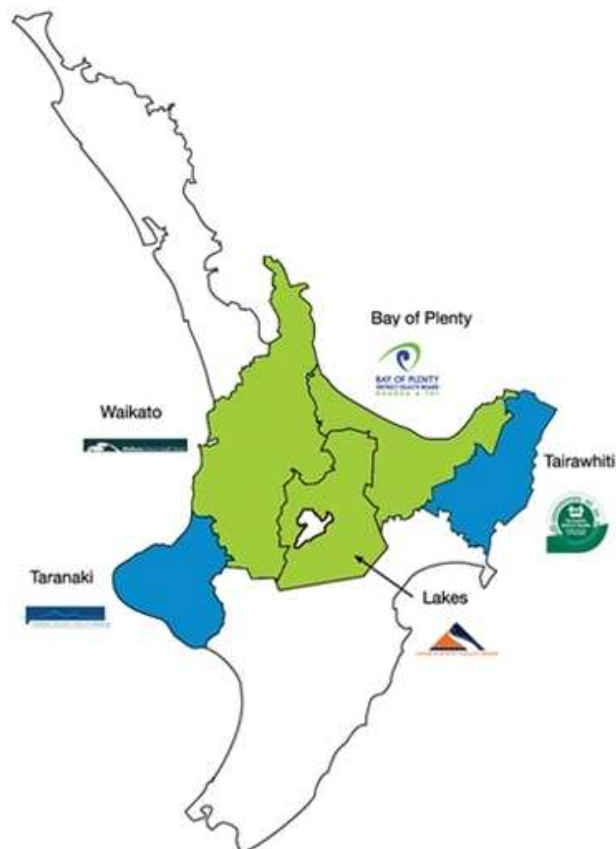


Midland Region Mental Health and Addictions Needs Assessment

December 2010



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- Members of the regional team: Eseta Nonu-Reid (Regional Director and project sponsor), Belinda Walker and Akatu Marsters.
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- The project team: Joan Mirkin (project consultant/report writer), Eseta Nonu-Reid, Belinda Walker and Barry Smith.
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 - Nga Purei Whakataa Ruamano, the Maori advisory network.
 - Generating Action for Families, the family whanau advisory group.
 - He Tipuana Nga Kakano, the consumer advisory group.
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EXECUTIVE SUMMARY

This report provides up to date information on the needs, unmet needs and current mental health and addiction service delivery in the Midland region. Together with a description of the demographic profile of the region and current national policy settings and priorities, the information is designed to provide a basis for prioritising needs and planning services.

Four approaches are used in this report:

- A population approach which uses prevalence, demographic and utilisation information to identify the mental health and addiction needs and unmet needs of particular population groups (by ethnicity, age, severity and disorder).
- A service benchmarking approach which compares the level of service provided in the region with national average levels, with PBF levels and with Blueprint targets.
- A comprehensive summary of the views of Midland region stakeholders as represented by the Midland regional advisory networks.
- A description of the context within which prioritisation decisions need to be made including the demography of the region, the funding environment and current policy settings and government priorities.

The report focuses on describing need and unmet need and current service delivery. It does not undertake a prioritisation exercise based on this information, nor does it address issues of quality or efficiency. Quality and efficiency are being addressed through the national *Key Performance Indicator Framework for New Zealand Mental Health and Addiction Services* project. This project will collate information on a significant number of key quality and efficiency indicators and will put in place a process for ongoing benchmarking, discussion and service improvement.

It has been possible to assess need and unmet need at a relatively detailed level due to information available from *Te Rau Hinengaro: The New Zealand Mental Health Survey* published in 2006. Until this survey was published, the only prevalence information for policy development and planning purposes was from overseas, augmented by some local information. *Te Rau Hinengaro:*

- Provides important and previously unavailable information about the prevalence of mental disorders and their patterns of onset and impact for adults in New Zealand.
- Explores the relationship between mental disorders and physical disorders.
- Provides information about the patterns of health and non-health service use by people with mental health problems.
- Examines the relationship between socio-demographic correlates and the probability of people meeting criteria for a mental disorder or accessing care.
- Describes the prevalence and correlates of suicidal behaviour.

Although the information base is much better now than in the past, the findings in this report should be considered in the context of:

- Incomplete utilisation data in the national information system, PRIMHD, as not all NGOs currently provide information into the system (although the percentage of missing data is relatively small).
- Some issues around the prevalence rates in Te Rau Hinengaro, where particular groups of people were not included in the survey including young people under 16 and older people (65+) in rest homes or with dementia.

Findings

The demographic profile of the Midland region identifies that the region has:

- A large rural population.
- A higher percentage of Maori compared with the New Zealand average
- A higher percentage of people in the highest quintile of deprivation compared with the New Zealand average.

The population approach (which uses prevalence, demographic and utilisation information to identify the mental health and addiction needs and unmet needs of particular population groups) estimates that there are still significant gaps in services for all population ethnicities and age bands except for adults with substance use disorders¹. The analysis highlighted particularly large service gaps for young people aged 16-24 with severe substance use disorders (and particularly for Maori and Pacific people with severe substance use disorders) and for young people aged 6-15 with any severe disorder.

Whilst the numbers of Pacific people in the Midland region is very small, the percentage service gap for this population is much higher than for other ethnicities. There are also significant service gaps for Maori in the region.

There is a high level of unmet need for primary mental health services for people with mild and moderate disorders.

The service and funding benchmarking approach identifies that the Midland region has a different service mix compared with the national average - with less reliance on inpatient beds and more on

¹ The analysis also indicates that more older people (65+) are receiving services than would be predicted using Te Rau Hinengaro, but this is unlikely to be the case and is more likely to be due to Te Rau Hinengaro not including people in rest homes or people with dementia in its survey – resulting in an underestimate of 12 month prevalence rates

services provided by community FTEs. Services where the Midland region appears to be below the national benchmarks include:

- Adult beds, child and youth beds and AOD beds.
- Child and youth day programmes.
- Specialist community FTEs and beds (services for complex and low prevalence disorders such as eating disorders and severe personality disorder).
- Methadone places.

The Midland region is above the national benchmark for AOD community FTEs.

The Midland region spends around the same amount per 100,000 population on mental health and addiction services as the New Zealand average. However, if a population based formula (which takes into account population characteristics) is used to determine how much should be spent, the Midland region would need to spend \$26.4m more per annum in total on specialist mental health and addiction services.

The view of the Midland region stakeholders confirms many of the findings from the analysis of quantitative data. In addition, stakeholders highlighted issues relating to providing services in rural communities, the shortage of services for children of service users (both mental health and addictions), the need for better integration of mental health and addiction services and the need for further development of a recovery model of service delivery and more peer support services.

Government's expectations and priorities for mental health and addiction services for the immediate future have been articulated recently in the "*Mental Health and Addiction Action Plan 2010.*" Many of the key priorities align well with the quantitative analysis in this report and with stakeholder views. These include tackling alcohol and drug related harm including additional alcohol and drug treatment programmes for young offenders, better mental health and addiction services that help divert children and young people away from negative pathways and increase their life chances, and considering new ways of delivering well-connected and co-ordinated services involving primary care, DHBs and NGOs.

Because of the incomplete utilisation data currently available it is recommended that:

- The tables in this report that use utilisation data be updated in 12 months time when:
 - All NGOs will be expected to be reporting to PRIMHD
 - utilisation data will be available in categories consistent with the new service specifications.

- DHBs seek access to aggregate local data from HealthStat Mental Health for use in future primary mental health planning processes.

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INTRODUCTION

The experience of mental health or substance use disorder is not uncommon, with 39.6% of people over 16 meeting criteria for a disorder over their lifetime. In any 12 months, 20.7% of people over 16 will experience a mental health or substance use disorder.

The assessment of need for mental health and addiction services is a process that helps inform strategic planning and service planning for communities and for individuals within communities, providing the background information for prioritising services, planning and funding services and workforce development activity. The Midland region completed a regional mental health and addiction needs assessment in May 2005. Since that time more up to date and robust prevalence and utilisation data has become available and new policy directions are being implemented. Given this, the Midland Region Mental Health and Addictions Network agreed to commission this updated mental health and addictions needs assessment.

The primary audience for this report is the mental health and addictions planners and funders of the Midland region. However, the report will also provide an evidence base to help service managers and clinical leaders (provider arm, NGOs and primary care) identify gaps in their own services, to identify services or approaches that may be needed to meet the particular demographic needs in their area, to plan workforce development and to assist in developing funding proposals.

The report will also provide information for consumers, family/whanau and other stakeholders to support their advocacy for re-focusing or re-designing funding and services to meet service gaps.

This needs assessment report comprises four main sections:

- The current environment. This section of the report describes the environment in which the mental health and addiction sector exists and which provides the context within which prioritisation decisions are made. It includes: legislation, government policy, priorities and national and regional directions; funding arrangements; workforce development; and the demographic profile of the region.
- Population need and unmet need. This section discusses mental health and substance use prevalence information and uses this information to identify the needs and unmet needs of different population groups within New Zealand with those disorders. It includes specialist services and primary care services.
- The level and mix of specialist services in the Midland region. This section describes the specialist services provided in the region and in each DHB. It also benchmarks the level and mix of services against national average volumes and spending, against Blueprint target volumes and spending and population based (PBF) volumes and spending.
- The views of Midland region stakeholders. This section provides a comprehensive summary of the views of Midland region stakeholders as represented by the Midland region advisory networks.

Each section of the report includes an analysis of the information, but does not suggest priorities. This is the role of planners and funders, in consultation with stakeholders and taking into account national, regional and local priorities.

THE CURRENT ENVIRONMENT

This section of the report describes the environment in which the mental health and addiction sector exists and provides the context within which prioritisation decisions are made. It includes:

- Legislation, government policy, priorities and national and regional directions.
- Funding arrangements
- An outline of workforce development.
- A demographic profile of the region.

Summary

Legislation, government policy, priorities and national and regional directions

- Current policy settings and government priorities provide the context within which prioritisation decisions need to be made.
- Government's expectations and priorities for mental health and addiction services for the immediate future have been articulated recently in the "*Mental Health and Addiction Action Plan 2010.*"

Funding arrangements

- Funding for specialist mental health mental health and addiction services (provider arm and NGOs) is ringfenced. Primary mental health services are funded from the primary health care budget.

Workforce

- Mental health and addiction services operate in the context of a growing and more diverse workforce including a developing peer support workforce and the promotion of a recovery model of service delivery.
- Ministry of Health funding for mental health and addiction workforce development is distributed by Health Workforce New Zealand (HWNZ). This may have an impact on the future workforce development infrastructure, and possibly the focus, for mental health and addiction workforce development, although there are no changes planned as part of the HWNZ 2010/11 Annual Plan.

Current policy settings and government priorities

Whilst the array of legislation, government policy, priorities and national directions is complex, there are a number of key common themes:

- Services that are recovery and wellness focused.
- Increasing promotion and prevention relating to mental health and addictions.
- Addressing gaps in services, in particular for:
 - Maori.
 - People, especially young people, with substance use problems (including reducing the harm from alcohol and improving the availability and accessibility of alcohol and other drug treatment services).
 - Children (including addressing conduct and behavioural problems in childhood).
- Building the capacity and capability of primary care to respond to the needs of people with mental illness and substance use problems.
- Strengthening linkages between primary care and specialist services and moving some services from specialist to primary care settings where appropriate.
- Better management of co-existing mental health and substance use problems - all mental health and addiction agencies will become “co-existing problems capable.”
- Earlier access to services.
- Meeting the needs of people in the criminal justice and youth justice system.
- Workforce development.
- Interagency linkages with a particular focus on services for children with conduct disorders.

Government’s expectations and priorities for mental health and addiction services for the immediate future have been articulated recently in the “*Mental Health and Addiction Action Plan 2010*”². Whilst the plan is focussed mainly on actions being lead by the Ministry of Health, it will impact on regional and DHB planning and funding decisions.

The prioritised actions respond to the Government’s immediate and emerging priorities and involve:

1. Moving health resources to increase access to mental health and addiction services and improve health outcomes through:

- New ways of delivering well-connected and co-ordinated services involving primary care, district health boards and non-government organisations.

² <http://www.moh.govt.nz/moh.nsf/indexmh/mental-health-and-addiction-action-plan-2010>

- More use of Relapse Prevention Plans and Knowing the People Planning or similar planning tools for people requiring long-term assistance.

2. Lifting system performance to enhance our communities' mental health and wellbeing by:

- Enhancing eating disorder services.
- Establishing regional advisory services for dementia behavioural support.
- Using national key performance indicators to measure how we're doing and where improvements need to be made, particularly for Māori and other vulnerable populations.
- Ensuring that services meet future needs through a new nationwide Mental Health and Addiction Service Development Plan.
- Collecting better information about publicly-funded mental health and addiction services.

3. Tackling alcohol and other drug-related harm by:

- Improving access to methamphetamine-related services.
- Developing a modern legislative framework.
- Providing additional alcohol and drug treatment programmes for young offenders.

4. Integrating efforts across government for better mental health outcomes through:

- Mental health and addiction services that help to divert children and young people away from negative pathways and increase their life chances.

The *Mental Health and Addiction Action Plan 2010* offers guidance for the implementation of the broader strategic directions set out in the national mental health strategy³ which is currently articulated in *Te Tahuu – Improving Mental Health 2005-2015: The Second New Zealand Mental Health and Addiction Plan* and in its associated action plan, *Te Kokiri: the Mental Health and Addiction Action Plan 2006-2015*. These two documents describe 10 leading challenges: promotion and prevention; building mental health services, responsiveness; workforce and culture for recovery; Maori mental health; primary health care; addiction; funding mechanisms for recovery; transparency and trust; working together.

A more detailed description of the legislation, government policy, priorities and national directions is included in Appendix 1.

Funding Arrangements

Funding for specialist mental health and addiction services (provider arm and NGOs) is ringfenced i.e. it can only be used for specialist mental health and addiction services for people most

³ The national mental health strategy is legislated under section 3 of the Mental Health Commission Act 1998.

severely affected by a mental illness or alcohol or other drug issue. The ringfence for each DHB is calculated annually by taking:

- Prior year baseline funding
- Plus incremental funding e.g. demographic and inflation funding, new Blueprint funding
- Plus prior year carried forward unspent mental health and addiction funding.

Ringfenced mental health funding is sometimes referred to as “Blueprint” funding.

DHBs are required (via the Operating Policy Framework⁴) to “be able to demonstrate fair pricing over time to provider arm and NGO providers of mental health and addiction services that is affordable to the DHB.”

Primary mental health and addictions services are funded from the primary health care budget.

The Service Coverage Schedule (which is part of the DHB Funding Agreement with the Crown) describes the level of service coverage for which the DHBs (and Ministry of Health as funder) are held accountable. Service coverage information includes the range of services, terms of access to those services, user charges, standards for safety and quality and any particular process requirements. DHBs are responsible for determining the specific quantity and type of services that are used to meet the service coverage.

The service agreements that DHBs have with their providers contain service specifications which describe the services to be funded. Nationwide service specifications for mental health and addiction services, as well as the Service Coverage Schedule can be found on the Nationwide Service Framework (NSF) library website www.nsf.health.govt.nz.

Workforce Development

Mental health and addiction services operate in the context of a growing and more diverse workforce, including growth of a peer support workforce and the promotion of a recovery model of service delivery. Whilst mental health workforce development has gained significant momentum in recent years, it is still identified as an area where action is needed because of significant skill shortage both nationally and internationally. There is a particular challenge for the AOD treatment sector which is faced with the challenge of increasing client demand, especially through the criminal justice system, with a workforce requiring investment in further education to become AoD qualified.

Workforce development is funded by DHBs and regions, as well as by the Ministry of Health which funds four national programmes:

- General mental health workforce development through Mental Health Programmes Ltd trading as Te Pou.

⁴ The Operational Policy Framework (OPF) is a set of business rules, policy and guideline principles that outline the operating functions of District Health Boards (DHBs).

- Maori workforce development through Te Rau Matatini Ltd.
- Child and youth workforce development through the Werry Centre for Child and Adolescent mental health.
- Alcohol and other drugs workforce development through Matua Raki, National Addiction Workforce Development Centre within Te Rau Matatini Ltd.

Details of the current work programmes for each workforce centre can be found at:

- <https://www.matatini.co.nz/>
- <http://www.matuaraki.org.nz/>
- <http://www.tepou.co.nz/>
- <http://www.werrycentre.org.nz/>

Recently, funding for mental health and addiction workforce development was consolidated within the Ministry of Health into Health Workforce New Zealand (HWNZ) which was set up in 2009 to lead and co-ordinate the planning and development of the country's health and disability workforce.

This may have an impact on the future workforce development infrastructure, and possibly the focus, for mental health and addiction workforce development, although there are no changes planned as part of the HWNZ 2010/11 Annual Plan.

Midland region demographic profile

Demographic characteristics have a significant influence on population health status. Information from *Te Rau Hinengaro*, the New Zealand Mental Health Survey (2006) shows the strong relationship between sociodemographic factors (such as age, ethnicity, gender, deprivation and educational status) and mental and substance use disorders. The key demographic characteristics of the Midland region are:

- 24.8% of the region's population are Maori, 2.0% Pacific and 4.4% Asian. The percentage of Maori varies across the region, ranging from 47.6% in Tairāwhiti, to 16.8% in Taranaki.
- 21.8% of the region's population is under 15, 13.8% between 15 and 24, 50% are 25-64 and 14.5% are over 65. Over time the percentage of younger people is decreasing and the percentage of older people increasing.
- 25% of the region's population is in the highest quintile of deprivation (i.e. the most deprived quintile) and 14% is in the lowest quintile (i.e. the least deprived quintile).
- Nearly half of Maori and Pacific people reside in the most deprived quintile and 5% in the least deprived quintile.
- Tairāwhiti DHB has the highest deprivation scores with 45% of the population residing in the most deprived quintile and 9% in the least deprived quintile.
- A significant proportion of the region's population reside in rural or isolated areas (19.2% compared to 12.2% nationally) .

A full description of the Midland region demographic profile is included in Appendix 2.

POPULATION NEED AND UNMET NEED

This section of the report discusses prevalence of mental health and substance use disorder and uses this information to identify the needs and unmet needs of different population groups within New Zealand with those disorders.

Summary

PREVALENCE

All mental health and substance use disorders (from *Te Rau Hinengaro*)

- 12 month prevalence is 4.7% for a serious disorder, 9.4% for a moderate disorder and 6.6% for a mild disorder.
- Prevalence is highest for Maori (8.7% have a serious disorder) and Pacific people (6% have a serious disorder) and for younger people, people with less education, people with less income and people who live in more deprived areas.

Substance use disorders (from *Te Rau Hinengaro*)

- 3.5% of the population experienced a substance use disorder within the past 12 months.
- Substance use disorders usually start at a young age (75% before age 24).
- Maori have the highest prevalence followed by Pacific people.
- Prevalence is highest for younger people, males, people with less education, people with less income and people who live in deprived areas.

Young People (from various surveys and literature – NZ and international)

- Around 20% of children and youth are estimated to have a mental disorder or problem.
- The estimated 12 month rate of disorder with significant clinical impairment for children and youth is around 12 - 15%.
- About half of mental disorders begin before the age of 14 years.

Youth Offending (from various surveys and literature – NZ and international)

- 12 month prevalence rate of mental health and/or AOD disorders in youth who have offended is between 40% and 60%.
- At least 20% of youth who have offended have disorders so severe that their ability to function is significantly impaired.

Methamphetamine use (from various surveys and literature)

- 12 month prevalence for the NZ population aged 15-45 years was 1.4% in 2009 down from a peak of 5% in 2001.
- 0.4% report using at least monthly during the year which equates to 13,000 people monthly.
- Experts consider that NZ's methamphetamine market is now "mature", one in which new, occasional and experimental users are put off the drug due to growing awareness of its damaging effects, leaving a residual population of heavy and dependent users.

NEED AND UNMET NEED

Percentage gaps

Based on 12 month prevalence rates in *Te Rau Hinengaro* and current service utilisation, the largest percentage gaps in the Midland region are estimated to be services for:

- People of all ethnicities aged 16-24 with severe substance use disorder (gap of 69% or 2,005 people).
- People of all ethnicities aged 6-15 with any severe disorder (gap of 60% or 5,126 people).
- Maori aged 16-24 with severe substance use disorder (gap of 82% or 1,716 people).
- Maori aged 45-64 with any severe disorder (gap of 60% or 1609 people).
- Pacific People aged 6-15 with any severe disorder (gap of 85% or 222 people).
- Pacific people aged 16-24 with severe substance use disorder (gap of 92% or 97 people).
- Pacific people aged 16-24 with any severe disorder (gap of 76% or 173 people).
- Pacific people aged 45-64 with any severe disorder (gap of 63% or 73 people).

Crude Gaps

Based on 12 month prevalence rates in *Te Rau Hinengaro* and current service utilisation, the largest crude gaps in the Midland region are estimated to be services for:

- People of all ethnicities aged 16-24 with severe substance use disorders (gap of 2,005 or 69%).
- Maori aged 16-24 with severe substance use disorder (gap of 1,716 people or 82%).
- People of all ethnicities aged 6-15 with any severe disorder (gap of 5,124 or 60%).
- People of all ethnicities aged 16-24 with any severe disorder (gap of 3,693 or 50%).
- People of all ethnicities aged 25-44 with any severe disorder (gap of 3,919 or 33%).
- People of all ethnicities aged 45-64 with any severe disorder (gap of 3,524 or 44%).
- Maori aged 25-44 with any severe disorder (gap of 1,609 people or 60%).

