 2014/15, 94% (n = 1,640 of 1,753) of clients receiving community addiction and mental health services reported being either “mostly satisfied” or “delighted/very satisfied” when asked how satisfied they were with the service.
- Satisfaction levels have been consistently high for the past five years, ranging from 92% to 95% satisfied.

Figure 3: Clients Satisfaction with General Community Addiction and Mental Health Services Received, 2010/11 to 2014/15



In 2014/15, 94% of clients receiving community AMH services were satisfied with the service they received. (see Figure 3).

Qualitative Client Feedback

Open-ended responses provided further insight into client experience. Of the 1,753 clients who participated in the 2014/15 survey, 1,352 provided a response to the question, 'The thing I liked best about my experience is/ What do you think has worked well in this program?' Major themes were:

- **Accessibility of service:** Clients appreciated that the service was available, free of charge and able to accommodate their schedules, as well as its location.
- **Staff knowledge and compassion:** Clients appreciated staff's knowledge and skills, their friendly, respectful and professional manner and their level of caring.

"I know I am safe and cared about here. I can say anything and not feel embarrassed or demeaned. I always come out from here with a new way to look at things or cope with my concerns. Thank you."

~Client Quote

- **Therapeutic environment:** Clients liked that the physical and psychological environment was safe, welcoming and non-judgmental.
- **Effectiveness of treatment:** Clients appreciated their improvement in health, including gaining insight into their life and receiving tools to improve their situation.

Clients were also asked 'What would you like to change about the service?' In total, 873 clients responded. A common response was a positive endorsement of the service or to indicate no changes were needed. Other themes included:

- **Availability and duration of treatment:** Clients commented there were long wait-times, not enough appointments offered or they were too short, and certain types of staff were not available (e.g., psychiatrists).
- **Treatment Environment:** Clients indicated several areas of the physical treatment environment could be improved (e.g., more comfortable furniture). Clients suggested providing coffee, food, free/more parking.
- **Enhance treatment scope and resources:** Clients asked for more or improved treatment resources (e.g., reading materials) and suggested increasing the amount/types of programs (e.g., for specific diagnoses) available.

"Just the amount of time between visits. Sometimes two weeks is a long time."

~Client Quote

Appropriateness

Health services are relevant to user needs and are based on accepted or evidence-based practice.

—Health Quality Council of Alberta, 2005

Alternative Level of Care

Alternate Level of Care (ALC) occurs when a patient who is occupying an inpatient bed does not require the intensity of resource/services in this setting (acute, complex continuing care, mental health or rehabilitation). A patient is on ALC when care needs and goals have been met and progress has reached a plateau in that level of care. The results were limited to patients in adult acute inpatient psychiatric units.

Measures

Alternate Level of Care

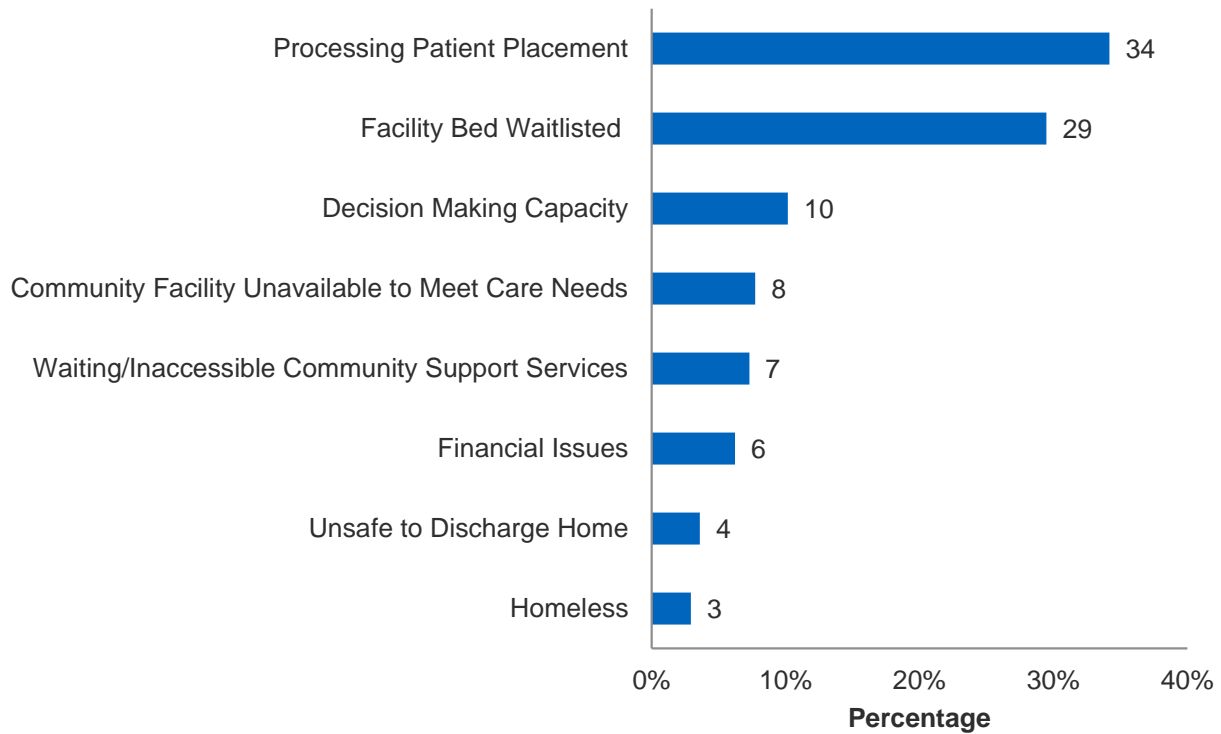
- Number of distinct mental health patients on ALC from adult acute inpatient psychiatric units.
- Total days patients are on ALC and number of bed equivalents among patients receiving mental health services in adult acute inpatient psychiatric units.
- Reasons for ALC among patients receiving mental health services in adult acute inpatient psychiatric units.
- Diagnostic profile of mental health patients on ALC from adult acute inpatient psychiatric units.

Slightly more than half of patients were on ALC for two weeks or less before being discharged.

Key Results

- In 2014/15, there were 1,238 patients who spent at least one day on ALC in an adult acute inpatient psychiatric unit.
- Across the province, 15.2% of available bed days on adult acute inpatient psychiatric units were occupied by patients who were ALC. More than 60% of ALC bed days were spent processing patient placement or waiting for placement in a facility, 34% and 29% respectively (see Figure 4).
- The total number of bed days used by adult acute inpatient patients requiring ALC in 2014/15 was 52,065; this equates to approximately 150 bed equivalents (at 95% occupancy).
- At time of discharge, 41% of ALC patients were diagnosed with schizophrenia or other psychotic disorders and 27% diagnosed with mood disorders.

Figure 4: Percent of Alternate Level of Care Days by Reason for Occupying Beds, Adult Acute Inpatient Psychiatric Units, 2014/15



Note:

- “Processing Patient Placement” includes administrative processes and clinical assessment which determine where a patient is placed. Many of these processes require a patient to be ready for discharge in order to match patient functionality to the appropriate placement setting.

In 2014/15, 15.2% of available bed days on adult acute inpatient psychiatric units were occupied by patients who were ALC. More than 60% of ALC bed days were spent processing patient placement or waiting for placement in a facility.

Efficiency

Resources are optimally used in achieving desired outcomes.

—Health Quality Council of Alberta, 2005

Length of Stay in Acute Care Hospitals for Mental Health Patients

Acute hospital care is an intensive service that accounts for a large proportion of Addiction and Mental Health (AMH) expenditures. Ensuring efficient use of available acute care hospital beds is important to the sustainability of the entire AMH service system. Actual length of stay (ALOS) compared to expected length of stay (ELOS) can be used to gauge if patients are staying in hospital longer than needed and measure the efficiency of bed utilization in acute care hospitals caring for patients with mental health disorders. An ALOS/ELOS ratio of 1.0 would suggest patients stay in hospital as long as expected.⁹

The results were limited to acute care hospitals (with and without psychiatric beds) and excluded provincial psychiatric facilities (e.g., The Centennial Centre for Mental Health and Brain Injury) as well as rehabilitation hospitals (e.g., Glenrose Rehabilitation Hospital). Rural hospitals are included in the ratios. ALOS was limited to the acute care phase of patient's stay in hospital and excluded any days spent on alternate level of care (ALC).

Measure

ALOS/ELOS Ratio

- Ratio of actual length of stay (number of bed days) in acute care hospitals compared to expected length of stay for patients with mental health disorders. (Measure does not differentiate between psychiatric unit and off-service bed use by patients with mental health disorders).

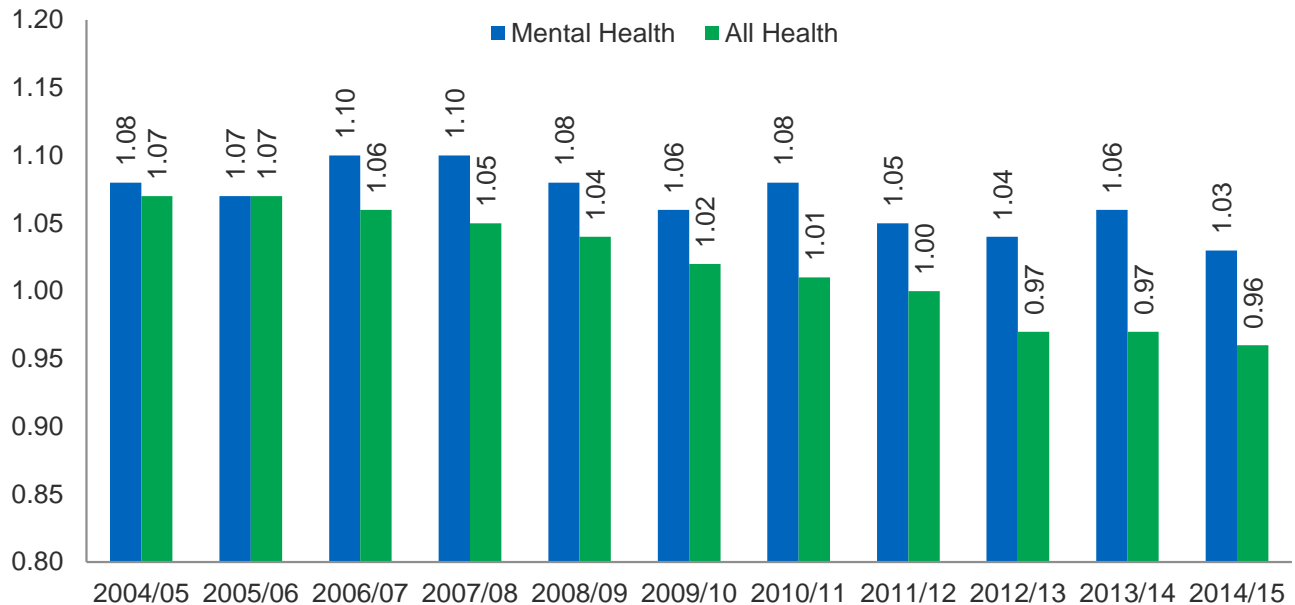
Key Results

- In 2014/15, Alberta's ALOS/ELOS ratio for patients treated in acute care hospitals with a mental health disorder was 1.03 indicating hospital stays longer than expected (see Figure 5).
 - In comparison, the ratio for all patients in acute care hospitals in Alberta for any health condition was 0.96 (see Figure 5).