(Note that the crude numbers for people aged 6-15 and 16-24 only cover a 9 or 10 year age span, whereas the other age brackets cover 20 years, so the numbers are not directly comparable).

Prevalence information

Until 2006, the only prevalence information available for policy development and planning purposes in New Zealand was from overseas, augmented by some local information. In 2006, *Te Rau Hinengaro: The New Zealand Mental Health Survey*⁵ was published. *Te Rau Hinengaro*

- Provides important and not previously available information about the prevalence of mental disorders and their patterns of onset and impact for adults in New Zealand.
- Explores the relationship between mental disorders and physical disorders.
- Provides information about the patterns of health and non-health service use by people with mental health problems.
- Examines the relationship between socio-demographic correlates and the probability of people meeting criteria for a mental disorder or accessing care.
- Describes the prevalence and correlates of suicidal behaviour.

The key findings of *Te Rau Hinengaro* are outlined in Appendix 3. Also included in Appendix 3 is prevalence information from other sources relating to offending, to young people and to methamphetamine use.

Prevalence rates from *Te Rau Hinengaro* used in this section of the report to determine need and unmet need are listed in tables 1-6 below. The prevalence rates used are divided into:

- Severe disorders – these rates are used as the basis for assessing need for specialist services (provided by both the DHB provider arm and NGOs and including inpatient and community services).
- Mild and moderate disorders – these rates are used as the basis for assessing need for primary care services.

The prevalence rates from *Te Rau Hinengaro* used in this section of the report are also divided into two main categories:

- People with any disorder – this includes the full range of disorders – mental health and substance use disorders.
- People with substance use disorders.

Table 1: Prevalence rates for people with any severe disorder (specialist services)

Age band	Maori %	Pacific %	Other %	Total %
6-15	None in Te Rau Hinengaro but estimated to be 8.6 (see note 1)	None in Te Rau Hinengaro but estimated to be 8.2(see note 1)	None in Te Rau Hinengaro but estimated to be 6.8(see note 1)	None in Te Rau Hinengaro but estimated to be 7.2(see note 1)
16-24	8.6	8.2	6.8	7.2
25-44	10.2	6.3	5	5.8
45-64	7.4	4.2	3.4	3.8
65 +	1.8	2.3	1	1.1
All over 15	8.7	6	4.1	4.7

⁵ MA Oakley Browne, JE Wells, KM Scott (eds). 2006. *Te Rau Hinengaro: The New Zealand Mental Health Survey*. Wellington: Ministry of Health

Source: Te Rau Hinengaro except for age 6-15

Note 1: The 12 month prevalence of disorder for school age children in prevalence studies overseas and in NZ (20-30%) is similar to the 12 month prevalence of disorders in Te Rau Hinengaro for the 16-24 age group (28.4%). This report assumes that the spread across ethnicities and severities is also similar and therefore uses the same prevalence figures for the 6-15 age group as for 16-24 year olds. It has not been possible to make an assessment of the prevalence for children 0-5 nor for children with substance use disorder.

Table 2: Prevalence rates for people with any mild or moderate disorder

Age band	Maori %	Pacific %	Other %	Total %
0-15	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro
16-24	24.6	20.2	20.7	21.4
25-44	22.7	20.5	18.7	19.3
45-64	16.3	1.3	13.4	13.6
65 +	6.1	13.8	5.1	6
All over 15 Mild	8.2	7.5	15.2	6.6
All over 15 Moderate	12.6	10.9		9.4

Source: Te Rau Hinengaro

Table 3: Prevalence rates for people with any disorder (mild, moderate or severe)

Age band	Maori %	Pacific %	Other %	Total %
0-15	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro
16-24	33.2	28.4	27.5	28.6
25-44	32.9	26.8	23.7	25.1
45-64	23.7	17.1	16.8	17.4
65+	7.9	16.1	6.9	7.1
All over 15	29.5	24.2	19.3	20.7

Source: Te Rau Hinengaro

Prevalence rates from Te Rau Hinengaro for people with substance use disorders are listed below.

Table 4: Prevalence rates for people with a severe substance use disorder

Age band	Maori %	Pacific %	Other %	Total %
0-15	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro
16-24	6.1	3.8	2	2.8
25-44	2.8	1.2	0.9	1.2
45-64	0.9	0.9	0.3	0.4
65 +	0.1	0.1	0	0
All over 15	2.9	2.1	0.7	1

Source: Te Rau Hinengaro

Table 5: Prevalence rates for people with a mild or moderate substance use disorder

Age band	Maori %	Pacific %	Other %	Total %
0-15	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro
16-24	12.1	5	5.6	6.8
25-44	5.7	3.4	2.6	3.0
45-64	1.7	1.3	0.7	0.8
65 +	0.3	0.1	0	0
All over 15 Mild	2.2	1.1	1	1.2
All over 15 Moderate	3.5	1.7	1	1.3

Source: Te Rau Hinengaro

Table 6: Prevalence rates for people with any substance use disorder (mild, moderate or severe)

Age band	Maori %	Pacific %	Other %	Total %
0-15	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro	None in Te Rau Hinengaro
16-24	18.2	8.8	7.6	9.6
25-44	8.5	4.6	3.5	4.2
45-64	2.6	2.2	1	1.2
65+	0.4	0.2	0	<0.1
All over 15	8.6	4.9	2.7	3.5

Source: Te Rau Hinengaro

Assessing population need and unmet need for people with severe disorders

Two methodologies have been used to identify need and unmet need:

- Using 12 month prevalence rates in *Te Rau Hinengaro* and current 12 month service utilisation data.
- Using the percentage access rates from the POP 06 performance measure⁶.

⁶ Pop 06: Improving the health status of people with severe mental illness is one of the DHB service performance measures in the Crown Funding Agreement. The measure targets improved access.

Using 12 month prevalence rates in Te Rau Hinengaro and current 12 month service utilisation data.

It is possible to estimate population need and unmet need by combining prevalence information from *Te Rau Hinengaro* with utilisation data from the national mental health and addiction information system PRIMHD.

The methodology used to determine need and unmet need is a three step process:

- Using the 12 months prevalence rate for severe disorders and the number of people in the region or DHB to calculate how many people could be expected to have a severe mental health and/or substance use disorder (the need).
- Comparing the expected number of people with a severe disorder with the number of unique individuals receiving services over a 12 months period to identify whether or not there is a gap and the size of any gap.
- Analysis of the percentage gaps and the crude gaps.

This methodology has been used for the total population, as well as for specific age bands and ethnicities. Results are provided for NZ, the Midland region and each DHB within the Midland region.

[Caveats around the use of Te Rau Hinengaro and PRIMHD information for determining need and unmet need](#)

Use of Te Rau Hinengaro information at a regional and local level: *Te Rau Hinengaro* was a national population survey, and whilst the information is likely to be robust at a regional level, use of it at a DHB specific level should be viewed as a “model” of likely prevalence, rather than an actual level of prevalence in the DHB.

Prevalence rates for 6-15 age band: Because *Te Rau Hinengaro* does not include prevalence rates for young people under 16, the 12 month prevalence rate use for young people 6-15 is only an estimate as discussed earlier in this chapter (as Note 1 to table 1) . The results for this age band should therefore be used carefully as the prevalence rates from other surveys are probably not directly comparable with those in *Te Rau Hinengaro* (other surveys will have used different ways of measuring disorders and severity).

Prevalence rates for 65+ age band: The prevalence rates in *Te Rau Hinengaro* for people aged 65+ are relatively low (1.1% for people with severe disorders). However, *Te Rau Hinengaro* excluded people in rest homes and people with dementia, so the real prevalence rate is likely to be higher. It has not been possible during this project to assess what the prevalence would be if people in rest homes and people with severe psychological and behavioural symptoms of dementia were included. The results from using the prevalence rates in *Te Rau Hinengaro* for this age group should therefore be used with caution as it undoubtedly understates the real prevalence.

Mild and moderate disorders: It was not possible to get separate age group and ethnicity information about people with mild disorders and people with moderate disorders. So the analysis has put people with mild and moderate disorders together.

Validity of *Te Rau Hinengaro* methodology: The World Health Organisation (WHO) coordinates the implementation and analysis of general population epidemiologic surveys of mental health disorders, substance use disorders and behavioural disorders in countries in all WHO countries. All the participating countries' surveys, including *Te Rau Hinengaro* use similar survey methodology, the same diagnostic interview and the same quality control measures. There is however, still some academic debate about the validity of the methodology used in the *Te Rau Hinengaro* survey including debate around the use of lay interviewers, the validity of the survey instruments and self report of service use⁷.

Who is seen in specialist services: An assumption has been made that all people being seen in specialist services (as reported to PRIMHD as unique individuals) have a severe disorder. We know, and it is also highlighted in *Te Rau Hinengaro*, that this is not the case, and that sometimes people with moderate, mild or even no disorders are seen.

An assumption has also been made that all people who have a severe disorder in the past 12 months need to see a specialist service (DHB or NGO) during that time. This is not necessarily the case.

PRIMHD: Not all unique individuals using specialist services in a 12 month period are yet captured by PRIMHD. This applies in particular to some NGO data, especially where access to NGO services is not via a provider arm service (e.g. in Waikato where access for many clients is via Hauora Waikato or direct referral to NGO AoD and child and youth services). Figures obtained from the Ministry of Health indicate that an average of around 3% of unique clients in NZ each year are seen solely in the NGO sector (i.e. with no provider arm involvement) and that, for the Midland region, around half of those would not have been reporting to PRIMHD for the 12 months that data was collected for this report. The impact therefore is relatively small for most DHBs in the region except for Waikato. Appendix 4 table 37 includes an additional line which estimates the impact of this "undercounting."

Within the next year, all client data is expected to be provided to PRIMHD, so future reports should have more complete information on which to base decisions.

The findings:

Tables 7-10 below show the number of people with severe disorders receiving specialist services in a 12 month period compared with the number that could be expected to receive services in that time (using *Te Rau Hinengaro* 12 month prevalence rates). The difference between these two figures is the unmet need expressed as both a crude number, and as a percentage. The higher the number or percentage the higher the unmet need. Any negative number or percentage indicates that more people are receiving services than would be expected.

There are separate tables for all ethnicities combined and for each ethnicity. Separate tables for each DHB are included in Appendix 5.

⁷ Anthony F. Jorm in the Australian and New Zealand Journal of Psychiatry 2006: 40:830-834

Table 7: 12 month unmet need for people of all ethnicities with severe disorders

All ethnicities

	New Zealand				Midland Region			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	NZ unmet need	NZ % unmet need	Expected numbers in 12 months needing services based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Midland unmet need	Midland % unmet need
All disorders								
6-15 estimate	41,349	17,264	24,085	58%	8,499	3,373	5,124	60%
16-24	41,363	21,842	19,521	47%	7,371	3,678	3,693	50%
25-44	68,244	41,143	27,101	40%	11,870	7,951	3,919	33%
45-64	41,663	23,169	18,494	44%	8,076	4,552	3,524	44%
65 +	6,257	11,489	-5,232	-84%	1,332	3,069	-1,737	-130%
Total population over 15 (see note 1)	160,565	97,643	62,922	39%	30,110	19,250	10,860	36%
Substance Use Disorders								
6-15 ⁸	-	467	-	-	-	26	-	-
16-24	16,086	5,891	10,195	63%	2,899	894	2,005	69%
25-44	14,119	14,330	-211	-1%	2,536	2,344	192	8%
45-64	4,386	6,275	-1,889	-43%	752	919	-167	-22%
65 +	1	439	-436		1	75	-72	
Total population over 15 (see note 1)	34,163	26,935	7,228	21%	6,406	4,232	2,174	34%

Sources: The expected number is derived by multiplying the number of people in that age bracket, by the 12 month prevalence rate. Population figures were from Stats NZ (via the Ministry of Health) and prevalence rates were from Te Rau Hinengaro

The actual number of unique clients receiving services in a 12 month period by age and ethnicity were from PRIMHD and provided by the Ministry of Health broken down in the same categories as Te Rau Hinegaro (See Appendix 12)

Note 1: the figures for the total population over 15 were not derived by adding the figures for each separate age group, but by a separate calculation based on the prevalence rate for the total population over 15. This is why the total is close to, but not the sum of, the individual age groups.

⁸ As noted earlier, it has not been possible to assess a prevalence rate for substance use disorder for this age group

Table 8: 12 month unmet need for Maori with severe disorders

Maori

	New Zealand				Midland Region			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	NZ unmet need	NZ % unmet need gap	Expected numbers in 12 months needing services based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Midland unmet need	Midland % unmet need
All disorders								
6-15 estimate	12,454	4,301	8,153	65%	3,877	1,192	2,685	69%
16-24	9,646	5,923	3,723	39%	2,960	1,477	1,483	50%
25-44	17,033	10,261	6,772	40%	5,126	2,795	2,331	45%
45-64	8,355	3,639	4,716	56%	2,689	1,080	1,609	60%
65 +	554	531	23	4%	193	235	-42	-22%
Total population over 15 (see note 1)	36,788	20,354	16,434	45%	11,462	5,587	5,875	51%
Substance Use Disorders								
6-15	-	259	-	-	-	16	-	-
16-24	6,842	2,020	4,822	70%	2,100	384	1,716	82%
25-44	4,676	4,064	612	13%	1,407	839	568	40
45-64	1,016	1,134	-118	-12%	327	213	114	35
65 +	31	26	5		11	9	2	
Total population over 15 (see note 1)	12,263	7,244	5,019	41%	3,821	1,445	2,376	62%

Sources: The expected number is derived by multiplying the number of people in that age bracket, by the 12 month prevalence rate. Population figures were from Stats NZ (via the Ministry of Health) and prevalence rates were from Te Rau Hinengaro

The actual number of unique clients receiving services in a 12 month period by age and ethnicity were from PRIMHD and provided by the Ministry of Health broken down in the same categories as Te Rau Hinegaro (See Appendix 12)

Note 1: See Note 1 Table 1.

Table 9: 12 month unmet need for Pacific people with severe disorders

Pacific People

	New Zealand				Midland Region			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	NZ unmet need	NZ % unmet need	Expected numbers in 12 months needing services based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Midland unmet need	Midland % unmet need
All disorders								
6-15 estimate	4,652	1,035	3,617	78%	261	39	222	85%
16-24	3,853	1,643	2,210	57%	229	56	173	76%
25-44	4,899	2,672	2,228	46%	290	129	161	57%
45-64	1,954	848	1,106	57%	117	44	73	63%
65 +	310	233	77	25%	20	19	1	5%
Total population over 15 (see note 1)	11,085	5,395	5,690	51%	663	247	416	63%
Substance Use Disorders								
6-15 estimate	-	20	-	-	-	0	-	-
16-24	1,785	451	1,334	75%	106	9	97	92%
25-44	933	753	180	19%	55	32	23	44%
45-64	419	170	249	59%	25	11	14	56%
65 +	13	6	7		1	0	1	
Total population over 15 (see note 1)	3,880	1,380	2,500	64%	344	52	292	85%

Sources: The expected number is derived by multiplying the number of people in that age bracket, by the 12 month prevalence rate. Population figures were from Stats NZ (via the Ministry of Health) and prevalence rates were from Te Rau Hinengaro

The actual number of unique clients receiving services in a 12 month period by age and ethnicity were from PRIMHD and provided by the Ministry of Health broken down in the same categories as Te Rau Hinegaro (See Appendix 12)

Note 1: See Note 1 Table 1.

Table 10: 12 month unmet need for non-Maori, non Pacific people (other) with severe disorders

Other								
	New Zealand				Midland Region			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	NZ unmet need	NZ % unmet need	Expected numbers in 12 months needing services based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Midland unmet need	Midland % unmet need
All disorders								
6-15 estimate	25,347	11,928	13,419	53%	4,664	2,142	2,522	54%
16-24	28,243	14,276	13,967	49%	4,433	2,145	2,288	52%
25-44	46,594	28,210	18,384	39%	7,490	5,027	2,463	33%
45-64	31,857	18,684	13,173	41%	5,895	3,438	2,465	42%
65 +	5,245	10,725	-5,480	-104%	1,095	2,815	-1,720	-157%
Total population over 15 (see note 1)	115,155	71,895	43,260	38%	20,412	13,417	6,995	34%
Substance Use Disorders								
6-15 estimate	-	188	-	-	-	10	-	-
16-24	8,307	3,420	4,887	59%	1,304	501	803	62%
25-44	8,387	9,513	-1,126	-13%	1,348	1473	-125	-9%
45-64	2,811	4,971	-2,160	-77%	520	695	-175	-34%
65 +	1	407	-406		1	66	-65	
Total population over 15 (see note 1)	19,661	18,311	1,350	7%	3,482	2,735	747	21%

Sources: The expected number is derived by multiplying the number of people in that age bracket, by the 12 month prevalence rate. Population figures were from Stats NZ (via the Ministry of Health) and prevalence rates were from Te Rau Hinengaro

The actual number of unique clients receiving services in a 12 month period by age and ethnicity were from PRIMHD and provided by the Ministry of Health broken down in the same categories as Te Rau Hinegaro (See Appendix 12)

Note 1: See Note 1 Table 1.

Appendix 5 provides similar information about need and unmet need for each DHB in the region.

Analysis of the findings

The tables above express the gaps both as crude numbers and percentage gaps. Each of these approaches provides a different perspective on the level of unmet need.

Using crude numbers has the advantage of showing where the gaps are for the largest number of people. However, using crude numbers to rank the gaps is less likely to uncover gaps in access for those ethnic groups with smaller numbers of people (specifically Maori and, to a larger extent, Pacific people). A crude numbers approach would also be less likely to show gaps in access for the 6-15 and 16-24 age groups, as there are fewer people in these category (these category covers a 9 and 10 year age span, whereas the other age groups used in this analysis cover 20 years). In other words, using the crude numbers will almost always show greatest gaps for populations with the highest numbers.

Using a percentage approach highlights whether or not one particular population group is receiving more or fewer services per head of population than another group. For very small populations however, sometimes a large percentage gap will indicate a gap for only a very few people. In such cases, instead of funding services specifically oriented to the needs of this population group, planners and funders may chose other ways to meet the needs of that population group e.g. facilitating workforce development within current providers to provide a more appropriate services for that group, or improving the targeting of destigmatisation programmes if stigma is one of the barriers to accessing services. It may also indicate where a regional approach may be more useful.

It is the role of decision-makers, in consultation with stakeholders, to balance meeting the needs of as many people as possible, with ensuring that there is equity between population groups.

Key gaps in services for various population groups in the Midland Region.

Using the percentage approach to the analysis

The information in tables 7-10 above shows that the largest percentage gaps in services for various population groups in the Midland Region are:

- People of all ethnicities aged 16-24 with severe substance use disorder (gap of 69% or 2,005 people).
- People of all ethnicities aged 6-15 with any severe disorder (gap of 60% or 5,126 people).
- Maori aged 16-24 with severe substance use disorder (gap of 82% or 1,716 people).
- Maori aged 45-64 with any severe disorder (gap of 60% or 1609 people).
- Pacific People aged 6-15 with any severe disorder (gap of 85% or 222 people).
- Pacific people aged 16-24 with severe substance use disorder (gap of 92% or 97 people).
- Pacific people aged 16-24 with any severe disorder (gap of 76% or 173 people).
- Pacific people aged 45-64 with any severe disorder (gap of 63% or 73 people).

The advantage of using the percentage approach can be seen in the analysis above: there are some significant access issues for Pacific people that would not be captured by a crude numbers approach, as the numbers of people affected will be relatively small.

Using the crude numbers approach to the analysis

The information in tables 7-10 above shows that the largest crude gaps in services for various population groups in the Midland Region are:

- People of all ethnicities aged 16-24 with severe substance use disorders (gap of 2,005 or 69%).
- Maori aged 16-24 with severe substance use disorder (gap of 1,716 people or 82%).
- People of all ethnicities aged 6-15 with any severe disorder (gap of 5,124 or 60%).
- People of all ethnicities aged 16-24 with any severe disorder (gap of 3,693 or 50%).
- People of all ethnicities aged 25-44 with any severe disorder (gap of 3,919 or 33%).
- People of all ethnicities aged 45-64 with any severe disorder (gap of 3,524 or 44%).
- Maori aged 25-44 with any severe disorder (gap of 1,609 people or 60%).

The advantages and disadvantages of using the crude numbers approach can be seen in the analysis above. The advantage is that it highlights real gaps for large numbers of people. However, Pacific people do not feature in this approach because of the small numbers in the population overall (in spite of the significant access issues). The fact that Maori and young people age 6-15 and 16-24 feature at all is indicative of large % gaps, given their smaller numbers in the population.

The gaps in services identified above are supported by the findings in Te Rau Hinengaro which also surveyed use of health services. *Te Rau Hinengaro* found that unmet need for treatment (across all severities) was greatest in younger people and Pacific people. Te Rau Hinegaro also notes that the rates of service contacts are low for alcohol abuse and alcohol dependence disorders.

Areas where population groups appear to be receiving more services than would be expected.

The data indicates that certain groups appear to be receiving more services than would be expected given the 12 month prevalence of disorder. These need further discussion to assess whether or not this is real, or whether there are data or other issues that have impacted on the findings. Certainly in relation to older people 65+, there are significant concerns about using a prevalence rate of only 1.1% given that people in rest homes and with dementia were not included in the survey.

With the proviso above, population groups that appear to be receiving more services than would be expected are:

- People with substance use disorders who are older than 24 years old (except for Maori and Pacific people).
- Older people generally.

Comparing the Midland Region with the national average.

Tables 7-10 above show the needs and unmet needs for New Zealand as well as for the Midland region. The patterns across New Zealand are very similar to the patterns for the Midland region.

The Midland region generally caters for people over 65 significantly better than the NZ average. It also caters for people 25-44 better than the NZ average. However, it has bigger gaps than the NZ average for young people generally, for young people with substance use disorders and for Maori and Pacific people with substance use disorders.

Identifying need and unmet need for various population groups using percentage access rates from the POP 06 performance measure.

Pop 06: Improving the health status of people with severe mental illness is one of the DHB service performance measures in the Crown Funding Agreement. This measure targets improved access on the basis that sufficient access to services will lead to improvement in quality outcomes.

The table below provides a summary of access rates for NZ, Midland and each DHB for various age groups and ethnicities.

Table 11: Percentage access rates to specialist mental health and addiction services by DHB, age and ethnicity⁹

		NZ access rates %	Midland access rates %	Bay of Plenty access rates %	Lakes access rates %	Tairawhiti access rates %	Taranaki access rate %	Waikato access rates %
All ages	Maori	3.85	3.48	3.44	3.28	5.05	4.68	2.88
	Pacific	2.35	1.83	1.79	1.84	2.07	2.66	1.72
	Other	2.57	2.79	2.79	3.09	3.57	3.39	2.47
	All	2.75	2.95	2.94	3.13	4.25	3.60	2.54
0-19	Maori	2.57	2.27	2.57	2.04	4.47	2.85	1.44
	Pacific	1.51	1.08	1.25	1.25	1.79	1.32	0.86
	Other	2.48	2.57	2.87	3.29	4.73	3.36	1.86
	All	2.41	2.42	2.72	2.61	4.49	3.19	1.69
20-64	Maori	5.14	4.66	4.40	4.36	5.88	6.39	4.22
	Pacific	3.07	2.39	2.24	2.27	2.29	3.74	2.31
	Other	2.72	2.91	2.91	3.01	3.56	3.44	2.67
	All	3.06	3.29	3.24	3.41	4.57	3.88	2.96
65+	Maori	1.78	2.33	1.79	3.07	2.23	4.11	2.00
	Pacific	1.69	1.99	1.54	1.48	0.00	2.78	2.18
	Other	2.10	2.69	2.38	3.10	2.22	3.27	2.65
	All	2.08	2.65	2.33	3.08	2.22	3.32	2.59

Source of data: Ministry of Health

⁹ The access rates are calculated by the Ministry of Health by dividing the number of unique clients seen by the particular population and multiplying by 100. The information has been derived from the PRIMHD database. The DHB region is identified by domicile code. Clients will be counted more than once if they identify more than one prioritised ethnic group during the reporting period.

Analysis of the findings

The analysis below:

- Benchmarks national, regional and local access rates.
- Compares access rates against the expected 12 month prevalence outlined in Te Rau Hinengaro.

Benchmarking: The following figures compare NZ, Midland and Midland DHBs' access rates by ethnicity and age.

Figure 1: All ethnicities access rates

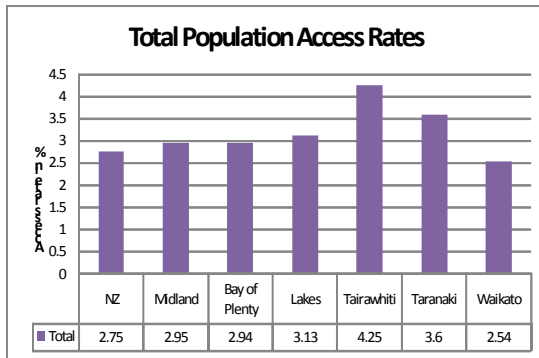


Figure 2: Non Maori, Non Pacific (other) access rates

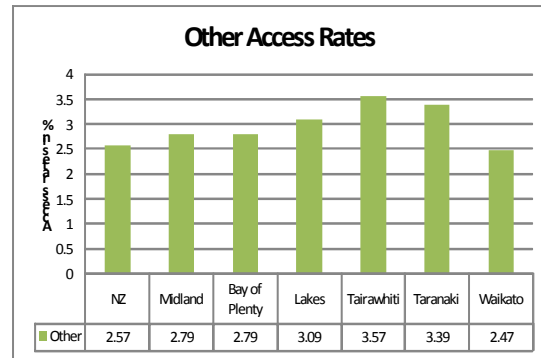


Figure 3: Maori access rates

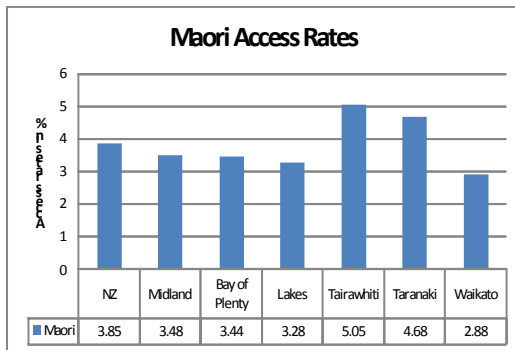
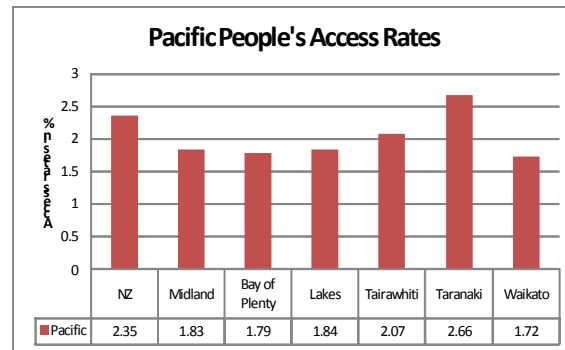
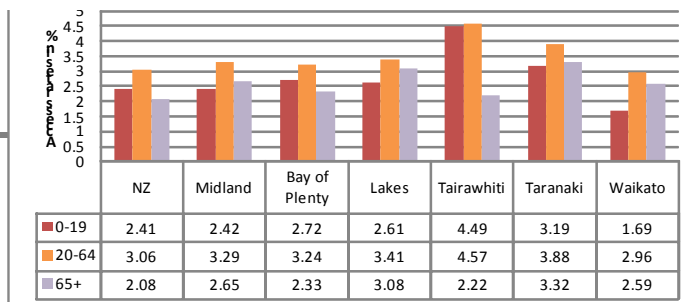


Figure 4: Pacific people's access rates



The graphs above show that the Midland region has overall access rates slightly higher than the NZ average. Access rates are lowest in Waikato at 2.54% and highest in Tairāwhiti at 4.25%. Tairāwhiti and Taranaki have access rates for Maori that are higher than the national average. Except for Taranaki, access rates for Pacific People is generally lower in all Midland DHBs than the national average.

Figure 5: Access rates by age



Assessment

Access rates for young people (0-19) in the Midland region are around the national average, and above the national average for all DHBs except for Waikato. Access rates for older people (65+) are particularly high in Lakes DHB.

The access rates for Waikato need to be interpreted carefully. Compared with the other Midland region DHBs, Waikato has a relatively large number of NGOs that were not reporting to PRIMHD during the period covered in this report (April 2009-March 2010) and whose clients were not captured by provider arm data. A rough estimate of the numbers is:

Child and youth (including AoD): 723 unique clients
 Hauora Waikato services: 479 unique clients
 Community AoD services: 775 unique clients
 Residential AoD services: 112 unique clients

This is a total of 2,089 unique clients. If these clients are taken into account, the access rate for Waikato would increase by 0.57% bringing it to an estimated 3.11% and in line with the other DHBs in the region.

Assessing access rates against the prevalence outlined in *Te Rau Hinengaro*: It is possible to match some of the access rates to prevalence rates in *Te Rau Hinengaro* as shown in table 12 below.

Table 12: Comparing access rates to specialist services with *Te Rau Hinengaro* 12 month prevalence rates

Population group	<i>Te Rau Hinengaro</i> 12 month prevalence %	NZ access rate %	Midland access rate %	Bay of Plenty access rate %	Lakes access rate %	Tairāwhiti access rate %	Taranaki access rate %	Waikato access rate %
Maori	8.7	3.85	3.48	3.44	3.28	5.05	4.68	2.88
Pacific	6.0	2.35	1.83	1.79	1.84	2.07	2.66	1.72
Other	4.1	2.57	2.79	2.79	3.09	3.57	3.39	2.47
Total	4.7	2.75	2.95	2.94	3.13	4.25	3.60	2.54

Sources of data: Te Rau Hinengaro and Ministry of Health

The greatest gaps between *Te Rau Hinengaro* 12 month prevalence and actual access rates are for Maori and Pacific people (average gap of 5.2% and 4.1% respectively across the Midland region).

Use of prevalence and other information to assess need and unmet need for people with mild and moderate disorders

Te Rau Hinengaro provides 12 month prevalence rates for people with mild and moderate disorders. Table 13 below provides information about prevalence of mild to moderate disorders, as well as the number of people that could be expected to have a mild to moderate disorder (by multiplying prevalence rates by the relevant population number).

Table 13: Expected number of people with mild and moderate disorders (all disorders)

Age	Prevalence	NZ Expected number with mild/moderate disorder	Midland Expected number with mild/moderate disorder	BOP Expected number with mild/moderate disorder	Lakes Expected number with mild/moderate disorder	Tairāwhiti Expected number with mild/moderate disorder	Taranaki Expected number with mild/moderate disorder	Waikato Expected number with mild/moderate disorder
0-15 (no information from Te Rau Hinengaro)	-	-	-	-	-	-	-	-
16-24	21.4	122,940	21,909	4,956	2,643	1,219	2,708	10,383
25-44	19.3	227,087	39,498	9,503	4,987	2,138	5,100	17,770
45-64	13.6	149,110	28,902	7,537	3,585	1,609	3,926	12,245
65 +	6	65,784	12,751	3,325	1,582	710	1,732	5,402
All ages over 15 mild	6.6	225,474	42,282	10,786	5,143	2,271	5,621	18,461
All ages over 15 moderate	9.4	321,129	60,220	15,362	7,324	3,235	8,005	26,293

Source of information: Calculated from prevalence rates from Te Rau Hinengaro and population numbers from Stats NZ (provided by Ministry of Health)

Table 14: Expected number of people with mild and moderate substance use disorders

Age	Prevalence	NZ Expected number with mild/moderate disorder	Midland Expected number with mild/moderate disorder	BOP Expected number with mild/moderate disorder	Lakes Expected number with mild/moderate disorder	Tairāwhiti Expected number with mild/moderate disorder	Taranaki Expected number with mild/moderate disorder	Waikato Expected number with mild/moderate disorder
0-15 (no information from Te Rau Hinengaro)	-	-	-	-	-	-	-	-
16-24	6.8	39,065	6,929	1,567	836	385	856	3,284
25-44	3.0	35,298	6,060	1,458	765	328	782	2,726
45-64	0.8	8,771	1,798	469	223	100	244	762
65 +	0	0	0	0	0	0	0	0
All ages over 15 mild	1.2	40,995	7,688	1,961	935	413	1,022	3,357
All ages over 15 moderate	1.3	44,412	8,328	2,125	1,013	447	1,107	3,636

Source of information: Calculated from prevalence rates from Te Rau Hinengaro and population numbers from Stats NZ (provided by Ministry of Health)

Most people with a mild or moderate mental health or substance use disorder will access services through primary care, either through GP “business as usual” or through the primary mental health initiatives funded by the Ministry of Health via the DHBs.

There is no one single national source of data on the number of people accessing primary care services for mild to moderate disorders. However, it is possible to piece together information from a number of different sources to get an indication of the level of unmet need for mental health and addiction services in primary care:

- Information from the section on health service use in *Te Rau Hinengaro*.
- Calculations based on funding for the current primary mental health initiatives.
- Information from HealthStat.

Health services use described in *Te Rau Hinengaro*: *Te Rau Hinengaro* indicates that only 36.5% of people with a moderate disorder make a mental health visit to any healthcare provider¹⁰ in a 12 month period and only 18.5% of those with a mild disorder. The number visiting the general medical sector (doctors, nurses, and other healthcare professionals, but mainly GPs¹¹) is 28.9% of people with a moderate disorder, and 15% of people with a mild disorder.

If we apply these percentages to the numbers of people with a mild to moderate disorder in NZ, the Midland region and each DHB we get the following results. A caveat around this methodology is that the percentages are a NZ average and applying them regionally and locally does not take into account differences in the populations of the various DHBs.

Table 15: Estimated unmet need for people over 15 with mild to moderate disorders

	Mild disorder for all ages over 15				Moderate disorder for all ages over 15			
	Expected number with mild disorder	% of people with mild disorder accessing services	Estimated number of people with mild disorder accessing services	Estimated unmet need for people with mild disorder	Expected number with moderate disorder	% of people with moderate disorder accessing services	Estimated number of people with moderate disorder accessing services	Estimated unmet need for people with moderate disorder
NZ	225,474	18.5	41,713	183,761	321,129	36.5	117,212	203,917
Midland	42,282	18.5	7,822	34,460	60,220	36.5	21,980	38,240
Bay of Plenty	10,786	18.5	1,995	8,791	15,362	36.5	5,607	9,755
Lakes	5,143	18.5	951	4,192	7,324	36.5	2,673	4,651
Tairāwhiti	2,271	18.5	420	1,851	3,235	36.5	1,181	2,054
Taranaki	5,621	18.5	1,040	4,581	8,005	36.5	2,922	5,083
Waikato	18,461	18.5	3,415	15,046	26,293	36.5	9,597	16,696

Source: % of people accessing services from *Te Rau Hinengaro*
 Estimated number of people is from Table 13

Information from the primary mental health initiatives: The draft “*Toolkit for Primary Mental Health Care Development Part 2: Knowledge bank*”¹² provides some information about the national gaps in

¹⁰ The health sector is defined in *Te Rau Hinengaro* as including mental health speciality (psychiatrists, other mental health specialist, any mental health specialist) and general medical (which includes nurses and other healthcare professionals as well as doctors – but is essentially the primary care sector).

¹¹ *Te Rau Hinengaro* notes that it can reasonably assumed that most people visiting the general medical sector did see a GP

¹² Authored on behalf of the Health Research Council by S Collings, P Gandar, A Dowell, S Mckenzie and N Currey. The document is yet to be released, but has been sent out for comments to various stakeholders

primary mental health initiatives funded by the Ministry of Health which provides further insight into unmet need for primary mental health services. The draft report notes that the primary mental health initiatives are currently supported by \$22.5m p.a. of ongoing funding (Ministry of Health 2009). They also note that the evaluation of primary mental health initiatives identified all up costs of \$580 - \$930 per patient treated¹³.

The draft toolkit assumes a NZ population of 4.3 million people (including children and young people) and a prevalence rate of 16% with mild to moderate common mental disorders and notes that this would represent 688,000 people. At a nominal standard cost of \$750 per person, this means that 30,000 people per year are accessing the primary mental health initiatives i.e. 4.4% of those potentially eligible (although as noted above, many of these are accessing “business as usual” primary care services for their mental health and addiction disorders).

The draft report notes that within the funding for primary mental health services, improving allocative efficiency through ensuring the funding reaches high need populations is important; however its relative small size means it is unlikely to stretch to cover the high need populations. The report notes that increasing efficiency, particularly through using models of care with brief interventions can potentially increase the reach of the existing funding substantially.

Some ways to provide leverage for the impact of the dedicated primary mental health funding are suggested including increasing the impact of ‘business as usual’ primary care; increasing the synergies between mental health and programmes for long term conditions, utilising low cost options such as e-therapies or green prescriptions and utilising low intensity brief psychological interventions within the primary care team.

Information from HealthStat: HealthStat collects information on all practice encounters with doctors or nurses (or other professionals) and for all patients. It monitors 1.7 million patients every week. HealthStat is only accessible by DHBs with permission of practices. If a DHB uses HealthStat it can see a customisable DHB population snapshot showing the pooled data for all practices.

HealthStat Mental Health provides data and analysis on:

- The number of people coded as having a mental illness.
- The rate of new diagnoses.
- The demographic and the co-morbidity of these people.
- Consultation rates of mental health clients.
- Prescribing patterns for the different cohorts.
- Other treatments, or associated clinical activities such as entry to care plus.
- The co-payments made by mental health clients.
- The distribution of professional roles of the primary care providers seeing mental health clients.

Given that HealthStat data is only available to participating practices and DHBs, the information in this report is aggregated national information from a national report provided to the Ministry of Health. This noted that:

- The consultation rates for people with mental health conditions is increasing faster than the rates for the general population and that this trend has continued for the 4 years that HealthStat has been running.

¹³ Dowell, Garrett, Collings et al. 2009

- There has been a large (around 66%) increase in the number of prescriptions for antidepressants between 2005 and 2010 although this appears to have stabilised.
- The total percentage of mental health consultations compared with total consultations has remained relatively consistent since 2005. As at November 2010, 20.15% of total consultations across NZ were for mental health.
- The percentage of mental health consultations being carried out by nurses is steadily increasing. For example, in 2005 22% of consultations for depression were being carried out by nurses compared with 30% in 2010. The percentage being carried out by doctors has decreased.
- Around 25% of mental health patients are on Care Plus.

It may be useful for DHBs to seek access to aggregate local data from HealthStat and use this for future planning purposes.

Conclusion

The information available relating to primary mental health needs and unmet needs from a variety of sources indicates a high level of unmet need. The information also indicates that significant improvements in access to primary mental health services have been made over the past few years.

LEVEL AND MIX OF SPECIALIST SERVICES IN THE MIDLAND REGION

This section describes the specialist services provided in the region and in each DHB. It also benchmarks the level and mix of services against national average volumes and spending, population based (PBF) volumes and spending and against Blueprint target volumes and spending.

Summary

- The Midland region spends about the same amount per 100,000 population on specialist mental health and addiction services as the rest of NZ.
- However, if a population based formula (which takes into account population characteristics) is used to determine how much should be spent, the Midland region would need to spend \$26.4m more than the current \$222.4m per annum on specialist mental health and addiction services.
- The Midland region has a different service mix compared with the national average with less reliance on inpatient beds and more on services provided by community FTEs. There are 80.1 fewer beds overall in the Midland region than if beds per 100,000 were at the national average, but 60.0 more FTEs. In particular the region has:
 - significantly fewer inpatient beds for adults, child and youth and AOD than the national average but
 - significantly more community FTEs than the national average for those same three groups.
- Services where the Midland region is consistently below the benchmark using all three benchmarking approaches are:
 - Adult beds, child and youth beds and AOD beds.
 - Child and youth day programmes.
 - Specialist beds and specialist community FTEs (services for complex and low prevalence disorders such as eating disorders and severe personality disorder).
 - Methadone places.

Brief overview of Midland region specialist mental health and addiction services
("specialist" services refers to mental health and AoD inpatient and community services provided by either the DHB provider arm or NGOs for people with a serious mental or substance use disorder).

Inpatient services in the Midland region include:

Bay of Plenty DHB provider arm:	24 beds in the acute inpatient unit, Te Whare Maiangi in Tauranga and 11 beds in the Whakatane acute/crisis inpatient unit.
Lakes DHB provider arm:	14 beds in the acute inpatient unit unit, Te Whare Oranga Tangata o Whakae in Rotorua for the Rotorua/Taupo/Turangi area
Tairāwhiti DHB provider arm:	13 inpatient beds
Taranaki DHB provider arm:	30 beds in the acute inpatient adult unit, Te Puna Waiora in New Plymouth. This includes an intensive psychiatric unit, 6 psychgeriatric beds and 20 adult inpatient beds
Waikato DHB provider arm:	61 adult beds and 1.2 child and youth beds
Hauora Waikato:	22 adult forensic beds

Community mental health services are provided across the region by both the DHB provider arm services and a wide range of NGOs including Kaupapa Maori and Pacific providers. These services cover the full range of services described in the national service specifications.

Regional specialist services are highly specialised services that are usually provided regionally or nationally and are accessed by the population either within the region, or in DHBs outside the region.

Regional services accessed by some or all DHBs in the Midland region include:

- Forensic services provided by Waikato DHB provider arm and Hauora Waikato (inpatient and community forensic services).
- AoD services provided by:
 - Rongo Atea (Kaupapa Maori youth AoD residential services in Hamilton).
 - Te Utahina Manakitanga Trust (Kaupapa Maori AoD residential service in Rotorua).
 - Salvation Army Bridge programme (Hamilton).