Alberta's ALOS/ELOS ratio for patients with mental health disorders was 1.03 in 2014/15. If this ratio was reduced to one, 5,352 bed days or the equivalent of 17 beds would be available to treat other patients.

- For hospitals with psychiatric beds the ALOS/ELOS ratio is greater (1.07) than for all hospitals (with and without psychiatric beds). It is not currently possible to report ALOS/ELOS ratio at the unit level. Results include patients who were discharged from psychiatric units and patients discharged from general/ medical units where applicable (with a most responsible diagnosis of a mental health disorder).
 - It is possible to report based on most responsible physician services; services provided by a psychiatrist are almost exclusively provided in units with psychiatric beds. The ALOS/ELOS ratio for mental health patients receiving psychiatrist services as the most responsible provider in hospital was 1.13.
- In Alberta, the ALOS/ELOS ratio for patients with mental health disorders has consistently been greater than 1.0 for the last 10 years. As well, the mental health ALOS/ELOS ratio has been greater than that for any health condition consistently since 2006/07 (see Figure 5).
- The mental health ALOS/ELOS ratio was above 1.0 for anxiety disorders, adjustment disorders, mood disorders and personality disorders (see Figure 6).
- When treated in hospitals without psychiatric beds, mental health patients generally had a lower ALOS/ELOS ratio (0.84) than those treated in hospitals with psychiatric beds (1.07). A possible reason for this may be due to these units not having capacity to manage clients requiring more acute psychiatric care and, as a result, referring them to more appropriate settings.
- In 2014/15, across the province 15,476 discharges met the criteria for inclusion in the mental health ALOS/ELOS ratio. The difference in bed days for ALOS compared to ELOS was 5,352 days (17 beds over the year).

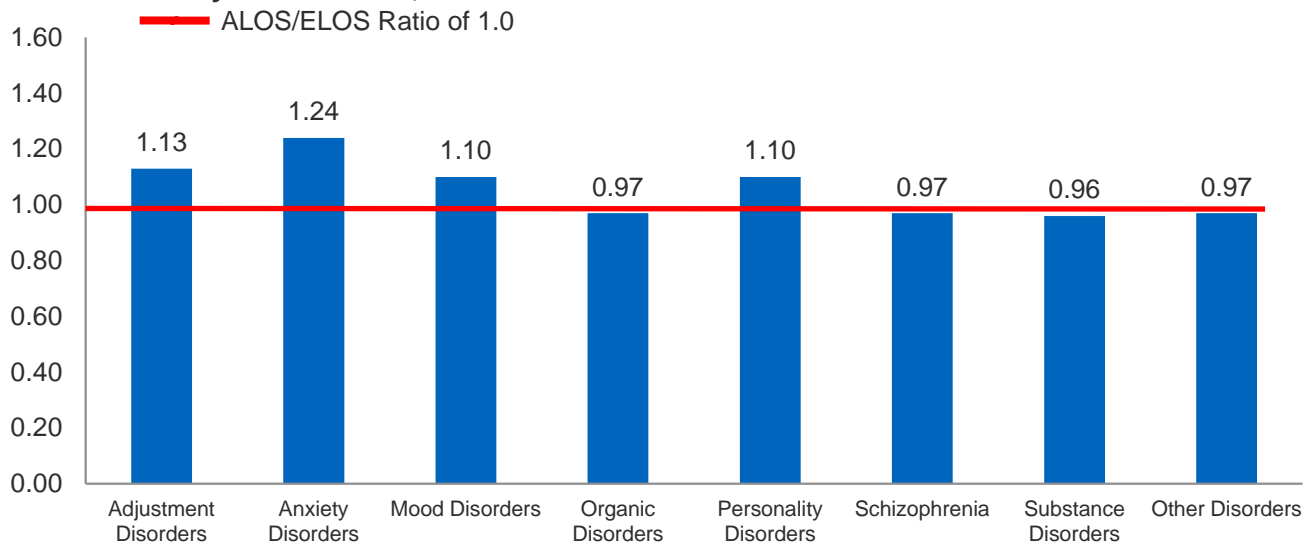
Figure 5: ALOS/ELOS Ratios, Acute Care Hospitals with and without Psychiatric Beds, 2004/05 to 2014/15



Note:

- ◆ Data in Tableau were updated and clinical categories were regrouped; therefore, ratios are slightly different from those previously reported.

Figure 6: ALOS/ELOS Ratios by Mental Health Diagnostic Category, Acute Care Hospitals with and without Psychiatric Beds, 2014/15



Effectiveness

Health services are provided based on scientific knowledge to achieve desired outcomes.

—Health Quality Council of Alberta, 2005

Treatment Outcomes

Treatment outcomes show the level of benefit for clients from the care provided. The Health of the Nation Outcome Scales (HoNOS) is a tool that measures treatment outcomes at a client, program and system level for adults and the Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA) does the same for children and adolescents.

Overall severity can be obtained by summing the score across scales; however, a derived measure (Index of Severity) is more clinically meaningful because it accounts for the frequency at which greater symptom severity is reported across the HoNOS/HoNOSCA items.¹⁰

Measures

Admission Profile

- Proportion of clients with moderate-to-severe Index of Severity ratings at admission for adults and children/youth, by area of service.

Treatment Outcomes

- Proportion of clients showing improvement in Index of Severity ratings from admission to discharge for adults and children/youth by area of service.