Services accessed outside of the region include:

- AoD services provided by

- Springhill (residential AoD services in Hawkes Bay).
- Nova Trust (a residential AoD bed in Christchurch).
- Odyssey House (youth and adult residential AoD services in Auckland).
- Te Wairiki (youth residential AoD services in Hastings used by Lakes DHB).
- Ashburn Clinic (Dunedin).
- Starship Hospital CFU in Auckland (for acute crisis youth mental health care and for eating disorders).
- Challenge Trust (residential eating disorders services in Auckland).
- Capital and Coast DHB services (Tairāwhiti uses these for some people with high and complex needs, forensic services and youth crisis mental health services).
- Packages of care from time to time outside the region.

A full list of all Provider arm and NGO services is provided in Appendix 4.

Benchmarking service mix and service levels

Benchmarking has been used to compare levels and mix of services nationally, regionally and across the Midland DHBs. There are several sources of information commonly used for benchmarking in the sector. This report considers three approaches and compares the results:

- Benchmarking against national average volumes and against national average spending.
- Calculating the difference between current service and funding levels and what would be expected if the region and each DHB in the region were providing services and funding services according to their PBF share of the national average volumes and funding.
- Benchmarking against target volumes and spending in the Mental Health Commission’s Blueprint for Mental Health Services in New Zealand.

It would have been useful to have been able to take a fourth approach i.e. benchmarking the number of *unique clients* accessing each service category in a 12 month period against the national average. Unfortunately, this would require a special run of information from PRIMHD and was not able to be completed for this report. It is something that could be done in future, and would provide not just another way to benchmark services against the national average, but would also provide a population perspective, as ethnicity data would be available for each of the service categories.

In future years outcome data will also enable better benchmarking as it will enable complexity to be taken into account i.e. benchmarking using a “casemix” approach.

Limitations of the benchmarking approach and assumptions made

Benchmarking against what?

Benchmarking is a well accepted methodology, but it does rely on having something robust to benchmark against.

Determining whether or not DHBs have an optimal level and mix of services is based on a premise that we know what is optimal and therefore what to benchmark against. In 1999 the Mental Health Commission produced the “*Blueprint for Mental Health Services in NZ*” (Blueprint) which, at the time, provided good guidance on the level and mix of services required per 100,000 population. For many years the *Blueprint* was used extensively and usefully for benchmarking. However, the model (and its assumptions about optimal service mix in particular) is now somewhat out of date and is not perceived to reflect the needs of a modern mental health and addiction system. Nonetheless the *Blueprint* has been used as part of the benchmarking mix.

Benchmarking against national average volumes and spending also has drawbacks in that this approach assumes that the national average constitutes an appropriate level and mix of services. The results of the analysis in this report need to be considered with these caveats.

Service Categories

In an ideal world, the service categories used in this analysis would be consistent with the new service specifications, as these specifications provide an up to date description of the types of services required to provide the full continuum of services.

However, the new specifications have been in place for only a short time and the standard reports do not yet show volumes or funding based on the new specifications. The service categories used in this report are therefore those identified in the Mental Health Commissions *Blueprint*, where information about volumes and spending is readily available.

Is the data complete?

The data in this report is from the national mental health and addiction information system, PRIMHD. Not all unique individuals using specialist services in a 12 month period are captured by PRIMHD. This applies in particular to some NGO data, especially where access to services is not via a provider arm service (e.g. in Waikato where access for many clients is via Hauora Waikato or direct referral into some child and youth and AoD services). Figures obtained from the Ministry of Health indicate that around 3% of unique clients each year are seen solely in the NGO sector (i.e. with no provider arm involvement) and that, for the Midland region, around half of those would not have been reporting to PRIMHD for the 12 months that data was collected for this report. The impact therefore is relatively small for most DHBs except Waikato DHB, but DHBs need to take this into account when making decisions based on information in this report.

The findings

Benchmarking Midland region volumes and funding against the NZ average

Midland region spending per 100,000 population is in line with national spending. Overall it spends \$25.4m per 100,000 population compared with a \$25.9m per 100,000 national average.

Table 16 compares Midland region volumes and funding (using Blueprint categories) against NZ average volumes and funding per 100,000 age specific populations.

Table 16: Midland volumes and funding per 100,000 benchmarked against the NZ average

		Volumes					Funding				
		1	2	3	4	5	6	7	8	9	10
		NZ	Midland				NZ	Midland			
Service type	Age specific Population	Beds or FTEs per 100,000 age specific population	Beds or FTEs per 100,000 age specific population	Variance per 100,000 age specific population	Variance per total age specific population	% variance per 100,000 age specific population	Funding per 100,000 age specific population (\$m)	Funding per 100,000 age specific population (\$m)	Variance per 100,000 age specific population	Variance per total age specific population	% variance per 100,000 age specific population
Adult community clinical FTEs	20-65	74.0	74.0	0.0	0.0	0%	8.6	8.4	0.2	0.9	1.7%
Adult inpatient beds	20-65	29.1	24.3	4.8	28.3	16.4%	6.0	5.4	0.6	3.2	9.2%
Adult community support FTEs	20-65	64.7	67.5	-2.8	-16.5	-4.3%	4.8	5.0	-0.2	-1.3	-4.7%
Adult residential beds	20-65	51.0	50.2	0.8	4.7	1.5%	2.4	2.2	0.2	0.7	5.2%
Total Adult							21.8	21.0	0.8	3.5	3.7%
AOD community FTES	All	18.3	24.0	-5.7	-47.7	-31.2%	1.8	2.4	-0.6	-5.1	-34.4%
AOD beds	All	13.1	9.3	3.8	31.3	28.7%	0.5	0.4	0.1	0.6	15.7%
Methadone places	All	105.6	95.0	10.6	87.9	10.0%	0.3	0.3	0.0	0.3	11.5%
Total AOD							2.6	3.1	-0.5	-4.2	-19.2%
Child and youth community FTES	0-19	71.1	73.3	-2.2	-5.4	-3.1%	8.2	8.4	-0.2	-0.5	-2.6%
Child and youth day programme	0-19	7.6	5.6	2.0	4.9	26.2%	0.6	0.5	0.1	0.3	16.8%
Child and youth beds*	0-19	4.9	1.6	3.3	8.1	68.1	1.1	0.3	0.8	1.9	70.9%
Total Child and Youth							9.9	9.2	0.7	1.7	7.1%
Forensic beds	20-65	7.7	8.5	-0.8	-4.3	-9.5%	2.1	2.2	-0.1	-0.6	-4.5%
Forensic community FTES	20-65	6.3	7.0	-0.7	-4.4	-11.8%	0.8	0.9	-0.1	-0.4	-8.0%
Total Forensic							2.9	3.1	-0.2	-1.0	-6.9%
Older people's community FTES	65+	50.2	42.4	7.8	9.4	15.7%	6.3	5.5	0.8	1.0	13.3%
Older people's beds	65+	25.1	19.9	5.2	6.3	20.7%	5.3	4.2	1.1	1.3	20.8%
Older people's day programme	65+	3.4	8.4	-5.0	-6.1	-146.9	0.3	0.7	-0.4	-0.5	-146.9%
Total Older People							11.9	10.4	1.5	1.8	12.6%
Specialist community FTES	All	3.3	2.8	0.5	4.6	16.5%	0.4	0.3	0.1	0.8	21.6%
Specialist Beds	All	0.7	0.0	0.7	5.7	98.3%	0.1	0.0	0.1	1.0	100.0%
Total specialist services¹⁴							0.5	0.3	0.2	1.8	40%
Non Blueprint funding ¹⁵	All	NA	NA	NA	NA		1.0	1.2	-0.2	-2.2	-27.8%

*inpatient and community

Individual DHB results can be found in Appendix 6.

¹⁴ Services for complex and low prevalence disorders such as eating disorders and severed personality disorder

¹⁵ non blueprint funding is ringfenced mental health and addiction funding allocated to services that are not able to be easily categorised into the standard categories e.g. workforce development and quality projects.

Using this benchmarking approach the greatest variations in service mix and levels between the Midland region and the NZ average are:

- Significantly fewer inpatient beds for adults, child and youth and AOD per 100,00 population than the national average (80.1) but
- Significantly more community FTEs per 100,000 population than the national average (60) for those same three groups.
- More AOD services than the national average (19.2% more funding per 100,000 than the national average).
- Significantly fewer specialist beds per 100,000 population (these are services for complex and low prevalence disorders such as eating disorders and severe personality disorder).
- 87.9 fewer methadone places than would be expected compared with the national average (a difference of 10 places per 100,000 population).

The population based funding (PBF) approach

Another benchmarking approach is to examine the difference between current service and funding levels and the levels that would be expected if the region and each DHB in the region were providing services and funding services according to their PBF share of the national average volumes and funding. This approach was used recently by Waikato DHB to identify gaps in mental health and addiction services.

In Vote: Health a population based formula (PBF) is used to decide what proportion of the available funding should be allocated to each individual DHB. Instead of allocating the available funding to DHBs by using a simple formula such as funding per head of population, a population based formula is used (PBF) which takes into account the population characteristics of the DHB e.g. the ethnicity, deprivation, age structure etc. This approach acknowledges that services for certain population groups cost more than for others. The formula also takes into account an estimate of unmet need.

The formula was developed to be used at a national/DHB level and the more it is used at lower levels e.g. service specific levels, the less accurate it becomes. In addition, because it uses historical spending and utilisation (and updated with a price factor as well as population characteristics) a DHB with a lower cost mental health and addiction system would end up looking as if it was underfunded.

However, despite these caveats, some DHBs have started using the formula to assess whether, for their own specific population make-up, they are spending too much or too little on particular services by comparing what they are spending on that service, with what they would spend if they allocated their PBF share of national spending to that service (and to all other services).

The Midland region has 19.1% of the NZ population, but its mental health PBF share is 21.25%. If the Midland region was to fund mental health and addiction services based on a PBF share of national spending on mental health and addictions it would be spending an additional \$26.4m per annum. This is made up as follows¹⁶ (a negative figure means that the DHB would need to spend more):

¹⁶ 2009/10 Ministry of Health advice to DHBs

- Bay of Plenty: -\$4.5m (-8%)
- Lakes: -2.8% (-9%)
- Tairāwhiti: -\$1.2m (-12%)
- Taranaki: \$1.1m (4%)
- Waikato: -\$19m (-19%)

Table 17: Difference between current service and funding levels and the levels that would be expected if the Midland region was providing and funding services according to their PBF share of national average volumes and funding.

	Volumes Midland Region				Funding Midland region			
	1	2	3	4	5	6	7	8
Service type	Current volumes (available beds or FTEs)	What the volumes would be if provided according to PBF share (available beds or FTEs)	How much more or less volumes are needed if volumes based on share of PBF (available beds or FTEs)	% increase or decrease needed to reach PBF volumes	Current \$ spent (\$m)	What \$ would be spent if spending was according to PBF share (\$m)	How much more or less would be spent if spending was based on share of PBF (\$m)	% increase or decrease needed to reach PBF spending
Adult community clinical FTEs	437.4	496.1	58.7	11.8%	49.7	57.3	7.6	13.3%
Adult inpatient beds	143.9	195.2	51.3	26.3%	32.1	40.1	8.0	19.9%
Adult community support FTEs	399.3	434.1	34.8	8.0%	29.5	31.9	2.4	7.6%
Adult residential beds	296.8	341.8	45.0	13.2%	13.3	15.9	2.6	16.4%
Total Adult					124.6	145.2	20.6	16.5%
AOD community FTEs	200.8	170.3	-30.5	-17.9%	19.8	16.4	-3.4	-20.9%
AOD beds	77.8	121.4	43.6	35.9%	3.3	4.4	1.1	24.2%
Methadone places	793.9	981.0	187.1	19.1%	2.3	2.9	0.6	20.4%
Total AOD					25.4	23.7	-1.7	-6.7%
Child and youth community FTEs	179	184.2	5.2	2.8%	20.6	21.3	0.7	3.3%
Child and youth day programme	13.7	19.7	6.0	30.4%	1.3	1.7	0.4	21.6%
Child and youth beds*	3.8	12.6	8.8	69.9%	0.8	2.9	2.1	72.5%
Total Child and Youth					22.7	25.9	3.2	14.1%
Forensic beds	50	51.8	1.8	3.4%	13.2	14.3	1.1	7.8%
Forensic community FTEs	41.4	42.0	0.6	1.4%	5.1	5.4	0.3	4.8%
Total forensic					18.3	19.7	1.4	7.7%
Older people's community FTEs	51.3	31.9	-19.4	-60.7%	6.6	4.0	-2.6	-65.2%
Older people's beds	24.1	15.9	-8.2	-51.2%	5.1	3.4	-1.7	-50.9%
Older people's day programme	10.2	2.2	-8.0	-370.6%	0.9	0.2	-0.7	-370.6%
Total Older People					12.6	7.6	-5.0	-39.7%
Specialist community FTEs	23.2	30.9	7.7	25%	2.8	4.0	1.2	29.5%
Specialist Beds	0.1	6.5	6.4	98%	0	1.1	1.1	100.0%
Total Specialist services					2.8	5.1	2.3	82.1%

Non Blueprint funding	NA	NA	NA	NA	10.2	8.9	-1.3	-14.8%
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Individual DHB results can be found in Appendix 6.

Given that the Midland region as a whole would need to spend \$26.4m more on mental health and addictions if spending was based on its PBF share of the national funding, it is not surprising that the gaps identified for some services are very large in some cases e.g for the region to reach its PBF share of national beds and FTEs it would need 148.7 more beds and 57.1 FTEs.

Given that it is unlikely that the Midland region DHBs will move to a PBF approach to funding across all service areas including mental health and addiction, the “absolute” level of the variations is probably not useful, but the figures can be used to help identify which services have the greatest or smallest gap.

Benchmarking Midland region volumes and funding against the *Blueprint for Mental Health Services*

Whilst the Mental Health Commission’s 1998 *Blueprint for Mental Health Services* is now out of date, the targets set in the Blueprint are still commonly used for benchmarking progress¹⁷.

Table 18 below provides information about the Midland region progress towards Blueprint volume and spending targets. DHB specific information is included in Appendix 6.

Table 18: Benchmarking Midland region volumes and funding against *Blueprint* targets

Service	Blueprint Target Volumes		Blueprint Target Spending	
	NZ % of target reached	Midland % of target reached	NZ % of target reached	Midland % of target reached
Adult community clinical FTEs	104.4%	104.9%	106%	106%
Adult inpatient beds	77.4%	65.7%	81%	78.2%
Adult community support FTEs	110.7%	117.2%	110%	114%
Adult residential beds	51.3%	51.7%	52%	49%
AOD community FTEs	92.1%	123.9%	95.3%	127%
AOD beds	100.2%	74.5%	48%	42%
Methadone places	70.2%	66%	71%	66%
Child and youth community FTEs	73.4%	76.4%	73%	76%
Child and youth day programme	33%	24.7%	30%	25%
Child and youth beds	60%	19.2%	63%	20%
Forensic beds	79.5%	89.5%	80%	92%
Forensic community FTEs	208.1%	238.8%	249%	280%
Older people's community FTEs	72%	60.6%	72%	61%
Older people's beds	76.5%	60.5%	77%	61%
Older people's day programme	10.4%	25.7%	10%	26%

¹⁷ Government has accepted that there is a need for a new flexible and more dynamic service development framework, which takes into account population demographics, reflects best practice recovery across the entire care continuum, and which can be used, alongside regional and local needs assessments to guide effective and efficient service delivery. The Ministry of Health, in partnership with the Mental Health Commission is leading this work and it is expected that a new model will be finalised before the end of 2012.

Specialist community FTEs	52.9%	45.6%	57%	51%
Specialist Beds	18.6%	0.5%	27%	0.4%
Non Blueprint funding	NA	NA	\$42m	\$10.2m

Comparing the results from the three approaches

Table 19 below compares the gaps identified by using the three benchmarking approaches. It shows the percentage increase that would be needed for each service category to reach:

- National average volumes and spending.
- PBF volumes and spending.
- *Blueprint* volume and spending targets.

Table 19: Comparing the gaps identified by using the three approaches

	Volumes			Funding		
	1	2	3	4	5	6
Service type	% increase needed to reach national average per 100,000 age specific population	% increase or decrease needed to reach PBF volumes	% increase needed to reach <i>Blueprint</i> target	% increase needed to reach national average per 100,000 age specific population	% increase or decrease needed to reach PBF volumes	% increase needed to reach <i>Blueprint</i> target
Adult community clinical FTEs	0%	11.8%	-4.9%	1.7%	13.3%	-6%
Adult inpatient beds	16.4%	26.3%	34.3%	9.2%	19.9%	21.8%
Adult community support FTEs	-4.3%	8.0%	-7.2%	-4.7%	7.6%	-14%
Adult residential beds	1.5%	13.2%	48.3%	5.2%	16.4%	51%
Total Adult				3.7%	16.5%	
AOD community FTEs	-31.2%	-17.9%	-23.9%	-34.4%	-20.9%	-27%
AOD beds	28.7%	35.9%	25.5%	15.7%	24.2%	52%
Methadone places	10.0%	19.1%	34%	11.5%	20.4%	34%
Total AOD				-19.2%	-6.7%	
Child and youth community FTES	-3.1%	2.8%	23.6%	-2.6%	3.3%	24%
Child and youth day programme	26.2%	30.4%	75.3%	16.8%	21.6%	75%
Child and youth beds*	68.1%	69.9%	80.8%	70.9%	72.5%	80%
Total Child and Youth				7.1%	14.1%	
Forensic beds	-9.5%	3.4%	10.5%	-4.5%	7.8%	8%
Forensic community FTEs	-11.8%	1.4%	-138.8%	-8.0%	4.8%	-180%
Total forensic				-6.9%	7.7%	
Older people's community FTEs	15.7%	-60.7%	39.4%	13.3%	-65.2%	39%
Older people's beds	20.7%	-51.2%	39.5%	20.8%	-50.9%	39%
Older people's day programme	-146.9	-370.6%	74.3%	-146.9%	-370.6%	74%
Total Older People				12.6%	-39.7%	
Specialist community FTEs	16.5%	25%	54.4%	21.6%	29.5%	49%

	Volumes			Funding		
Specialist Beds	98.3%	98%	99.5%	100.0%	100.0%	99.6%
Total Specialist services				40%	82.1%	
Non Blueprint funding	NA	NA	NA	-27.8%	-14.8%	\$10.2m

Individual DHB results can be found in Appendix 6.

Services where the Midland region is consistently below the benchmark using all three methodologies (i.e. where more services would be needed to meet the benchmark) are:

- Adult beds, child and youth beds and AOD beds.
- Child and youth day programmes.
- Specialist beds and specialist community FTEs (services for complex and low prevalence disorders such as eating disorders and severe personality disorder).
- Methadone places.

The services where the Midland region is consistently above the benchmark using all three methodologies is AOD community FTEs.

THE VIEWS OF MIDLAND REGION STAKEHOLDERS

This section provides a comprehensive summary of the views of Midland region stakeholders as represented by the following Midland region advisory networks:

- Nga Purei Whakataa Ruamano, the Maori advisory network.
- Generating Action for Families, the family whanau advisory group.
- He Tipuana Nga Kakano, the consumer advisory group.
- Portfolio Managers Group.
- Clinical Leadership forum, Midland provider arm Clinical Directors and Managers.
- Midland Region Addictions, the addictions advisory group.

Summary

Some of the key general themes arising from the consultation process include:

- Issues relating to rurality and suggestions for improving service delivery for people in rural areas.
- Gaps in services for youth with substance use disorders.
- Large gaps in primary mental health especially for people with substance use disorders.
- Insufficient consideration of, and services for, children of service users (both mental health and addictions).
- A need for better integration between mental health and addiction services still needed.
- Gaps for young people and Maori.
- Difficult boundary issues for co-existing disorders such as people with mental disorders and a disability.

There was a high level of satisfaction with the way the Midland region advisory networks are working.

Before outlining the views of stakeholders it is useful to note the overall summary from the Midland Region Mental Health and Addiction planning day in 2005 which was based on the issues, gaps and needs identified during the last Midland Region Mental Health and Addiction Needs Assessment in 2005. These were:

“Vision: Mental Health system that is flexible and responsive and builds on partnership, participation/protection

- Focused on the consumer.
- Whanau Ora, Tapa Wha.
- Accessible service system across primary, secondary, tertiary levels.
- Supporting workforce development.
- Building on collaboration.

To do so, we need to go through positive evolution and develop informed leadership and overcome

- Disconnected funding system – public health, DSS, mental health, primary care.
- Rigid service specifications.
- Funding that is not aligned to needs.
- Inequity of funding.
- Mind set changes from medical to non-medical, from social disability to social ability.
- Provide options and choices including cultural assessment tools.”

What has been achieved over past 5 years (since the last needs assessment report was completed)

Midland region stakeholders identified the following key achievements over the past 5 years.