Key Results

Admission and discharge completion rates for 2014/15 are not available at this time. However, in 2013/14, of admissions to addiction and mental health services an estimated 59% had a completed HoNOS or HoNOSCA rating. Of discharges, an estimated 43% had a completed HoNOS or HoNOSCA rating.

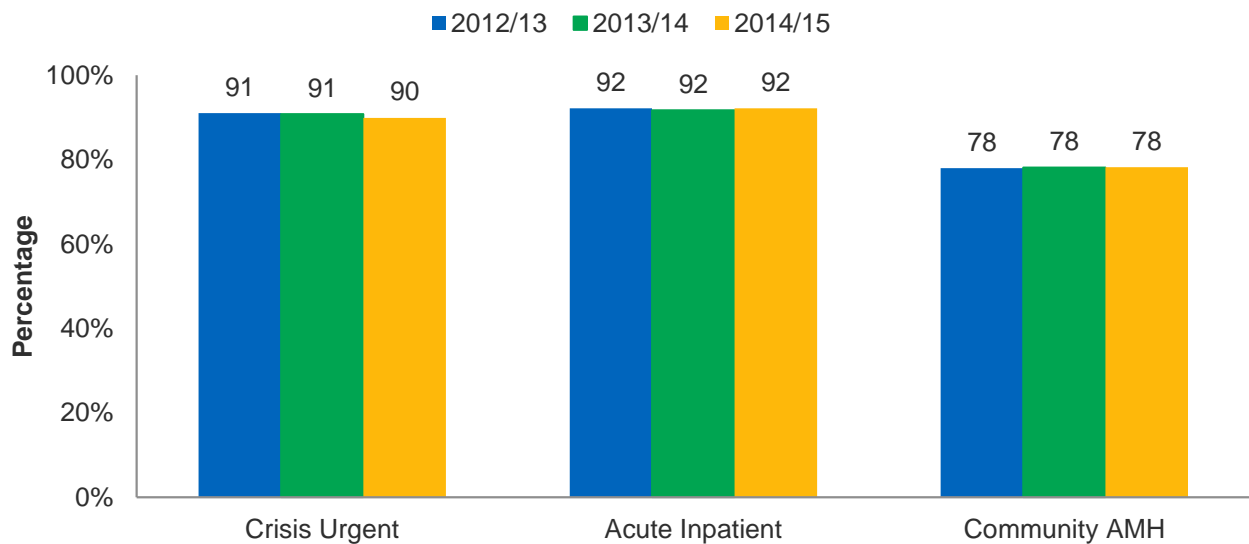
Unlike previous versions of this report, addiction services are integrated into different service areas rather than reported as a separate service category. Detoxification services are included with crisis urgent services, outpatient and opioid dependency services are included in the community addiction and mental health services. Specialty and general community mental health services have also been combined into the 'community AMH' service area.

In 2014/15, clients entering AMH services had a high degree of acuity with 84% of adults and 89% of children and youth rated as having moderate-to-severe problems.

Admission Profile

- Overall, clients entering addiction and mental health services have a high degree of acuity with 84% of adults and 89% of children/youth rated as having moderate-to-severe problems in 2014/15 on the HoNOS/HoNOSCA.
 - Admission acuity varied by area of service with acute inpatient and crisis urgent services having the highest proportion of clients with moderate-to-severe problems.
- The level of admission acuity for a given service area was generally consistent for adults and children/youth over the past three fiscal years (see Figure 7 and Figure 8).
- In total 124,037 HoNOS forms and 30,342 HoNOSCA forms were completed at admission between 2012/13 and 2014/15.

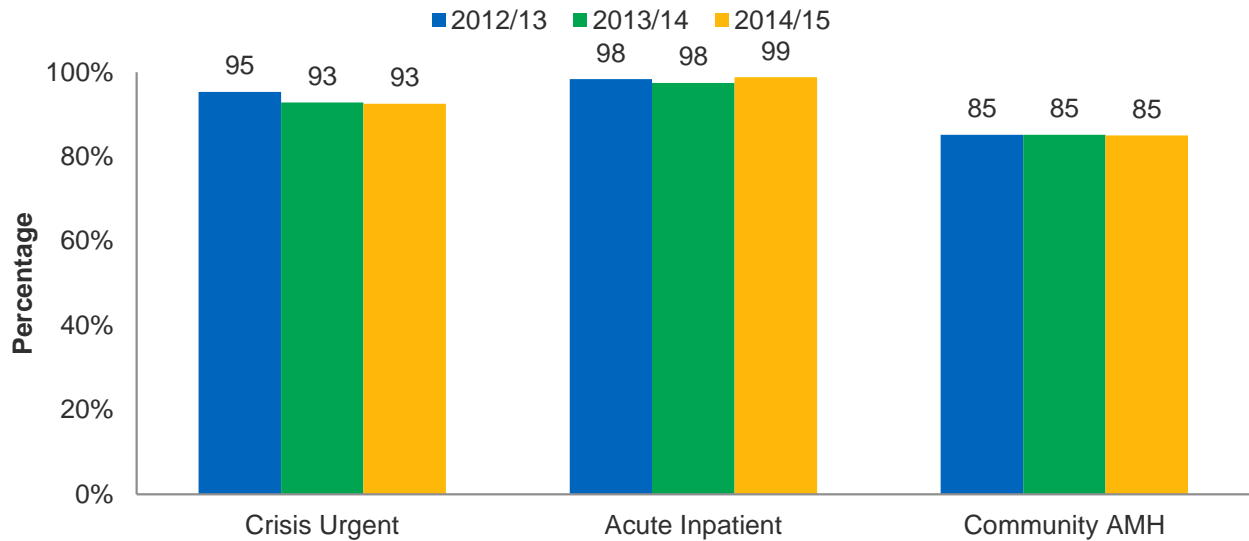
Figure 7: Percent of Adults with Moderate-to-Severe Problems Measured by HoNOS at Admission by Area of Service, 2012/13 to 2014/15



Notes:

- Results include data from North, Edmonton and Calgary zones. Acute inpatient services do not include any data from the North Zone.
- Addiction services data from the Edmonton Zone was not available in 2012/13 fiscal year.
- HoNOS and HoNOSCA forms from the Edmonton Zone that were entered into E-Clinician in 2014/15 were not available for this report.

Figure 8: Percent of Children/Youth with Moderate-to-Severe Problems Measured by HoNOSCA at Admission by Area of Service, 2012/13 to 2014/15



Notes:

- ♦ Results include data from North, Edmonton and Calgary zones. Acute inpatient services do not include any data from the North Zone.
- ♦ Addiction services data from the Edmonton Zone was not available in 2012/13 fiscal year.
- ♦ HoNOS and HoNOSCA forms from the Edmonton Zone that were entered into E-Clinician in 2014/15 were not available for this report.

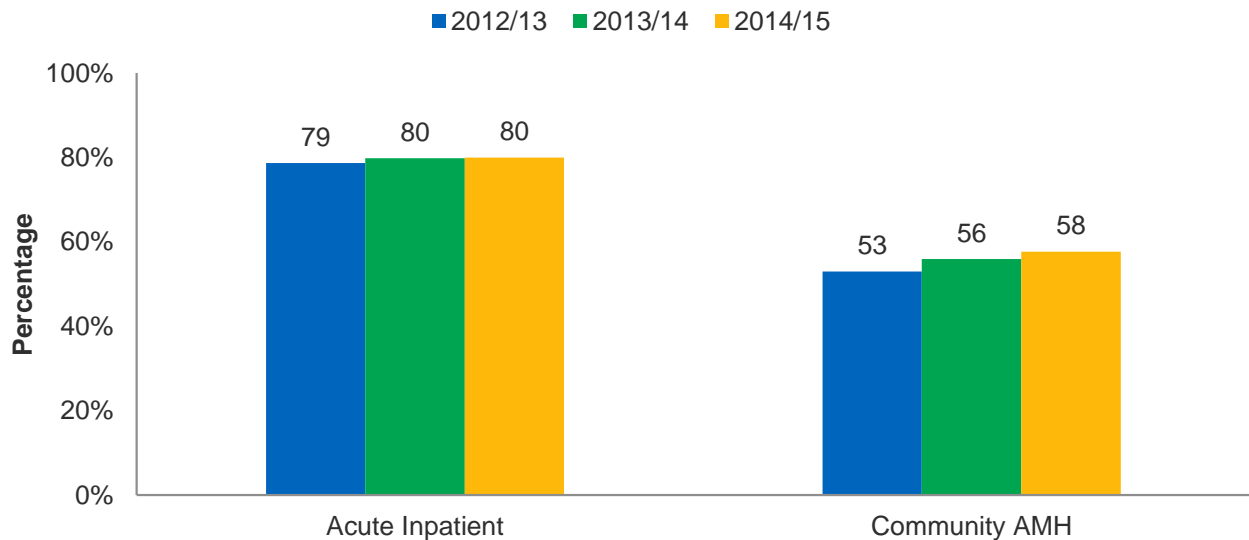
Treatment Outcomes

- Overall, a significant proportion of clients receiving addiction and mental health services improved in problem severity (Index of Severity) as a result of care, as measured by the HoNOS/HoNOSCA.
 - Between 2012/13 and 2014/15, there were 31,957 admission – discharge pairs for HoNOS and 12,447 pairs for HoNOSCA.
 - For adults, the pairing completion rate for crisis urgent services was low, hence results have been suppressed.
 - Most adults improved following care received in acute inpatient services (80%). Just over half of adults treated in community addiction and mental health services (58%) showed improvement at discharge in 2014/15 (see Figure 9).
 - Over the past three fiscal years, this pattern of improvement has remained consistent across all service areas (see Figure 9).
 - The pattern of improvement for children/youth differs from adults. Of the three service areas highlighted in this report, the greatest proportion of improvement occurred in community addiction and mental health services (68%).

- There was variability in patterns of improvement across the three fiscal years in most service areas for children/youth. The greatest year-to-year fluctuation is observed in crisis urgent services where the proportion of clients improving at discharge dropped from 54% in 2012/13 to 43% in 2014/15 (see Figure 10).

Over the past three fiscal years, differences in patterns of improvement were noted for adults and children/youth. The greatest proportion of adults showed improvement in acute inpatient settings and children/youth in community addiction and mental health AMH settings.