Recovery focus	<ul style="list-style-type: none"> • A move to a recovery focus, although this is not yet universally the case. This has been assisted by recovery training.
Service Development	
<i>Primary care</i>	<ul style="list-style-type: none"> • Increased availability of primary mental health services for people with mild and moderate disorders. • Development and use of new tools for primary care practitioners (guidelines, on-line tools, e therapy etc). • Increasing use of primary mental health services for young people. • Shared care between GPs and specialist services (particularly in relation to AoD services).
<i>Specialist services (DHB provider arm and NGOs and including inpatient and community services)</i>	<ul style="list-style-type: none"> • Better access to a wider and more modern range of medication. • More housing options available. • Better integration between mental health and addiction services. • Much better relapse prevention planning. • More and better respite care which keeps people out of acute services. • More peer support services and peer advocacy. • In Taranaki, the establishment of home-based treatment in Taranaki, and the STEP AOD programme. • In Tairāwhiti, refurbishment of the inpatient unit including ensuites. • In Lakes, services to assist people into work, supported living options, inpatient beds for older people and training in talking therapies in the provider arm. • In Bay of Plenty and Waikato the development of good services for older people and people with dementia (with work commenced for older Maori) • Increased consumer and family involvement in AoD treatment. • Increased AoD funding.

	<ul style="list-style-type: none"> • More Kaupapa Maori AOD services in the NGO sector.
Workforce development	<ul style="list-style-type: none"> • More workforce development opportunities. • Recovery focused workforce development. • AoD specific workforce development (e.g. work done by Matua Raki, DAPAANZ competencies, training for GPs, scholarships, AOD specific qualifications, secondment programmes). • Development of nursing in AOD treatment.
National and Regional initiatives	<ul style="list-style-type: none"> • Introduction of PRIMHD. • Introduction of new and more “modern” service specifications. • Introduction of the co-existing disorders framework. • Review of AOD Act in progress. • Continued development and influence of NAOTP. • Continued development and influence of Midland regional network forums, which are considered to be working well.

Gaps and service development issues identified by stakeholders:

Midland region stakeholders identified the following key gaps and service development issues.

	Gaps and issues
Recovery focus	<ul style="list-style-type: none"> • Access to peer support has improved but there is still a shortage of peer support available. • Consumer advisor roles are still not working to their full potential. • Whilst there have been improvements in consumer and family involvement, there is still a need for further development of mechanisms for feedback, respectful dialogue and influence.
Service Development: Primary Care	
<i>Primary care</i>	<ul style="list-style-type: none"> • Big gaps in primary mental health services. • More interventions needed at the primary care level and better GP support and training. A view that primary mental health services do not cater well for people with AOD issues generally.
Service Development: Specialist Services (DHB provider arm and NGOs)	
<i>General</i>	<ul style="list-style-type: none"> • There are still women who have suffered sexual abuse who are put into a ward with men. • Specific support is needed for people changing medication and for managing withdrawal from medications. • Training is needed for staff and services users in use of advance directives. There appear to be issues around lack of recognition, implementation and acceptance by some clinicians and inpatient units in the region. • Many service users don't know about HONOS and there are also issues relation to service user access to their outcome information.
<i>Youth</i>	<ul style="list-style-type: none"> • Gaps in services for younger people. • Insufficient consideration of, and services for, children of service users. This was a common theme from all stakeholder groups. Stakeholders suggested incorporating into relapse prevention planning use of the KITES “kidsplan” (Waikato is funding some services in this area). • Supported accommodation, especially for youth. • Child and Youth Forensic services.

	<ul style="list-style-type: none"> • Maternal mental health services. • More consumer advisors needed in CAMHS services and a more holistic approach. • Young people with behaviour problems but no mental health diagnosis miss out on services due to criteria for access (as articulated in the NSF Service Coverage document).
<i>Maori</i>	<ul style="list-style-type: none"> • Gaps in services for Maori.
<i>Pacific People</i>	<ul style="list-style-type: none"> • Consideration needed about what the barriers are for Pacific people accessing services. Is there a need to recruit more Pacific workers?
<i>Asian People</i>	<ul style="list-style-type: none"> • Consideration needed about what the barriers are for Asian people accessing services. Is there a need to recruit more Asian workers?
<i>Co-existing disorders</i>	<ul style="list-style-type: none"> • Issues for people with dual diagnosis especially mental health and intellectual disability. There are boundary disputes about who is responsible as well as a shortage of appropriate services. • Whilst there is good policy direction in relation to integration of mental health and AOD services, implementation is limited indicating a need for changes in culture and more workforce development.
<i>AoD</i>	<ul style="list-style-type: none"> • Gaps in AoD services especially youth and Maori AoD services in the community. More marae based AOD programmes needed. • Specialist addiction psychiatry. • Crisis support for AOD clients including AOD peer support and advocacy (this is available in Tairāwhiti). • Social detoxification services (pre and post residential care). • Detoxification services for young people. • Respite care specifically for AOD. • Services for children of AoD service users. • Services to support family/whānau to keep them well and to enable them to support their family member with a substance use disorder. • Lack of access to certain medications that are available in the rest of the world – Naltrexane prescribing and specialist access to addiction medicine. • Education on the effect of mixing medications with street drugs and also the effects of not taking medication. • Better treatment while people are in prison. • Referral pathways need improving. • Better relationships needed with the probation service. • Consider how to deal with people who do not turn up for treatment (DNAs) • Stigma issues relating to substance use problems especially for certain populations. • Criteria for access to mental health services do not always meet the needs of the probation service and CYFS.
<i>Older People</i>	<ul style="list-style-type: none"> • Gaps in services for older people. An increasing number of older people and people with dementia is likely to have a big impact in future years. • Kaumatua in rest homes are isolated from whānau, there is little mental health expertise in rest homes and a need for more workforce development.
<i>Rural services</i>	<p>Rurality issues were a constant theme in the consultation meetings.</p> <ul style="list-style-type: none"> • Rurality issues include <ul style="list-style-type: none"> ○ Services being provided away from home requiring time out of the area, especially for young people e.g. Starship hospital. ○ Services are needed closer to home.

	<ul style="list-style-type: none"> ○ How to develop rural crisis services in a way that is not too expensive. ○ In Bay of Plenty, most services are still based in Western BOP with consequent difficulties for people in Eastern BOP. ○ There are social determinants that are not necessarily within the scope of the health system, but which contribute to substance use (and mental health) disorders e.g. shortage of social opportunities outside of the local tavern, lack of education etc. ● Isolation of many Midland providers and the need for <ul style="list-style-type: none"> ○ Better access to training/conferences etc – perhaps a mobile AOD training programme towards a recognised qualification and/or recognition of the costs of training. ○ More electronic resources (teleconference etc) and training in the use of what IT is available. ○ Mobile treatment services including a roving medical specialist. ○ Better located residential treatment facilities. ● Gaps in rural crisis services
<i>Respite care</i>	<ul style="list-style-type: none"> ● Shortage of respite care options
<i>Specialist services</i>	<ul style="list-style-type: none"> ● Gaps in specialist community services for people with eating disorders and borderline personality disorder
<i>Referral pathways and NASC processes</i>	<ul style="list-style-type: none"> ● Some DHBs have confusing referral pathways which result in services holding on to clients due to lack of trust in the transition process e.g. Taranaki ● Considerable dissatisfaction with Needs Assessment and Service co-ordination services including issues around <ul style="list-style-type: none"> ○ Gatekeeping by DHB provider arm services ○ Embedding current service referral patterns ○ Single point of entry limiting whanau decision making as to the preferred service provider ○ Lack of cultural competency ○ A “way in” to services for self referrals (for AoD especially this results in a big gap)
<i>DHB specific gaps</i>	<p><i>Waikato gaps</i></p> <ul style="list-style-type: none"> ● Large gaps in community adult clinical FTEs and in particular for Maori. ● Child and youth inpatient beds. ● A likely gap in AOD services, but this has not been able to be quantified at this stage. ● Crisis services and respite services for Maori. <p><i>Bay of Plenty gaps</i></p> <ul style="list-style-type: none"> ● AOD services and in particular youth AOD and Maori AOD. ● Supported accommodation services. ● Uncertain access to child and youth inpatient beds when required. ● People with high and complex needs. ● Rural based services in Eastern BOP including no adult Kaupapa services. ● Community support. ● Kaupapa friendly landlord services. ● Kaumatua services. <p><i>Taranaki gaps</i></p> <ul style="list-style-type: none"> ● Crisis and family respite (adult and youth). ● Housing in particular for 18-25 year olds and for people with co-existing mental health and AOD disorders.

	<ul style="list-style-type: none"> • Insufficient packages of care. • People with Huntington’s disease. • A question about whether Taranaki has too many inpatient beds. <p><i>Tairāwhiti gaps</i></p> <ul style="list-style-type: none"> • Community adult mental health services (which need to be sized in light of prevalence data). • AOD which still need to be sized. • AOD respite services (there are no services available). • Child and youth services in rural areas. • Big gaps in primary mental health services. • Lack of options for older Māori . <p><i>Lakes gaps</i></p> <ul style="list-style-type: none"> • Under 12 year olds with AOD problems. • Kaupapa Māori services. • Housing options.
Workforce development	<ul style="list-style-type: none"> • A need to focus more on recovery. • Encourage movement of people out of peer support roles into other roles (career pathways). • Recognition of the costs of training especially in an environment where standards are increasing. • AOD courses that support a balance of experiential and intellectual learning. • There is little mental health expertise in rest homes and a need for more workforce development in this area.
National, regional and interagency initiatives	<ul style="list-style-type: none"> • A need to develop better working relationships with Justice and other agencies.

APPENDIX 1: MENTAL HEALTH AND ADDICTION LEGISLATION, POLICY AND PRIORITIES

1. LEGISLATION

The provision of mental health and addiction services in New Zealand is subject to a number of acts that impact on future demand for services and for the way that services are developed and provided.

These include (in alphabetical order):

- **Alcoholism and Drug Addiction Act 1966.** The aim of this Act is to make better provision for the care of people with alcohol dependency and people addicted to drugs.
- **Crimes Act 1961.** Section 23 of this Act sets out the conditions that apply to the defence of insanity.
- **Health and Disability Commissioner Act 1994** (Health and Disability Code of Rights). The Act created the Office of the Health and Disability Commissioner, with the role of promoting and protecting the rights of health and disability services consumers, and facilitating the fair, simple, speedy and efficient resolution of complaints – with a national network of independent advocates under the Director of Advocacy, and an independent prosecutor, the Director of Proceedings.
- **Health and Disability Safety Act 2003.** The purpose of the Act is to:
 - Promote the safe provision of health and disability services to the public.
 - Enable the establishment of consistent and reasonable standards for providing health and disability services to the public safely.
 - Encourage providers of health and disability services to take responsibility for providing those services to the public safely.
 - Encourage providers of health and disability services to the public to continuously improve the quality of those services.
- **Health Practitioners Competency Assurance Act 2003.** The Act provides a framework for the regulation of health practitioners in order to protect the public where there is a risk of harm from the practice of the profession.
- **Intellectual Disability (Compulsory Care and Rehabilitation) Act 2003.** The purposes of this Act are:
 - To provide courts with appropriate compulsory care and rehabilitation options for persons who have an intellectual disability and who are charged with, or convicted of, an offence; and
 - To recognise and safeguard the special rights of individuals subject to the Act; and

- To provide for the appropriate use of different levels of care for individuals who, while no longer subject to the criminal justice system, remain subject to this Act.
- **Land Transport Act 1998.** The key areas of relevance from this Act are the provisions concerning drivers' licenses for patients under the Mental Health (Compulsory Assessment and Treatment) Act 1992.
- **Mental Health Commission Amendment Act 2007.** This Act sets out the role of the Commission as follows:
 - Advocate for people with mental disorders and/or addiction and their families.
 - Promote and facilitate collaboration and communication about issues relating to mental disorders and addiction.
 - Promote community understanding of issues relating to mental disorders and addiction.
 - Reduce stigma and prejudice and eliminate discrimination against people with mental disorders and/or addiction and their families.
 - Monitor and report to the Minister on implementation of the national mental health strategy.
 - Stimulate and support policy-makers, funders and providers to provide integrated, effective, efficient systems of care that meet the needs of the community.
 - Stimulate and undertake research relevant to mental disorders and addiction.
- **Mental Health (Compulsory Assessment and Treatment) Act 1992.** This Act provides for the compulsory assessment and treatment of people who are considered to be "mentally disordered" within the meaning of the Act. The Mental Health (Compulsory Assessment and Treatment) Amendment Act came into force from 1 April 2000.
- **Misuse of Drugs Act 1975.** Section 24 of this Act relates to the treatment of people dependent of controlled drugs.
- **New Zealand Public Health and Disability Act 2000.** This Act establishes the structure underlying public sector funding and the organisation of health and disability services. It establishes District Health Boards, and sets out the duties and roles of key participants, including the Minister of Health, Ministerial committees, and health sector provider organisations. It also sets the strategic direction and goals for health and disability services in New Zealand. These include to improve health and disability outcomes for all New Zealanders, to reduce disparities by improving the health of Māori and other population groups, to provide a community voice in personal health, public health, and disability support services and to facilitate access to, and the dissemination of information for, the delivery of health and disability services in New Zealand. The Act has recently been amended to provide a focus on national and regional requirements as well as local requirements, support shared arrangements and collaboration, provide a mechanism for arbitration and mediation between DHBs, and establish the Health Quality and Safety Commission.
- **Privacy Act 1993** promotes and protects individual privacy. The *Health Information Privacy Code 1994* issued under the Act provides rules to protect individual privacy in respect of consumers' health information. A revised 2008 edition is available.

- **Public Finance Act 1989.** The purpose of this Act is to ensure the effective and efficient regulation of all government revenue, expenditure, assets and liabilities.

Forensic Mental Health Services are delivered in the context of the following legislation:

- **Criminal Procedure (Mentally Impaired Persons) Act 2003.** The purpose of this Act is to “restate the law formerly set out in part 7 of the Criminal Justice Act 1985 relating to mentally disordered persons who are involved in criminal proceedings, and to make a number of changes to that law,” including changes to:
 - Provide the courts with appropriate options for the detention, assessment, and care of defendants and offenders with an intellectual disability; and
 - Provide that a defendant may not be found unfit to stand trial for an offence unless the evidence against the defendant is sufficient to establish that the defendant caused the act or omission that forms the basis of the offence.
- **Victims Rights Act 2002.** Section 37 of this Act concerns notice to be given to registered victims of the discharge, leave or escape, or death of an accused or offender who is compulsorily detained in a hospital.

Copies of legislation can be found on www.legislation.govt.nz

2. **POLICY AND KEY NATIONAL DIRECTIONS** (with current regional action where applicable)

A number of national policies, strategies and key government directions outlined in this section impact on current and future mental health service planning.

Mental Health and Addiction Action Plan 2010

The Minister of Health recently (November 2010) released the “*Mental Health and Addiction Action Plan 2010*”. The plan outlines the Government’s priorities for mental health and addiction services in the short term, offering guidance for the implementation of the broader strategic direction set out in the national mental health strategy (as discussed in the following section). Given that this is the most recent articulation of Government’s priorities for mental health and addiction, it is included as the first item in this section. The full document can be found at:

<http://www.moh.govt.nz/moh.nsf/indexmh/mental-health-and-addiction-action-plan-2010>

Whilst the document is focussed mainly on actions being lead by the Ministry of Health, it will impact on regional and DHB planning and funding decisions. The prioritised actions respond to the Government’s immediate and emerging priorities and involve:

1. Moving health resources to increase access to mental health and addiction services and improve health outcomes through:

- New ways of delivering well-connected and co-ordinated services involving primary care, district health boards and non-government organisations.

- More use of Relapse Prevention Plans and Knowing the People Planning or similar planning tools for people requiring long-term assistance.

2. Lifting system performance to enhance our communities' mental health and wellbeing by:

- Enhancing eating disorder services.
- Establishing regional advisory services for dementia behavioural support.
- Using national key performance indicators to measure how we're doing and where improvements need to be made, particularly for Māori and other vulnerable populations.
- Ensuring that services meet future needs through a new nationwide Mental Health and Addiction Service Development Plan.
- Collecting better information about publicly-funded mental health and addiction services.

3. Tackling alcohol and other drug-related harm by:

- Improving access to methamphetamine-related services.
- Developing a modern legislative framework.
- Providing additional alcohol and drug treatment programmes for young offenders.

4. Integrating efforts across government for better mental health outcomes through:

- Mental health and addiction services that help to divert children and young people away from negative pathways and increase their life chances.

Te Tahuu – Improving Mental Health 2005-2015: The Second New Zealand Mental Health and Addiction Plan and in its associated action plan, **Te Kokiri: the Mental Health and Addiction Action Plan 2006-2015**. These two documents currently articulate the national mental health strategy which is legislated under section 3 of the Mental Health Commission Act 1998. These two documents describe 10 leading challenges: promotion and prevention; building mental health services, responsiveness; workforce and culture for recovery; Maori mental health; primary health care; addiction; funding mechanisms for recovery; transparency and trust; working together.

The key priorities and themes emerging from these two documents which impact on planning and funding decisions include:

- Services that are recovery and wellness focused.
- Increasing promotion and prevention relating to mental health and addictions.
- Building the capacity and capability of primary care to respond to the needs of people with mental illness and substance use problems.
- Addressing gaps in services, in particular for Maori, people with substance use problems, children and older people.

- Strengthening linkages between primary care and specialist services.
- Better management of co-existing mental health and substance use problems.
- Earlier access to services.
- Meeting the needs of people in the criminal justice and youth justice system.
- Workforce development.
- Interagency linkages.

New Zealand Health Strategy 2000. Although it is now 10 years old, the New Zealand Health Strategy 2000 (NZHS) still provides an overview of government priority areas that will provide the highest benefits for the New Zealand population, focusing in particular on tackling inequalities in health. Three of its population health objectives apply to mental health and addiction services;

- Improve the health status of people with severe mental illness.
- Reduce the rate of suicides and suicide attempts.
- Minimise harm caused by alcohol and illicit and other drugs use to both individuals and the community.

In addition, the NZHS highlights the importance of “improving the responsiveness of mental health services.”

New Zealand Disability Strategy: Making a World of Difference - Whakanui Oranga (April 2001). Underpinning the NZ Disability Strategy is a vision of a fully inclusive society. New Zealand will be inclusive when people with impairments can say they live in:

'A society that highly values our lives and continually enhances our full participation.'

Achieving this vision will involve ensuring that disabled people have a meaningful partnership with Government, communities and support agencies, based on respect and equality. Disabled people will be integrated into community life on their own terms, their abilities will be valued, their diversity and interdependence will be recognised, and their human rights will be protected. Achieving this vision will also involve recognising the principles of the Treaty of Waitangi.

To advance New Zealand towards a fully inclusive society, the *NZ Disability Strategy* includes fifteen objectives, underpinned by detailed actions. The document can be accessed at www.odt.govt.nz

He Korowai Oranga: Maori Health Strategy (Minister of Health and Associate Minister of Health 2002). *He Korowai Oranga: Maori Health Strategy* (Minister of Health and Associate Minister of Health 2002) set the direction for Maori health development. It affirms recognition of whanau as central to mental health, wellbeing and recovery. The overall aim of He Korowai Oranga is whanau ora: Maori families supported to achieve their maximum health and wellbeing.

Te Puawaiwhero – The Second Maori Mental Health and Addiction National Strategic Framework 2008-2012. *Te Puawaiwhero* builds on the first framework, *Te Puawaitanga*, launched in 2002. The overall aim is whanau ora: Maori families to reach their maximum health and wellbeing. The key principles in the strategy are:

- Prioritise Maori – act on evidence of health inequality in Maori mental health and addiction need to ensure that new and existing initiatives are responsive and effective for Maori.
- Build on the gains – current initiatives to improve Maori mental health and addiction are sustainable and have a development path for the future.
- Responsive to Maori – build on the link between health and culture to ensure initiatives are responsive to the unique needs of Maori.

Priorities for action are:

- Promotion and prevention – promote Maori mental health and wellbeing and prevent mental illness and addiction through development of programmes that are effective for diverse Maori communities.
- Early intervention and primary health care- primary mental health and addiction service models and funding arrangement are responsive to Maori mental health need and strategies
- Specialist services – Tangata Whaiora who require specialist services experience services that provide choice and are effective, efficient, timely and responsive to their needs.

New Zealand Suicide Prevention Strategy (2006-2016) and Action Plan (2008-2012). The Strategy provides a framework for suicide prevention efforts over the next 10 years. Its overarching aim is to reduce the rate of suicidal behaviour and its effects at on the lives of New Zealanders. The Strategy has seven goals:

- Promote mental health and well-being, and prevent mental health problems.
- Improve the care of people who are experiencing mental disorders associated with suicidal behaviour.
- Improve the care of people who make non fatal suicide attempts.
- Reduce access to the means of suicide.
- Promote the safe reporting and portrayal of suicidal behaviours by the media.
- Support families/whanau, friends and others affected by a suicide or suicide attempt.
- Expand the evidence about the rates, causes and effective interventions.

The action plan provides detail on how the goals of the strategy will be achieved over the 5 years 2008-2012.

Te Raukura: Addressing the mental health and alcohol and other drug needs of children and youth.¹⁸ *Te Raukura* draws together the key issues and priorities that were identified by the child and youth mental health and alcohol and other drug sector, namely:

- Reducing inequalities.
- Child and youth specialist services:
 - Access.
 - Gaps in specialist service provision.
 - Additional areas of focus:
 - children of parents/wh-anau with a mental illness, including the role of
 - young carers
 - youth forensic services
 - severe behaviour disorders
 - child and youth AoD services

¹⁸ Ministry of Health. 2007. *Te Raukura Mental health and alcohol and other drugs: Improving outcomes for children and youth*. Wellington: Ministry of Health.