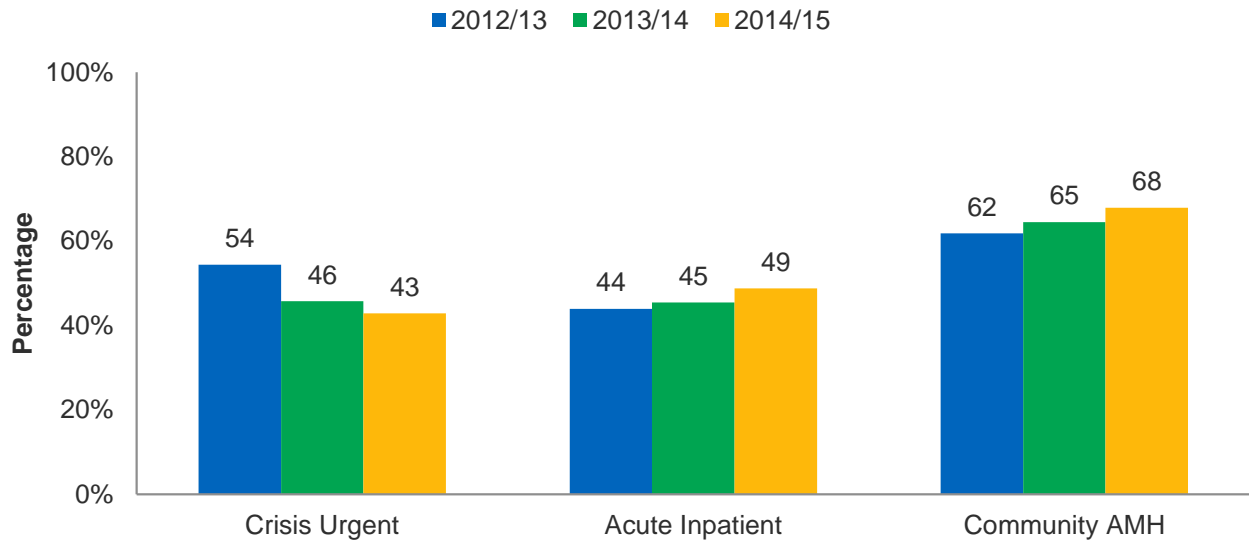
Figure 9: Percent of Adults who Improved in Problem Severity Measured by HoNOS from Admission to Discharge by Service Cluster, 2012/13 to 2014/15*



Notes:

- Results include data from North, Edmonton and Calgary zones. Acute inpatient services do not include any data from the North Zone.
- Addiction services data from the Edmonton Zone was not available in 2012/13 fiscal year.
- HoNOS and HoNOSCA forms from the Edmonton Zone that were entered into E-Clinician in 2014/15 were not available for this report.
- Results for crisis urgent services were excluded because the rate of admissions with a paired discharge was 1% or less.

Figure 10: Percent of Children/Youth who Improved in Problem Severity from Admission to Discharge by Service Cluster, 2012/13 to 2014/15



Notes:

- Results include data from North, Edmonton and Calgary zones. Acute inpatient services do not include any data from the North Zone.
- Addiction services data from the Edmonton Zone was not available in 2012/13 fiscal year.
- HoNOS and HoNOSCA forms from the Edmonton Zone that were entered into E-Clinician in 2014/15 were not available for this report.

Mental Health Readmissions and Post-Hospitalization ED Visits

Inpatient psychiatric services are designed to stabilize patients who are in crisis or experiencing acute symptoms. Unplanned hospital readmissions and subsequent emergency department (ED) visits can be a measure of the effectiveness of follow-up services and community care, the appropriateness of the client's discharge, and the adequacy of support patients received when transitioning from hospital to community. Repeat hospital admissions are costly and can indicate deficiencies in the coordination of care.¹¹

The results were limited to acute care hospitals (with and without psychiatric beds) and excluded provincial psychiatric facilities (e.g., The Centennial Centre for Mental Health and Brain Injury) as well as rehabilitation hospitals (e.g., Glenrose Rehabilitation Hospital).

Measures

Mental Health Readmission

- Proportion of patients with an unplanned (non-elective) readmission to hospital within 30 days of discharge from a hospital stay for which most responsible diagnosis was mental illness. Excludes transfers.

Post-Hospitalization ED Visits

- Proportion of patients with mental health disorders visiting an ED within 30 days of discharge from hospital.

Key Results

Mental Health Readmission

- In 2014/15, the 30 day mental health readmission rate was 9.3% in Alberta. This is below the latest available national average of 11.6% in 2011/12. Mental health readmission rates have been stable for the past five years (see Figure 11).
- Clients with a personality disorder and substance related disorder as their primary diagnosis have a higher readmission rate (12% and 10.9%) compared to the overall provincial rate (9.3%) for all mental health disorder (see Figure 12). Across Canada, readmission rates for personality disorder and schizophrenia were higher than the Canadian average.¹²
- Clients with substance related disorders, mood disorders, and schizophrenia accounted for 80.5% of the clients readmitted to hospital within 30 days (unplanned).

Post-Hospitalization ED Visits

- Across Alberta, 17.5% of clients discharged from hospital with a primary mental health diagnosis accessed the ED within 30 days of leaving the hospital. This is comparable to what has been reported in other jurisdictions.¹³
- The rate of post-hospitalization ED visits peaked in 2012/13 and has since slightly decreased (see Figure 11).

Figure 11: 30 Day Mental Health Hospital Readmissions and Post-Hospitalization ED Visits, 2010/2011 to 2014/2015