- maternal and infant mental health
 - low-prevalence disorders.
- Implementation of best practice.
- Intersectoral collaboration.
- Workforce.
- Primary mental health care.

Mental Health Commission's Blueprint for Mental Health Services 1998 (*and proposed development of a new service development framework*)

The *Blueprint* model was developed by the Mental Health Commission in 1998 to operationalise the national mental health strategy to provide a practical framework for planning and funding of specialist mental health services. The *Blueprint* identifies the service mix and volumes required for age groups within every 100,000 people.

The *Blueprint* model and the associated funding stream have contributed to the development of a relatively comprehensive range of specialist services (albeit that some gaps and weaknesses still remain) for people in New Zealand who are affected by a severe mental disorder and/or substance use disorder.

There are limitations to the continued use of the Blueprint model because of:

- New practices, service types and configurations not reflected in the model.
- Inconsistencies with other policy settings especially the population based funding formula.
- The input based nature of the targets.
- Reduced relevance of the targets to local DHB settings, rather than nationally or regionally as envisaged when the model was developed.

Government has accepted that there is a need for a new flexible and more dynamic service development framework, which takes into account population demographics, reflects best practice recovery across the entire care continuum, and which can be used, alongside regional and local needs assessments to guide effective and efficient service delivery.

The Ministry of Health, in partnership with the Mental Health Commission is leading this work and it is expected that a new model will be finalised before the end of 2012.

Better, Sooner, More Convenient Primary Health Care. *Better, Sooner, More Convenient Primary Health Care* is the Government's initiative to "deliver a more personalised primary health care system that provides services closer to home and makes Kiwis healthier".

The initiative recognises that primary health care has a part to play in helping reduce acute demand pressure on hospitals by better managing chronic conditions and proactively supporting high need populations. The policy envisages the establishment of integrated family health centres and some services moving from secondary to primary care settings. Two Midland region business cases (out of nine in New Zealand) have been successful in the initial phase of implementation:

- The Midlands Network which identifies \$65.8 million worth of services that can be managed within primary care, that are currently purchased and managed by four of the Midland region's DHBs and their provider arms – Waikato, Lakes, Taranaki and Tairāwhiti.
- Eastern Bay of Plenty PHOs which will merge and provide a whānau ora approach to services, an integrated Family Health Centre in Whakatane and two smaller Whānau Ora centres in Opotiki and Kawerau. An integrated Family Health Network will also be established to ensure integration and coordination.

In relation to mental health and addiction some primary-secondary integration projects have been established in five demonstration sites as part of the Better, Sooner, More Convenient business case groups – in Midland (Taranaki); Canterbury; Wairarapa; West Coast; AH+ (Alliance Health Plus).

A Ministry project team is working with the mental health and addictions implementation teams in each of the demonstration sites to support implementation of their primary/secondary mental health and addictions integration initiatives and to facilitate the sharing of their experience with the sector.

There are three areas of demonstration:

- Electronic notes sharing.
- Specialist telephone advice to GPs.
- More comprehensive primary/secondary integration.

Electronic notes sharing: A relatively modest e-notes sharing demonstration has been developed. The e-notes demonstration works with whatever information systems are in place in primary and secondary services. A web-based service is used to bridge the two environments. In its simplest form this demonstration entails regularly updated copies of the patient's primary care notes being available on the web service, with psychiatrists being enabled via a web login (and possibly a patient password) to read all or part of a patient's record. Where possible, a further extension of e-notes sharing would entail the psychiatrist being able to write to the patient's primary care record (eg treatment plan / information / advice). There are currently three demonstration sites for e-note sharing: Wairarapa; West Coast; AH+ (Alliance Health Plus)

Specialist telephone advice to GPs: The overarching principle is that the system should be as simple as possible and the advice should be provided as quickly as possible – aiming for same day response. It is not intended that this system will be used to make routine referrals, used after hours, or in cases of emergency. There are currently four demonstration sites for specialist telephone advice: Wairarapa; West Coast; Midland (Taranaki); Canterbury.

More comprehensive primary/secondary integration: These initiatives aim to improve integrated service delivery through the development and implementation of new models of care that include:

- Measures to increase capacity and capability to provide mental health, alcohol and drug services in a primary care setting.
- Health professionals working collaboratively and across traditional boundaries to provide more holistic care that is responsive to the needs of patients and minimally disruptive of support arrangements (including housing etc) and other roles and responsibilities in the community.

- Increased integration of specialist services in primary care service delivery models (ie more than simple shift in location of delivery).
- A well-supported and stimulating work environment that improves workforce recruitment and retention.
- Coordination across integrated care pathways and information systems that provide for efficient service delivery.
- Systems that enable improved and sustainable models of care while maintaining appropriate accountability for equitable access, safety, quality, performance and efficient use of system resources.

There are currently two demonstration sites for more comprehensive integration: Wairarapa; West Coast.

Drivers of Crime/Conduct Disorders: *Drivers of Crime* is an approach that focuses on addressing the underlying drivers of criminal offending within the New Zealand context. It recognises the growing body of knowledge about the circumstances of people's lives that are associated with a greater likelihood of offending and victimisation including: family dysfunction; poverty; child maltreatment; poor educational achievement; harmful drinking and drug use; poor mental health; severe behavioural problems amongst children and young people; and the intergenerational transmission of criminal behaviour. Many of these issues are concentrated within socially and economically disadvantaged families and communities.

Addressing the *Drivers of Crime* involves responding effectively along the pathways of offending. This includes early prevention, treatment for specific needs related to offending, and justice sector responses that reduce re-offending. It involves shared responsibility across a range of government agencies and service providers, and a focus on improved value for money through better coordinated, better targeted, and more effective services and programmes.

The Government has decided on a number of options to address the drivers of crime. The four areas for cross-agency action are:

- Improve the quantity, quality and effectiveness of maternity and early parenting support services, particularly for those most at risk.
- Address conduct and behavioural problems in childhood.
- Reduce the harm from alcohol, and improve the availability and accessibility of alcohol and other drug treatment services.
- Identify alternative approaches to manage low-level repeat offenders and offer pathways to success.

The first three of these options are directly relevant to mental health and addiction services.

National Drug Policy 2007-2012. The overarching goal of the *National Drug Policy 2007-2012* is to prevent and reduce the health, social and economic harms that are linked to tobacco, alcohol, illegal and other drug use. Drug policy in NZ is based on the principle of harm minimisation. The strategy is summarised as follows:

Strategies that support harm minimisation can be divided into three groups or 'pillars':

- Supply control - which aims to prevent or reduce harm by restricting the availability of drugs.
- Demand reduction - which involves a wide range of activities that aim to reduce individuals' desire to use drugs.
- Problem limitation - which seeks to reduce harm from drug use that is already occurring.

HARM MINIMISATION		
Supply Control	Demand Reduction	Problem Limitation
Legislative controls over: import, export, production, cultivation, manufacturing, supply and possession	Drug Education (the delivery of information to improve knowledge and awareness)	Primary prevention including early intervention, brief intervention and ambulance services
Enforcement Activity including border control, shutting down drug cultivation, manufacturing, trafficking and selling operations	Health Promotion (the process of enabling people to increase control over, and, to improve, their health)	Secondary treatment interventions including psychotherapy, managed withdrawal, pharmacotherapy, substitution therapy, residential
Precursor Control	Social Marketing (the use of commercial marketing technologies to persuade target audiences to make behaviour changes)	Harm reduction including needle exchange, heroin prescription, injecting rooms
	Community Action (a process which accesses local resources and knowledge to address social issues)	

Tackling Methamphetamine: An Action Plan (October 2009) – published by Department of Prime Minister and Cabinet, Policy Advisory Group

The overall goal of this Action Plan is a significant reduction in methamphetamine use, which will lead to a reduction in the harms that it causes. This will be achieved through a reduction in supply by controlling precursors and breaking supply chains, a reduction in demand for methamphetamine

through enhanced support for families and communities to resist the drug, and through helping users into treatment and supporting communities to help users into treatment. In relation to providing better routes into treatment, the plan provides for more places in AoD treatment for problematic methamphetamine users and better routes into treatment.

Published Guidance Documents

The Ministry of Health has published a number of guidance documents which impact on planning and funding decisions, and is finalising others in key policy areas. These documents provide guidance on how to make progress as and when these service areas are prioritised for funding by DHBs and the region. Areas where guidance has recently been provided includes:

- *Service Delivery for People with Co-existing Mental Health and Addiction Problems – Integrated Solutions 2010.*
- *Future Directions for Eating Disorders Services in New Zealand (April 2008).*

Service Delivery for People with Co-existing Mental Health and Addictions Problems: Integrated solutions. This is guidance, rather than a policy document but the key directions are supported by the Minister of Health. The document outlines a general expectation that all mental health and addiction agencies will become “co-existing problems capable.” The document addresses the issue of when to:

- Integrate treatment for co-existing problems independently of other services.
- Develop shared care or integrated approaches across services.
- Develop a small, specialist co-existing problems resource.

The document provides a framework that can be used to determine the best response i.e:

- Less severe mental health, less severe addiction – primary health care settings (medical and non medical).
- More severe mental health, less severe addiction – mental health service settings and primary health care.
- Less severe mental health and more severe addiction – addiction services and primary care.
- More severe mental health and more severe addiction - co-working between mental health and addiction services, with support from specialist co-existing problem services.

Future Directions for Eating Disorders Services in New Zealand (April 2008). This is also a guidance, rather than a policy document, but the key directions are supported by the Minister of Health and dedicated Government funding has been allocated to building new services.

The document proposes a tiered service model and principles to address the gaps in service provision and build an integrated eating disorders sector. Key areas for action include:

- Increasing the number and widening the range of services.
- Establishing tertiary eating disorders services.
- Supporting seamless service delivery, easy transitions between services and continuity of care by providing:

- Each service user referred to a secondary service with a designated care co-ordinator.
- At least one designated eating disorders liaison person in each DHB (or appropriate group of DHBs).
- Building a workforce in primary, secondary and tertiary services with:
 - The skills and experience to deliver effective services to people with an eating disorder.
 - A culture that promotes service user participation and leadership.
 - A culture that involves family/whānau in treatment and recovery.

Other guidance documents: Guidance documents are currently being developed in the following areas:

- Youth Forensic services (this is near completion).
- Maternal and Infant Mental Health.
- Primary Mental Health and addictions.
- Mental Health and addictions of older people and dementia (this is near completion and has been sent to key people in the sector for final comment).

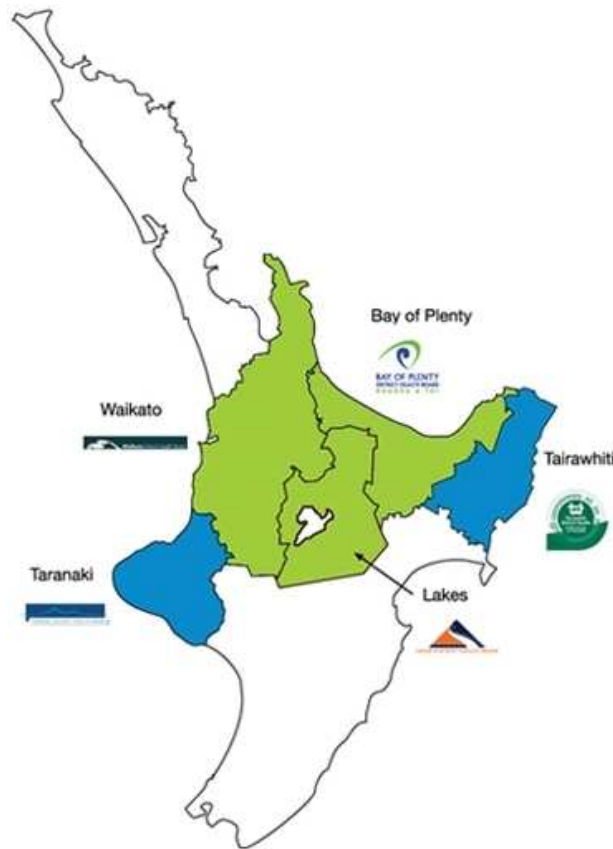
APPENDIX 2: MIDLAND REGION DEMOGRAPHIC PROFILE

Geography

The Midland region covers a large geographic area and encompasses Tairāwhiti DHB, Taranaki DHB, Lakes DHB, Waikato DHB and Bay of Plenty DHB.

A map which details the boundaries of the Midland region and the five DHB's located within these boundaries is provided below:

Figure 6: Midland region boundaries



The region covers 56,738.3 km² and comprises 21% of the New Zealand land mass. Waikato is the largest in size, covering 37% of the area, while Taranaki is the smallest, covering only 14% of the total region.

There are a number of main urban areas¹⁹ in the region (Hamilton Zone, Cambridge Zone, Te Awamutu Zone, Tauranga, Rotorua, Gisborne, and New Plymouth) and a few secondary urban areas²⁰ (Tokotoa, Taupo, Whakatane and Hawera), but a significant proportion of the region's population reside in rural and isolated areas (19.2% compared to 12.2% nationally).

¹⁹ Main urban areas are very large urban areas centred in a city or major urban centre, with a minimum population of 30,000

²⁰ Secondary urban areas are very urban areas centred on large regional centres, with populations between 10,000 and 29,999

Table 20: Midland Region Land Area and Population (2010)

DHB	Area in km ²	% of Region	Population	% of Region (2001 % in brackets)
Bay of Plenty	9,649.5	17%	210,980	25% (24%)
Lakes	9,570.4	17%	103,290	12% (13%)
Tairawhiti	8,355.0	15%	46,805	6% (6%)
Taranaki	7,944.6	14%	109,530	13% (14%)
Waikato	21,218.8	37%	364,790	44% (43%)
Midland Region	56,738.3	100%	835,395	100%

Figure 8: Midland region land area

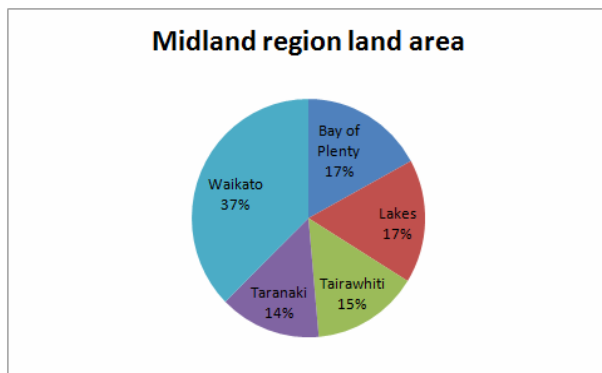
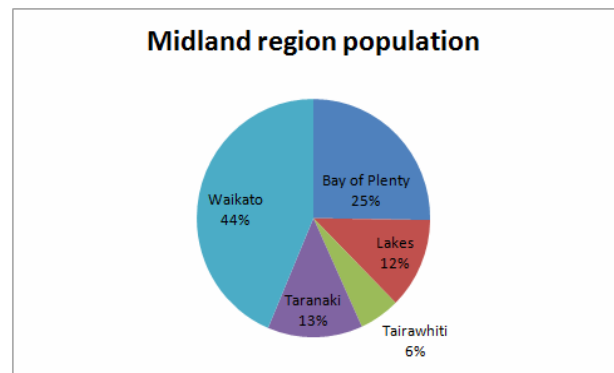


Figure 7: Midland region population



Iwi within the Midland region

Many Iwi are located within the Midland region. While the tribal boundaries of each Iwi are not uniform with either the region or even DHB districts it is still relevant to identify what Iwi exist within Midland. The formally recognised Iwi groups that are located with the Midland region are identified in conjunction with their respective DHBs below²¹.

Tairawhiti DHB: Ngati Porou, Ngai Tamanuhiri, Rongowhakaata, Te Aitanga-a-Mahaki.

Lakes DHB: Lakes DHB sits within part of the rohe or Te Arawa waka. In this rohe there are two major iwi: Te Arawa, which covers the Rotorua Lakes area and Ngati Tuwharetoa, which covers Taupo and Turangi. In the extreme western ends of Lakes DHB is Mangakino who are of Ngati Kahungunu ko Wairarapa iwi and to the east is Kaingaroa who are Ngati Manawa.

Bay of Plenty DHB: Waitaha, Tapuika, Tuwharetoa-ki- Kawerau, Tuhoë, Ngaiterangi, Ngati- a-Ranginui, Te Whanau-a-Apanui, Te Whanau-a-Te Ehutu, Ngaitai, Whakatohea, Ngati Pukenga, Ngati Makino, Ngati Manawa, Ngati Whakaue ki Maketu, Ngati Rangi, Ngati Rangitihi, Ngati Whare, Ngati Awa, Ngai Tai.

Waikato DHB: Waikato, Hauraki, Ngati Maniapoto, Ngati Raukawa.

Taranaki DHB: Ngati Tama, Ngati Mutunga, Te Atiawa, Ngati Maru, Taranaki, Ngaruahinerangi, Ngati Ruanui, Nga Rauru.

²¹ Information from Midland region strategic plan

Midland region ethnicity

Overall 24.8% of the region’s population are Maori, 2.0% Pacific and 4.4% Asian. The percentage of Maori varies across the region, ranging from a high of 47.6% in Tairawhiti, to a low of 16.8% in Taranaki.

The percentage of Pacific people is 2.5% in both Waikato and Lakes, but only 1% in Taranaki. The percentage of Asian people in Waikato is 6.1% compared with a regional average of 4.4% and a low of 1.7% in Tairawhiti.

Table 21: Midland region population by ethnicity (2010)

DHB	Asian		Maori		Other		Pacific		Total Population
	Pop	% of pop	Pop	% of pop	Pop	% of pop	Pop	% of pop	
Bay of Plenty	6,410	3.0%	52,200	24.7%	149,570	70.9%	2,800	1.3%	210,980
Lakes	3,850	3.7%	35,290	34.1%	61,550	59.6%	2,600	2.5%	103,290
Tairawhiti	790	1.7%	22,280	47.6%	22,780	48.7%	955	2.0%	46,805
Taranaki	2,860	2.6%	18,450	16.8%	87,130	79.5%	1,090	1.0%	109,530
Waikato	22,510	6.1%	78,640	21.6%	254,700	69.8%	8,940	2.5%	364,790
Midland Region	36,420	4.4%	20,6860	24.8%	575730	68.9%	16,385	2.0%	835,395
New Zealand	463,095	10.5%	664,230	15.1%	2,966,840	67.8%	279,365	6.4%	4,373,530

Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Figure 9: NZ ethnicity

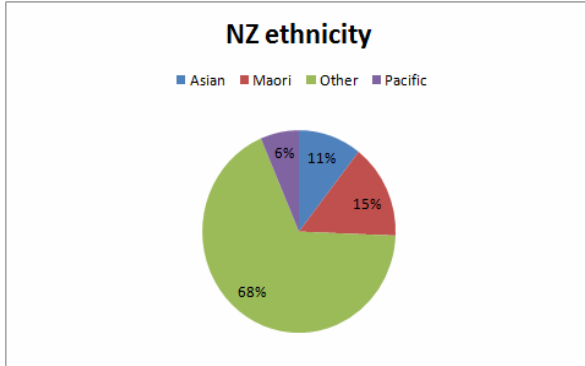


Figure 10: Midland Region ethnicity

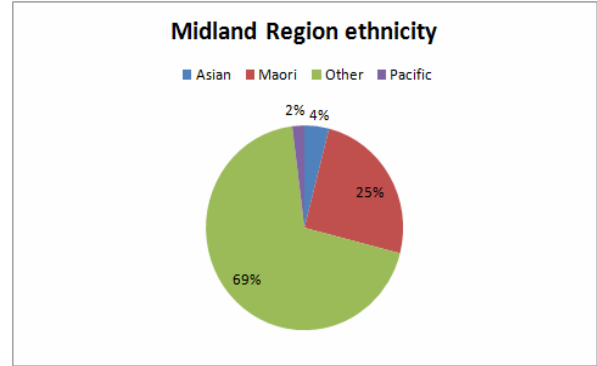


Figure 11: Bay of Plenty ethnicity

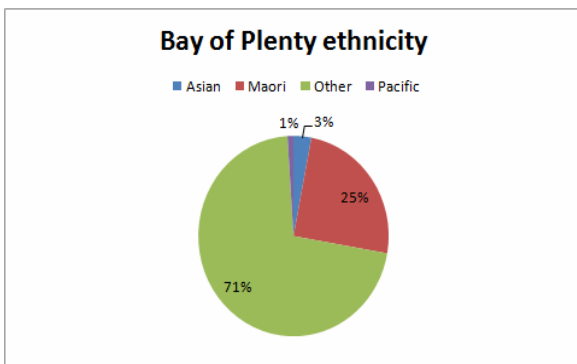


Figure 12: Lakes ethnicity

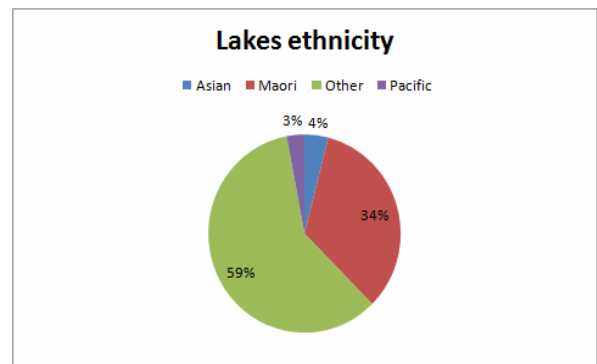


Figure 13: Tairāwhiti ethnicity

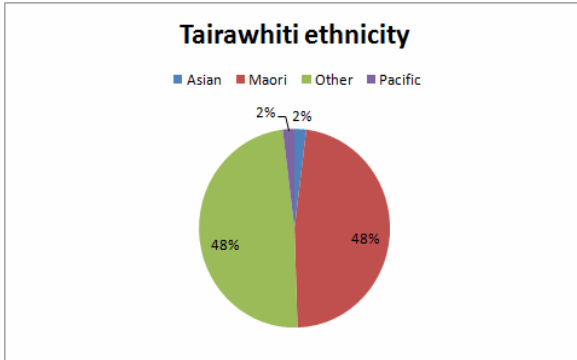


Figure 14: Taranaki ethnicity

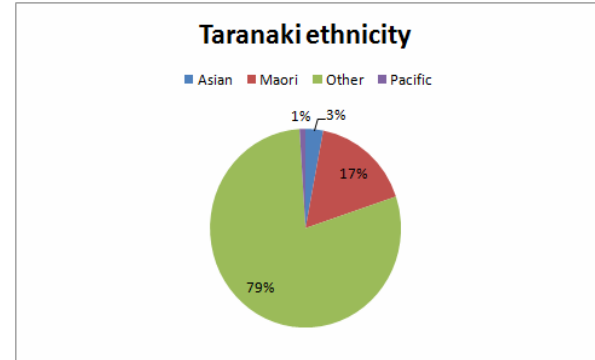
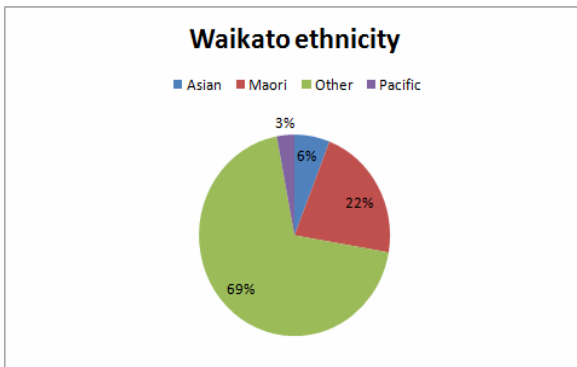


Figure 15: Waikato ethnicity



Midland region age structure

Overall 21.8% of the region’s population is under 15, 13.8% between 15 and 24, 50% are 25-64 and 14.5% are over 65. This age structure has changed since the 2001 figures reported in the previous needs analysis, and there is now a lower percentage of younger people and a higher percentage of older people. This trend is expected to continue as shown in table 25, where the percentage of people under 15 will reduce even further to 19.6% and the number of people over 65+ will increase to 21.2%.