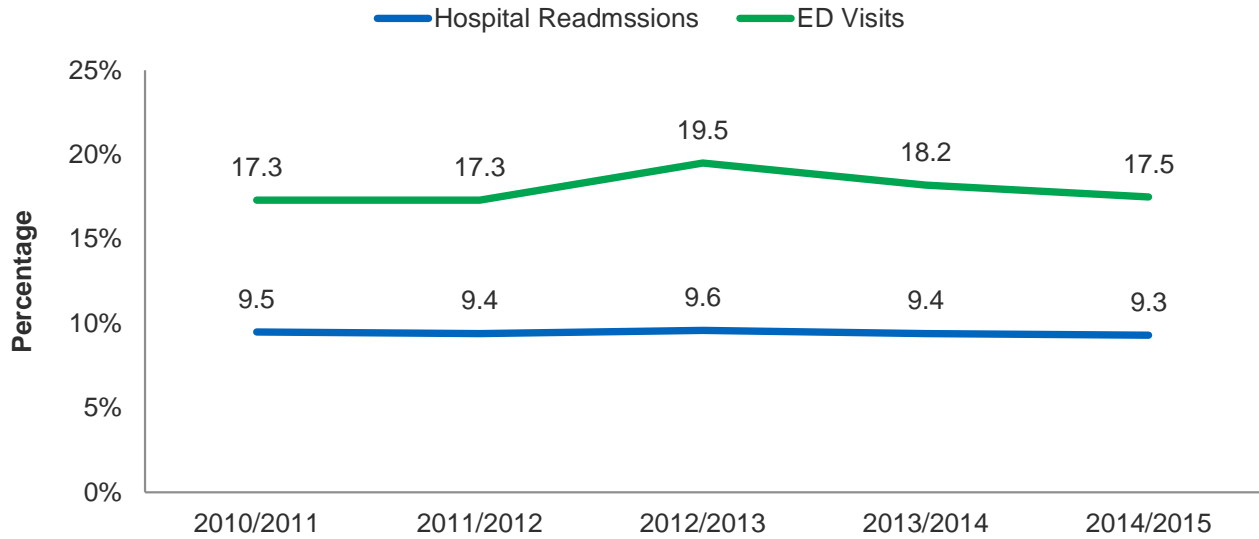
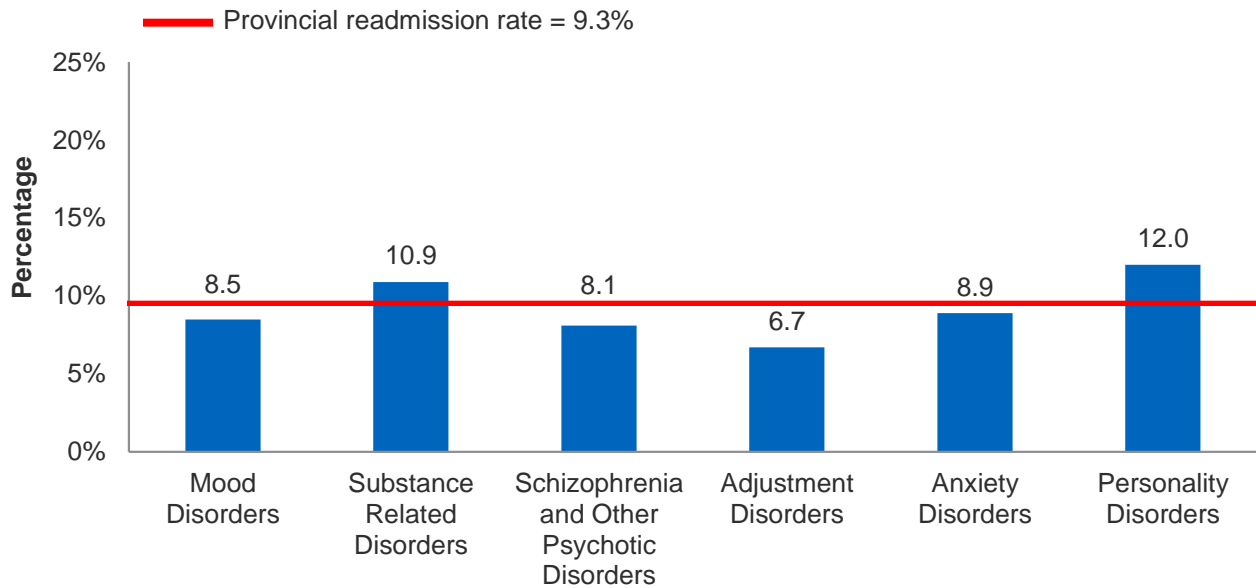


Figure 12: Comparison of Readmission Rates by Diagnosis, Alberta, 2014/15



Safety

Mitigate risks to avoid unintended or harmful results.

—Health Quality Council of Alberta, 2005

Patient Safety

Enhancing safe and healthy patient care and work environments, preventing mistakes and close calls, and supporting continuous quality and safety improvement is a focus of Alberta Health Services (AHS). In 2012, the *Reporting of Clinical Adverse Events, Close Calls and Hazards Policy* was implemented across AHS. To mitigate risks and avoid harm, it is important to monitor adverse incidents that occur and to use this information to make care safer.

In order to consistently report these events, the Reporting and Learning System for Patient Safety (RLS) was introduced. This system is in place across all AHS hospitals, psychiatric facilities and community services in Alberta. The RLS is intended to enable and support AHS's commitment to developing a safety culture. It is a way for all practitioners to voluntarily report events that concern patient safety.

Important patient safety risk factors on addiction and mental health units include: aggression, self-harm, absconding or elopement, use of seclusion and restraints, as well as searching for and removing contraband items.

Measures

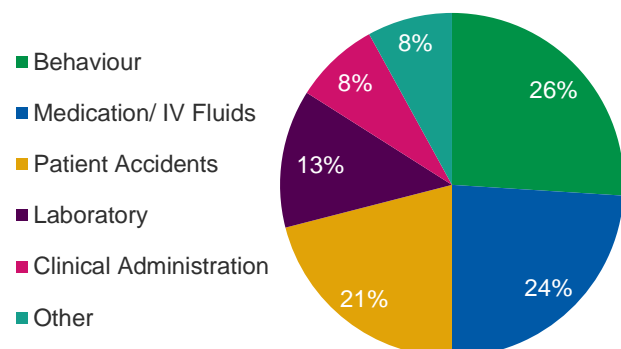
Types of Incidents

- Types of incidents reported in the RLS system on addiction and mental health units.

Key Results

- Of the over 4,800 events that were voluntarily reported in RLS in 2014/15 on addiction and mental health units, 26% were categorized as problem types of *behaviour*, 24% as a *medication/IV error* and 21% as a *patient accident* (see Figure 13)

Figure 13: Reported Event Types, Addiction and Mental Health Units, 2014/15



Note:

- “Other” includes a variety of event types such as “documentation”, “clinical process/ procedure”, “medical device” etc. occurring at a low frequency, where a separate category is not warranted.

In order to understand what kind of events occurred within these problem type categories other than “*medication/IV error*,” an analysis of common incidents that occurred in the RLS system field “Description of what happened” showed the following:

- Falls accounted for 16% of the reported events regardless of the problem type category. For example, a fall could be categorized as a patient accident or as behaviour (if the fall was a result of a patient’s action).
- Elopement was referenced in 13% of the reported events.
- Most patients who eloped from addiction and mental health units had privileges that allowed them to leave the unit for specified amounts of time, many patients also waited for opportunities when the locked unit doors would be opened (e.g., shift change or visitors entering).
- On several occasions, patients returning from pass were found to have contraband items, such as alcohol or drugs.
- In the reported events, the use of restraints was involved in a minority of cases. Generally, if the incident involved an assault on a staff member, the patient was restrained either physically or chemically. Restraints were referenced in approximately 2% of the reported events.
- Some patients harmed themselves while on a pass or were found in the act of harming themselves on hospital grounds. Suicide attempts and ideation were referenced in approximately 4% of the reported events.
- Assaults, both physical and verbal, were referenced in 14% of the reported events. These may have occurred between patients and between patients and staff.
- In 98% of the reported events, regardless of the problem type, the severity was identified as “No apparent harm (67%) or minimal harm (31%).
- Reports are classified according to the primary problem for the patient at the time of the event. This can result in variability in classification. Similar incidents had different severity ratings and different event types. This suggests the application of standard definitions and an understanding of the terminology may be a benefit in future reporting.

AHS is working to understand the issues related to patient and staff safety. As the reporting of incidents becomes more robust, more knowledge will be gained on the unique safety risk factors for addiction and mental health patients.

Data Sources

Measure	Data Sources
Service utilization	<ul style="list-style-type: none"> Alberta Health, Interactive Health Data Application (http://www.ahw.gov.ab.ca/IHDA_Retrieval/), mid-year Population Estimates retrieved <ul style="list-style-type: none"> Note that rates of service use for addiction were based on the 12+ population and rates of service use for mental health were based on the 0+ population AHS Addiction System for Information and Service Tracking (ASIST) Data Research View for Treatment Service AHS ASIST Data Research View for Treatment Appointment AHS Service Tracking & Outcomes Reporting (STOR) Detox and Treatment Client Information Databases for Funded Agencies & Programs AHS Data Repository (AHSDDRX) (2015), National Ambulatory Care Reporting System (NACRS) AHS Data Repository (AHSDDRX) (2015), Discharge Abstract Database (DAD) AHS – Provincial Addiction & Mental Health. Alberta Regional Mental Health Information System (ARMHIS), standard data product 2010/11 – 2014/15 AHS – Provincial Addiction & Mental Health. Meditech, standard data product 2010/11 – 2014/15 Reported Beds Staffed & In Operation as of March 31, 2015 (https://my.albertahealthservices.ca/http://insite.albertahealthservices.ca/Corporate/com-m-corp-pub-bed-survey.pdf)
Wait times for services	<ul style="list-style-type: none"> Alberta Regional Mental Health Information System (ARMHIS), standard data product, 2010/11 – 2014/15 Meditech, standard data product, 2010/11 – 2014/15 Regional Access and Intake System (RAIS), Calgary zone, 2010/11 – 2014/15 AHS Addiction System for Information and Service Tracking (ASIST) Data Research View for Treatment Service
Client satisfaction	<ul style="list-style-type: none"> AHS Service Satisfaction Scale 10 (SSS-10) administration Addiction and Mental Health Client Experience Survey Administration
Alternate Level of Care	<ul style="list-style-type: none"> Medworxx Extract: 23 May 2015 (South Zone, Red Deer Regional, Edmonton Zone, Foothills Medical Centre, North Zone) SCM Extract: 05 April 2015 (Rockyview General, Peter Lougheed, South Health Campus) HDS Standard Data Extract: 23 May 2015 (Claresholm Centre MHA, Centennial Centre MHBI, St Therese) AHS Provincial Addiction & Mental Health, AHS Data Repository – Discharge Abstract Database (AHS_IP_DOCTOR_DX)
Actual compared to expected length of stay	<ul style="list-style-type: none"> Data Integration, Measurement and Reporting: Tableau Provincial Acute (Actual) Length of Stay Relative to Expected Length of Stay https://tableau.albertahealthservices.ca/views/ProvincialELOSvsALOSDashboard/ELOVsALOSTablesandGraphs#1
Treatment outcomes	<ul style="list-style-type: none"> Regional Mental Health Program HoNOS Rating (MHRATING) system, Edmonton Zone AHS HoNOS Database System (HDS), Provincial Addiction and Mental Health
Hospital Readmissions	<ul style="list-style-type: none"> AHS Data Repository (AHSDDRX), Discharge Abstract Database (2015). Extract received from Data Integration, Measurement and Reporting AHS Annual Performance Report 2014-15, internal correspondence with AHS Analytics
Patient Safety	<ul style="list-style-type: none"> Reporting and Learning System for Patient Safety

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- ¹³ Lin E, Diaz-Granados N, Stewart D E, Bierman A S. Postdischarge care for depression in Ontario. *The Canadian Journal of Psychiatry*. 2011; 56(8): 481–489.