The age spread varies between DHBs e.g. Tairāwhiti DHB has a higher number of young people than the region average and a lower number of people over 65.

Table 22: Midland Region population by age (2010)

	00-14		15-24		25-44		45-64		65+	
	Pop	% of pop	Pop	% of pop	Pop	% of pop	Pop	% of pop	Pop	% of pop
Bay of Plenty	44,370	21.0%	26,340	12.5%	49,240	23.3%	55,420	26.3%	35,610	16.9%
Lakes	23,800	23.0%	13,920	13.5%	25,840	25.0%	26,360	25.5%	13,370	12.9%
Tairāwhiti	11,560	24.7%	6,525	13.9%	11,080	23.7%	11,830	25.3%	5,810	12.4%
Taranaki	22,720	20.7%	14,305	13.1%	26,425	24.1%	28,865	26.3%	17,215	15.7%
Waikato	79,560	21.8%	54,040	14.8%	92,070	25.2%	90,040	24.7%	49,080	13.5%
Midland Region	182,010	21.8%	115,130	13.8%	204,655	24.5%	212,515	25.4%	121,085	14.5%

Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Population projections

Over the next 16 years the Midland region population will increase at a lower rate than the NZ average. The highest Midland region population increase is expected in the Bay of Plenty DHB (17.5%) whilst the population of Tairāwhiti DHB is expected to decrease slightly (-0.3%).

Table 23: Midland Region population projections 2010-2026

	2010	2016	2021	2026	% increase in population 2010-2026
Bay of Plenty	210,980	226,020	237,240	247,870	17.5%
Lakes	103,290	104,930	105,590	105,740	2.3%
Tairāwhiti	46,805	47,100	46,945	46,625	-0.3%
Taranaki	109,530	110,545	110,525	109,975	0.4%
Waikato	364,790	381,840	392,720	402,140	10.2%
Midland Region	835,395	870,435	893,020	912,350	9.21%
New Zealand	4,373,530	4,630,495	4,817,555	4,991,595	14.1%

Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Table 24: Midland Region ethnic population projections 2010-2026

	2010		2016		2021		2026	
		% of total pop		% of total pop		% of total pop		% of total pop
Asian	36,420	4.4%	45,425	5.2%	52,975	5.9%	60,410	6.6%
Maori	206,860	24.8%	221,940	25.5%	233,030	26.1%	243,670	26.7%
Other	575,730	68.9%	584,970	67.2%	587,470	65.8%	587,280	64.4%
Pacific People	16,385	2.0%	18,100	2.1%	19,545	2.2%	20,990	2.3%
Total	835,395		870,435		893,020		912,350	

Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Figure 16: Changes in Midland Region ethnicity from 2010 to 2026

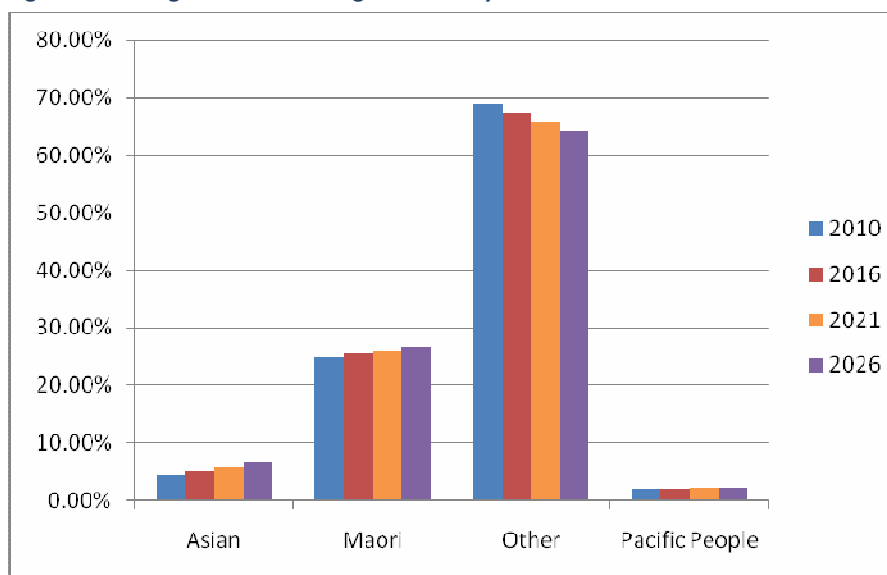


Table 25: Midland Region age projections 2010-2026

Age band	2010		2016		2021		2026	
		% of total pop		% of total pop		% of total pop		% of total pop
00-14	182,010	21.8%	183,035	21.0%	184,075	20.6%	179,005	19.6%
15-24	115,130	13.8%	111,715	12.8%	105,160	11.8%	108,690	11.9%
25-44	204,655	24.5%	205,990	23.7%	212,270	23.8%	217,195	23.8%
45-64	212,515	25.4%	223,380	25.7%	223,070	25.0%	214,170	23.4%
65+	121,085	14.5%	146,315	16.8%	168,445	18.9%	193,290	21.2%
Total	835,395		870,435		893,020		912,350	

Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

A breakdown of population information for each DHB is provided in more detail in appendices 7-11.

Deprivation

NZDep provides a deprivation score to each mesh block in New Zealand and average scores can be calculated at higher levels such as DHB level. The scores, which are measured in deciles (from 1-10) can be scaled to quintiles (from 1-5). 1 is the least deprived, and 5 the most deprived.

A quarter of the Midland regions’s population (25%) are in the highest quintile of deprivation (i.e. the most deprived quintile) whilst only 14% are in the lowest quintile (i.e. the least deprived quintile). Deprivation varies across ethnicities and across the region. Nearly half of Maori and Pacific people reside in the highest quintile of deprivation whilst only 5 % are in the lowest quintile. Tairawhiti DHB has the highest deprivation scores with 45% of the population residing in quintile 5 and only 9% in quintile 1.

Figure 17: Deprivation by ethnicity in the Midland region

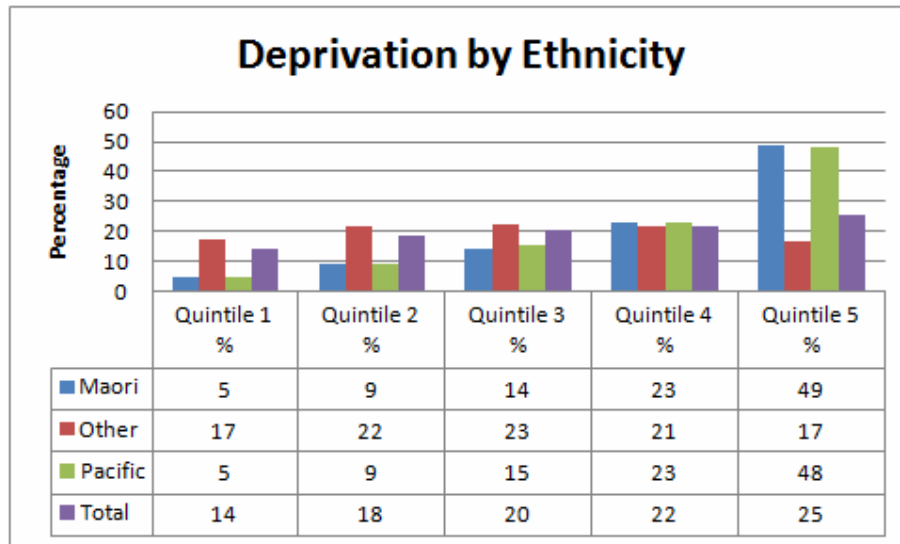
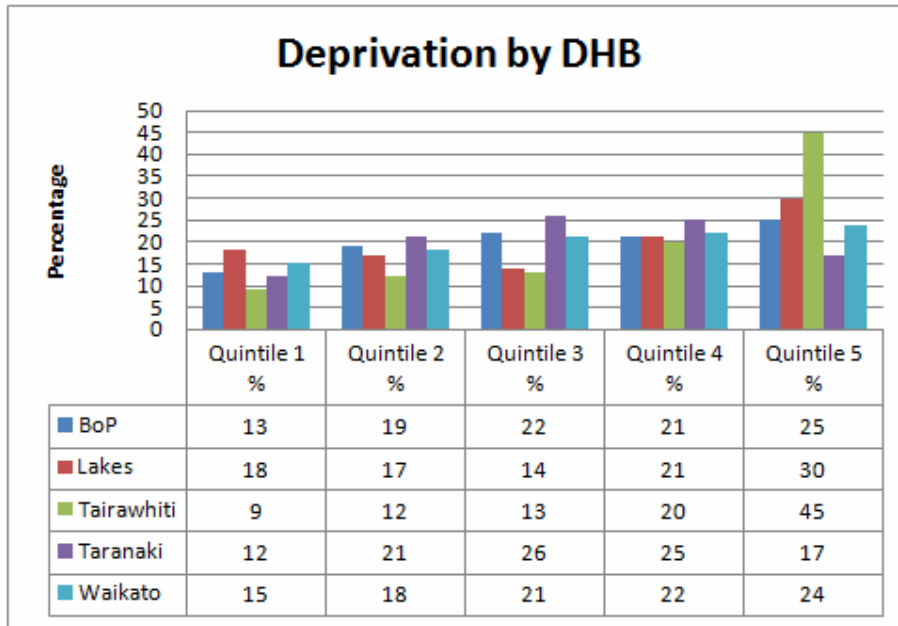


Figure 18: Deprivation by DHB in the Midland region



APPENDIX 3: PREVALENCE INFORMATION

Key findings from *Te Rau Hinengaro*

Prevalence

- Mental disorder is common in New Zealand: 46.6% of the population are predicted to meet criteria for a disorder at some time in their lives, with 39.5% having already done so and 20.7% having a disorder in the past 12 months.
- The prevalence of serious disorder in the past 12 months was 4.7%, moderate disorder 9.4% and mild disorder 6.6%, with the remaining 79.3% of the population not diagnosed with a disorder.
- The prevalence of disorder and serious disorder in the past 12 months was higher for younger people, people with less education, people with less income and people who lived in more deprived areas.
- Māori and Pacific people had a higher prevalence of disorder and serious disorder in the past 12 months than was found for the Other composite ethnic group, but these differences were much reduced, particularly for Pacific people, after adjustment for sociodemographic correlates.
- Comorbidity of mental disorders (the co-occurrence of two or more disorders) is common, with 37.0% of those experiencing 12-month disorders having two or more disorders.
- A clear relationship exists between the increasing number of disorders and case severity, with 59.6% of people experiencing multiple disorders classified as serious cases.
- People with mental disorders have higher prevalences of several chronic physical conditions compared with people without mental disorders of the same age. People with chronic physical conditions are also more likely to experience mental disorders compared with those without physical conditions.

Health service use

- A mental health visit in the healthcare sector (mental health and general health) was made in the past 12 months by 58.0% of those with a serious disorder, 36.5% with a moderate disorder, 18.5% with a mild disorder and 5.7% of those not diagnosed with a disorder.
- Pacific people and, to a lesser extent, Māori are less likely than Others to make contact for mental health reasons with services. The extent of these disparities is little affected by adjustment for sociodemographic correlates. This indicates barriers to access for Māori and Pacific people that are not explained by youthfulness or socioeconomic disadvantage.
- People with lower educational attainment and people resident in rural centres or areas had lower rates of visits to the mental health specialty sector.

Suicidal behaviour

- In the past 12 months, 3.2% experienced suicidal ideation, 1.0% made a suicide plan and 0.4% made a suicide attempt.
- Individuals with a mental disorder had elevated risks of suicidal behaviour, with 11.8% of people with any mental disorder in the last 12 months reporting suicidal ideation, 4.1% making a suicide plan and 1.6% making a suicide attempt in that period.
- The risk of making a suicide plan or suicide attempt was more common among younger people, people with low household income, and people living in more deprived areas.
- Mood disorders, anxiety disorders, eating disorders and substance use disorders are all associated with suicidal ideation, suicide plan and suicide attempt. Of individual disorders, major depressive episode has the strongest association with suicidal ideation, suicide plan and suicide attempt.
- Māori and Pacific people had higher prevalences of suicidal ideation, suicide plans and suicide attempts in the past 12 months than Others.

Substance use disorders

ALAC commissioned a report *Substance use disorders in Te Rau Hinengaro: the New Zealand Mental Health Survey* which draws together information from *Te Rau Hinengaro* to provide a specific focus on substance use disorders. The findings are summarised below:

- The lifetime prevalence of substance use disorders was 12.3% and 3.5% had experienced a substance use disorder within the past 12 months.
- In the past 12 months 2.6% of the population experienced alcohol abuse, 1.3% alcohol dependence, 1.2% drug abuse and 0.7% drug dependence. Marijuana disorders were a subgroup of drug disorders with prevalences of 0.9% for abuse and 0.5% for dependence.
- The prevalence of substance use disorders in the past 12 months was markedly higher for younger people, and higher for males, people with less education, people with less income and people who lived in more deprived areas.
- Maori had the highest prevalence of substance use disorders in the past 12 months followed by Pacific people and then the Other composite ethnic group (unadjusted prevalences for Maori, Pacific and Others were 9.1%, 4.9% and 2.7%). After adjustment for sociodemographic correlates, differences were much reduced, particularly for Pacific people (adjusted prevalences for Maori, Pacific and Others were 6.0%, 3.2% and 3.0% respectively).
- Twenty-five percent of people who will at some time in their lives experience substance use disorder do so by age 16, 50% by age 18 and 75% by age 24.
- Maori have a significantly higher risk of developing substance use disorders than Pacific people, who have significantly higher risk than the composite Other group, even after adjustment for age and sex.

Key findings from other prevalence studies

Prevalence in young people in New Zealand

The BPAC NZ publication “*Best Practice (special edition) Depression in Young People*” contains a comprehensive section on prevalence and epidemiology of common mental disorders in young people in NZ. This is useful given that *Te Rau Hinengaro* did not include young people under 16. The information in the BPAC publication does not however differentiate between mild, moderate and severe disorders.

The full report can be found at:

<http://www.bpac.org.nz/magazine/2010/youngdep/youngdep.asp>

The publication identifies that:

- Around 20% of children and adolescents are estimated to have mental disorders or problems, with similar types of disorders being reported across cultures. About half of mental disorders begin before the age of 14 years.
- From a general practice perspective, many children will have important psychological problems at a subclinical level which would benefit from intervention, and may be the precursors to adult disorders. These include behaviour and conduct problems, significant school refusal and the excessively anxious child.

The following table in the BPAC publication identifies prevalence of common disorders in children and adolescents.

Table 26: Prevalence of common disorders in children and adolescents

	Total	Boys	Girls
Preschool (also see box below)			
Preschool mental health problems (parent rated)	16	17	14
Hyperactive behaviour disorder	2	2	2
Primary school age			
Attention-deficit hyperactivity disorder	14	19	9
Anxiety disorder (especially separation anxiety)	5	no data	no data
Conduct disorder	3	5	2
Depression/dysthymia	3	4	2
Pre-adolescence (11 years)			
Conduct/oppositional disorder	9	12	5
Attention-deficit hyperactivity disorder	5	no data	no data
Separation anxiety	4	2	5
Overanxious disorder	3	4	2

	Total	Boys	Girls
Depression/dysthymia	2	3	<1
Any mental disorder	18	20	17
Mid-adolescence (15 years)			
Anxiety disorder	13	7	19
Conduct disorder	5	7	3
Depression/dysthymia	6	3	9
Any mental disorder	22	16	18
Late adolescence (18 years)			
Alcohol or substance abuse/dependence	24	29	20
Depression/dysthymia	18	10	27
Anxiety disorder	17	12	22
Any mental disorder	42	39	45

NZ data have been used where available

Source: *Best Practice (special edition) Depression in Young People - BPAC NZ*

The BPAC publication notes that childhood anxiety commonly precedes adolescent depression. In the presence of both anxiety and depression, there is an increased risk of developing a comorbid substance use disorder and treatment responsiveness is reduced.

The “*Werry Centre Stocktake of Child and Adolescent stocktake of Child and Adolescent Mental Health Services in New Zealand (Oct 2005)*” includes similar information as above. It also includes an estimate of the prevalence of disorders with significant clinical impairment. It notes that according to a Canadian review, the rate of disorders in the community for children and youth with clinically significant impairment in functioning associated with a mental health diagnosis is 15%.

“*A review of the outcomes of all treatments of psychiatric disorder in childhood: MCH 17-33 Final report to the National Health Service Executive July 2000*” - Peter Fonagy, Maru Target, David Cottrell, Jeanette Phillips and Zarina Kurtz reports the prevalence of psychiatric disorders in community surveys to be around 20-30% of school age children, dropping to 12-15% when only moderate to severe (clinically significant) diagnoses are considered.

Prevalence studies relating to offending

Detailed information about prevalence relating to offending and youth forensic needs will be provided by the Ministry of Health in its Youth Forensic guidance document which is likely to be available in February 2011. The following is a summary of some of the prevalence information relating to this group:

- International studies indicate that the prevalence of mental health and/or AOD disorders in the *general population* of young people is between 20 and 30 percent.
- International studies have repeatedly reported prevalence rates of mental health and/or AOD disorders of between 40 and 60 percent amongst *youth who have offended*.

- The authors of an American study of more 1400 *youth who had offended* asserted that at least 20 percent of their sample experience disorders “so severe that their ability to function is significantly impaired” (Skowyra and Coccozza 2007, p. vii).
- The prevalence of mental health and/or AOD disorders in *detained youth* is more than 60 percent to in excess of 80 percent.
- AOD disorders are particularly prevalent amongst *youth who have offended*. Skowyra and Coccozza (2007) found that 46 percent of their sample met criteria for an AOD disorder.
- The co-occurrence of conduct disorder and substance abuse is generally reported as being the most frequent combination amongst *youth who have offended*.
- co-existence of mental health and/or AOD disorders is the rule, rather than an exception, amongst *youth who have offended*.
- a strong correlation between children with childhood onset conduct disorder and offending.
- AOD disorders are more prevalent amongst young females *who have offended* (55 percent) than young males who have offended (43.2 percent).

Prevalence of Methamphetamine use

The Department of Prime Ministry and Cabinet, Policy Advisory Group published a report “*Tackling Methamphetamine: An Action Plan*” in October 2009.

This report notes that data from national household drug surveys and other population surveys suggests that use of methamphetamine in New Zealand ‘peaked’ about 2001 at around 5% of 15-45 year olds followed by a stabilisation and a gradual decline until 2009. A recent Massey University survey backs up this picture of declining methamphetamine use. Preliminary results indicate that last year use in the population aged 15-45 years fell to 1.4% in 2009 from 3.4% in 2006.

Other countries in the OECD, with the exception of Australia, Canada and parts of the USA, report much lower rates of methamphetamine use. However, they report higher prevalence of other Class A drugs (notably cocaine and heroin).

The 2007 Alcohol and Drug Use Survey also covered more frequent use with 0.4% reporting using any type of amphetamine at least monthly during the year, which equates to approximately 13,000 people monthly. Monthly use was highest for those aged 25-34, higher for males than females, and higher for Maori than non-Maori. Just over 1% of Maori reported using amphetamine, including methamphetamine at least monthly, compared with 0.5% for non-Maori.

Recent surveys of frequent drug users indicate that levels of use among those still taking the drug are increasing. This supports the suggestion by experts that New Zealand’s methamphetamine market is now ‘mature’: one in which new, occasional and experimental users are put off the drug due to growing awareness of its damaging effects, leaving a residual user population of heavy and dependant users.

Impact of Methamphetamine use: Fatalities directly attributed to methamphetamine are rare, but risks are inherent with acute intoxication, such as cardiovascular problems, convulsions and mental health disturbances, including paranoia and violence. Methamphetamine overdose, if untreated, can potentially induce a stroke or cardiac arrest. Risks are compounded if other substances, such as alcohol, are ingested in combination with methamphetamine.

Long term, heavy or dependant users of methamphetamine may experience a number of psychotic features, including paranoia, hallucinations and mood swings. Problems may be compounded by existing mental health, physical, psychological and social problems.

Methamphetamine use is associated with violent behaviour, particularly if the user has a mental health problem, issues with anger, and a predisposition for violence. A number of high profile violent criminal acts committed by individuals using methamphetamine have caused widespread public concern. Methamphetamine is damaging to relationships causing disconnection from family/whānau and community.

APPENDIX 4: MIDLAND REGION SERVICES BY DHB

Table 27: Waikato NGO services

Provider Name	Purchase unit code	NGO service	Volume
The Salvation Army NZ Trust		STILL TO BE ADDED	
Te Runanga O Kirikiriroa Charitable Trust	MHAK20D	Residential Care & Support Adult community support service	0.30 Non-clinical FTE
Cambridge Community Agencies Network Charitable Trust	MHD74C	Community Alcohol & Drug Services - Community based alcohol and other drug specialist	0.50 Nursing and allied FTE
Care NZ (Est 1954) Limited	MHDI48C	Community Alcohol & Drug Services - Infant, Child, Adolescent & Youth Community Clinical Services	3.00 Nursing and allied FTE
Care NZ (Est 1954) Limited	MHD74C	Community Alcohol & Drug Services - Community based alcohol and other drug specialist services	3.80 Nursing and allied FTE
Centre 401 Trust	MHC35F	Consumer Run Support & Facilitation Service - Consumer Resource & Information Service	3.34 Peer support FTE
Centre 401 Trust	MHC36F	Consumer Run Support & Facilitation Service - Peer support service-Adults	2.20 Peer support FTE
Centre 401 Trust	MHQU	Consumer Run Support & Facilitation Service - quality and audit	1.00 programme
Healthcare of New Zealand Limited	MHA20D	Adult Community Support Services	4.88 Non-clinical FTE
Healthcare of New Zealand Limited	MHA17	Adult Planned Respite	240 bed days
Healthcare of New Zealand Limited	MHA17D	Adult Planned Respite	1.00 Non-clinical FTE
The Ngati Maniapoto Marae	MHA21D	Activity based recovery support service -	1.00 Non-clinical FTE

Provider Name	Purchase unit code	NGO service	Volume
Pact Trust Incorporated		activities and living skills	
The Ngati Maniapoto Marae Pact Trust Incorporated	MHAK20D	Adult Community Support Service	1.00 Non-clinical FTE
People Relying on People Inc	MHW68D	Families & Whanau Support - education, information and advocacy service	1.00 Non-clinical FTE
People Relying on People Inc	MHW68D	Family Facilitator Service- Family whanau support, education, information and advocacy service	1.00 Non-clinical FTE
Stepping Out Hauraki Incorporated	MHC35F	Consumer Run Support Services - Consumer resource and information	2.00 Peer support FTE
Hauora Waikato Maori Mental Health Services	MHCS28	Adult mental Health Services - Specialist Maternal Mental Health Service	0.25 Other clinical
Hauora Waikato Maori Mental Health Services	MHCS28	Adult mental Health Services - Specialist Maternal Mental Health Service	0.02 Senior medical FTE
Hauora Waikato Maori Mental Health Services	MHAK09C	Adult mental Health Services - Community Clinical Mental Health	8.60 FTE
Hauora Waikato Maori Mental Health Services	MHAK09D	Adult mental Health Services - Community Clinical Mental Health	3.00 Non-clinical FTE
Hauora Waikato Maori Mental Health Services	MHAK09A	Adult mental Health Services - Community Clinical Mental Health	2.00 Senior Medical FTE
Hauora Waikato Maori Mental Health Services	MHAK03	Adult mental Health Services - Adult crisis respite - Kaupapa Māori	367 Bed days
Hauora Waikato Maori Mental Health Services	MHAK20D	Adult mental Health Services - Adult community support service	2.73 Non-clinical FTE
Hauora Waikato Maori Mental Health Services	MHCK36F	Adult mental Health Services - Peer Support service for adults	1.50 Peer support FTE
Hauora Waikato Maori Mental Health Services	MHAK10C	Adult mental Health Services - Adult over 18 years	3.40 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHAK10C	Adult mental Health Services - Child & Youth under 18 years	6.00 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHCS11	Adult mental Health Services - Community Forensic Service	0.06 FTE
Hauora Waikato Maori Mental Health Services	MHIS06	Adult mental Health Services - Minimum Secure Forensic	1,368.75 Bed days
Hauora Waikato Maori Mental Health Services	MHK61E	Adult mental Health Services - Kaumatua Roles	2.00 Cultural FTE
Hauora Waikato Maori Mental Health Services	MHAK18C	Adult mental Health Services - Needs assessment and service coordination	4.50 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHCS12	Adult mental Health Services - Prison/Court Liaison Waikato	0.50 FTE
Hauora Waikato Maori Mental Health Services	MHCS12	Adult mental Health Services - Prison/Court Liaison Waikato	0.50 FTE
Hauora Waikato Maori Mental Health Services	MHCS12	Adult mental Health Services - Prison/Court Liaison Midland region	0.50 FTE
Hauora Waikato Maori Mental Health Services	MHFK80A	Adult mental Health Services - Forensic Mental Health Community service	0.19 Senior clinical FTE

Provider Name	Purchase unit code	NGO service	Volume
Hauora Waikato Maori Mental Health Services	MHFK83	Adult mental Health Services - Forensic Mental Health Service	4,110.34 bed days
Hauora Waikato Maori Mental Health Services	MHFK85C	Adult mental Health Services - Forensic Mental Health – Court	1.50 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHIY87C	Youth Forensic Specialist Community service	1.50 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHIYK87C	Youth Forensic Specialist Community service	1.50 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHMK90A	Specialist Community Team – Perinatal mental health	0.07 Senior clinical FTE
Hauora Waikato Maori Mental Health Services	MHMK90C	Perinatal Mental Health Specialist service	0.75 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHIK44D	Child & Youth Community Mental Health & Addictions - Hamilton Cluster - Kaupapa Māori	2.50 Non-clinical FTE
Hauora Waikato Maori Mental Health Services	MHK61E	Child & Youth Community Mental Health & Addictions - Hamilton Cluster - Kaumatua Roles	0.50 Cultural FTE
Hauora Waikato Maori Mental Health Services	MHIK44A	Child & Youth Community Mental Health & Addictions - Hamilton - Kaupapa Māori	1.00 Senior clinical FTE
Hauora Waikato Maori Mental Health Services	MHIK44C	Child & Youth Community Mental Health & Addictions - Hamilton Cluster - Kaupapa Māori	7.20 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHDIK48C	Child & Youth Community Mental Health & Addictions - adolescent & youth alcohol & drug community services - Hamilton Cluster Child - Kaupapa Maori -	4.00 Nursing and allied FTE
Hauora Waikato Maori Mental Health Services	MHIK40	Child & Youth Community Mental Health & Addictions - Infant, child, adolescents, yo Hamilton Cluster	41.16 Occupied bed days
Taumarunui Community Kokiri Trust	MHIK44C	Child & Youth Community Health Addictions Services - South Cluster ICAY community mental health services - Kaupapa Māori	2.25 Nursing and allied FTE
Taumarunui Community Kokiri Trust	MHIW68D	Child & Youth Community Health Addictions Services - Family whanau support education, info & advocacy service- South Cluster	0.81 Non-clinical FTE
Taumarunui Community Kokiri Trust	MHDIK48C	Child, adolescent & youth alcohol & drug community services - South Cluster - Kaupapa Maori	1.00 Nursing and allied FTE
Taumarunui Community Kokiri Trust	MHDK74C	Community Alcohol & Drug Services - Kaupapa Maori Community based Alcohol and other drug services	1.50 Nursing and allied FTE
Waahi Whaanui Trust	MHDK74C	Alcohol & Drug Kaupapa Maori Community based Alcohol and other drug services	2.50 Nursing and allied FTE
Waahi Whaanui Trust	MHADK14C	Alcohol & Drug Co-existing disorders	1.00 Nursing and

Provider Name	Purchase unit code	NGO service	Volume
		(mental health)	allied FTE
Waahi Whaanui Trust	MHDIK48C	Alcohol & Drug Child, adolescent & youth alcohol & drug community services - Kaupapa Maori	0.50 Nursing and allied FTE
Te Korowai Hauora o Hauraki Incorporated	MHIK44C	Child & Youth Community Health & Addictions Services - Hauraki Cluster - Kaupapa Māori	1.50 Nursing and allied FTE
Te Korowai Hauora o Hauraki Incorporated	MHIK44A	Child & Youth Community Health & Addictions Services - Hauraki Cluster - Kaupapa Māori	0.30 Senior clinical FTE
Te Korowai Hauora o Hauraki Incorporated	MHIKW68D	Child & Youth Community Health & Addictions Services - Hauraki Cluster - Family whanau support education	0.50 Non-clinical FTE
Te Korowai Hauora o Hauraki Incorporated	MHIK44C	Child & Youth Community Health & Addictions Services - Hauraki Cluster - Kaupapa Māori	0.50 Nursing and allied FTE
Rostrevor House Inc	MHIW68D	Child & Youth Community Health & addictions Services - Southern & Hauraki Cluster - Family whanau support education, information & advocacy service	0.20 Non-clinical FTE
Rostrevor House Inc	MHI44C	Child & Youth Community Health & addictions Services - Southern & Hauraki Cluster - Infant, child, adolescent & youth community mental health services	1.00 Nursing and allied FTE
Rostrevor House Inc	MHIW68D	Child & Youth Community Health & addictions Services - Southern & Hauraki Cluster - Family whanau support education, information & advocacy service	0.50 Non-clinical FTE
New Progress Enterprises Charitable Trust	MHC35F	Consumer Support Services - Consumer resource –Waikato	4.47 Peer support FTE
New Progress Enterprises Charitable Trust	MHA21D	Consumer Support Services - Activity based recovery support service/ activities and living skills – Waikato	3.00 Non-clinical FTE
New Progress Enterprises Charitable Trust	MHA22D	Consumer Support Services - Vocational Support Services - Waikato	2.50 Non-clinical FTE
New Progress Enterprises Charitable Trust	MHA21D	Consumer Support Services - Activity based recovery support service/ activities and living skills – Taranaki	2.00 Non-clinical FTE
New Progress Enterprises Charitable Trust	MHA22D	Consumer Support Services - Vocational Support Services - Taranaki	2.00 Non-clinical FTE
Family and Caregiver Support Incorporated	MHW68D	Families & Whanau Support - Family whanau support education, information and advocacy service	1.25 Non-clinical FTE
Laura Fergusson Trust Incorporated	MHA25	Individual Packages of Care - Housing and Recovery Services Day Time/ Responsive Night Support	365 Bed days

Provider Name	Purchase unit code	NGO service	Volume
Te Awhi Whanau Charitable Trust Housing and recovery services day time/responsive night support - Kaupapa Māori	MHAK25	Residential Care & Support Services	2,928 Occupied bed days
Te Awhi Whanau Charitable Trust	MHAK25	Residential Care & Support Services - Housing and recovery services day time/responsive night support - Kaupapa Māori	1,952 Occupied bed days
Te Awhi Whanau Charitable Trust	MHAK20D	Residential Care & Support Services - Housing and recovery services	1.00 Non-clinical FTE
The Higher Ground Drug Rehabilitation Trust	MHD76	Alcohol & Drug Residential Treatment Services - Intensive and other drug services with accommodation	1,461.33 Occupied bed days
The Higher Ground Drug Rehabilitation Trust	MHD76C	Alcohol & Drug Residential Treatment Services - Intensive and other drug services with accommodation	1.00 Nursing and allied FTE
Maniapoto Maori Trust Board	MHAK20D	Community Support & Tamariki & Rangatahi Services - Adult community support service	3.00 Non-clinical FTE
The Waikato Clinical Psychology Educational Trust	MHWF	Clinical Psychologists Workforce Development	1.00 Programme
Linkage Trust	MHQU	Primary Mental Health Integration - quality and audit	1.00 Programme
Linkage Trust	MHQU	Primary Mental Health Integration - quality and audit	2.00 Programme
Linkage Trust	MHQU	Primary Mental Health Integration - quality and audit	1.00 Programme
The Youth Horizons Trust	MHI52C	Infant, child, adolescent & youth planned respite	1.00 Nursing and allied FTE
The Youth Horizons Trust	MHI52	Infant, child, adolescent and youth planned respite	612 Bed days
The Youth Horizons Trust	MHI46C	Child & Youth Community Health & Addictions - Child, adolescent and youth intensive clinical support - South & Hauraki Clusters	1.00 Nursing and allied FTE
The Youth Horizons Trust	MHQU	Child & Youth Community Health & Addictions Services - South & Hauraki Clusters - quality and audit	1.00 Programme
The Youth Horizons Trust	MHI46C	Child & Youth Community Health & Addictions Services - South & Hauraki Clusters - intensive clinical support	1.00 Nursing and allied FTE
The Youth Horizons Trust	MHQU	Child & Youth Community Health & Addictions Services - South & Hauraki Clusters - quality and audit	1.00 Programme
Alcohol And Drug Community Support Trust	MHD74C	Support Housing - Alcohol & Drug Community based alcohol and other drug	1.00 Nursing and allied FTE

Provider Name	Purchase unit code	NGO service	Volume
		specialist services	
Alcohol And Drug Community Support Trust	MHWD01	Alcohol & Drug Training Fee Support - Workforce Development	1.00 Programme
Waihi Community Lifestyle Trust	MHAK20D	Residential Support & Care Services - Adult community support	2.00 Non-clinical FTE
K'aute Pasifika Trust	MHI44C	Infant, child, adolescent & youth community mental health services	1.00 Nursing and allied FTE
HealthShare Ltd	MHQI01	Waikato Mental Health Audit Services - Quality Improvements	41.33 Programme
Pai Ake Solutions Limited	MHDIK48C	Adolescent & youth alcohol & drug community services - Kaupapa Maori	0.38 Nursing and allied FTE
Pai Ake Solutions Limited	MHDK74C	Community Alcohol & Drug – Adult Kaupapa Maori Community based Alcohol and other drug services	1.50 Nursing and allied FTE
Hauraki PHO	MHCS07	General Hospital Liaison Service	1.00 FTE
Mental Health Solutions Limited	MHA20D	Residential Support - Adult Community Support Services	70.40 Non-clinical FTE
Mental Health Solutions Limited	MHA20D	Residential Support - Adult Community Support Services	1.32 Non-clinical FTE
Mental Health Solutions Limited	MHA20C	Residential Support - Adult Community Support Services	5.50 Nursing and allied FTE
Mental Health Solutions Limited	MHA22D	Residential Support Vocational Support Services - Non clinical staff	3.00 Non-clinical FTE
Mental Health Solutions Limited	MHA23C	Residential Support Housing Coordination Service	2.50 Nursing and allied FTE
Waikato Alcohol & Addiction Counselling Centre	MHD74C	Community based alcohol and other drug specialist services	4.50 Nursing and allied FTE
Workwise Employment Limited	MHA22D	Employment Outcomes Model - Vocational Support Services	7.50 Non-clinical FTE
Support Families in Mental Illness Waikato Incorpo	MHW68D	Family whanau support education, information and advocacy service	2.80 Non-clinical FTE
Blueprint NZ Limited	MHQU	Workforce Development - quality and audit	1.00 Programme
Nga Ringa Awhina O Hauora Trust	MHCI37F	Child & Youth Community Mental Health & Addictions - Hamilton Cluster Peer support service for child and youth	0.50 Peer support FTE
Nga Ringa Awhina O Hauora Trust	MHIK51D	Infant, child, adolescent and youth services - Hamilton Cluster – NASC - Kaupapa Māori	2.00 Non-clinical FTE
Nga Ringa Awhina O Hauora Trust	MHK61E	Child & Youth Community Mental Health & Addictions - Hamilton Cluster - Kaumatua Roles	0.50 Cultural FTE
Nga Ringa Awhina O Hauora Trust	MHIK51A	Infant, child, adolescent and youth services – Hamilton Cluster- NASC - Kaupapa Māori	0.50 Senior clinical FTE
Nga Ringa Awhina O Hauora Trust	MHIK51C	Infant, child, adolescent and youth services – - Hamilton Cluster - NASC - Kaupapa Māori	5.50 Nursing and allied FTE

Provider Name	Purchase unit code	NGO service	Volume
Nga Ringa Awhina O Hauora Trust	MHIK44C	Infant, child, adolescent and youth community mental health services - Hamilton Cluster -Kaupapa Māori -	2.50 Nursing and allied FTE
Nga Ringa Awhina O Hauora Trust	MHI46C	Child, adolescent and youth intensive clinical support - Hamilton Cluster -	2.00 Nursing and allied FTE
Nga Ringa Awhina O Hauora Trust	MHQU	Child & Youth Community Mental Health & Addictions - Hamilton Cluster - quality and audit	2.00 Programme
Richmond New Zealand Trust Limited	MHI47	Infant, Child, Adolescent & Youth Community Support with accommodation component	1,460 Bed days
Richmond New Zealand Trust Limited	MHA20D	Adult Community Support Services	2.20 Non-clinical FTE
Richmond New Zealand Trust Limited	MHA12D	Adult Mental Health Service Service for Profoundly Hearing Impaired	0.33 Non-clinical FTE
Raukawa Charitable Trust	MHIK44C	Infant, child, adolescent and youth community mental health services - South Cluster - Kaupapa Māori	1.50 Nursing and allied FTE
Raukawa Charitable Trust	MHIKW68D	Child & Youth Community Health & Addictions Services - South Cluster - Family whanau support education	1.50 Non-clinical FTE
Raukawa Charitable Trust	MHP63D	Child & Youth Community Health & Addictions Services - South Cluster - Pacific community clinical & support service	0.50 Non-clinical FTE

Table 28: Waikato provider arm services

Purchase unit code	Waikato DHB Provider Arm Service	Volume
MHA01	Adult acute inpatient beds	14,600 Available bed days
MHA02	Adult intensive care inpatient beds	4,745 Available bed days
MHA03	Adult Crisis Respite	1,788 Client
MHA04A	Crisis intervention service	1.00 Senior Medical Clinical FTEs
MHA04C	Crisis intervention service	15.00 Other Clinical FTEs
MHA07	Sub-Acute/Extended Care Inpatient Beds	2,555 Available bed days
MHA08A	General Hospital Liaison Service	1.00 Senior Medical Clinical FTEs
MHA08C	General Hospital Liaison Service	1.50 Clinical FTEs
MHA09A	Community clinical mental health services	11.75 Senior Medical Clinical FTEs
MHA09A	Community clinical mental health services – DBT	1.00 Senior Medical Clinical FTEs
MHA09C	Community clinical mental health services	89.60 Clinical FTEs
MHA09C	Community clinical mental health services - NASC role	0.55 Clinical FTEs
MHA09C	Community clinical mental health services – DBT	4.00 Clinical FTEs
MHA09C	Community clinical mental health services - high & complex needs	9.30 Clinical FTE
MHA13A	Service for mental health & intellectual disability	0.50 Senior Medical Clinical FTEs

Purchase unit code	Waikato DHB Provider Arm Service	Volume
MHA13C	Service for mental health & intellectual disability	2.50 Clinical FTEs
MHA18C	Community mental health services - needs assessment & service coordination	3.50 Clinical FTE
MHA18D	Community mental health services - needs assessment & service coordination	0.60 Non-clinical FTE
MHA19	Adult Packages of Care - specified client	1 Client
MHA19	Adult Packages of Care	24 Client
MHA19	Adult Packages of care - Refugee & New Migrant Services	10 Packages of care
MHA21C	Day activity & living skills service	3.50 Senior Medical Clinical FTEs
MHA21D	Day activity & living skills service	2.00 Non-Clinical FTEs
MHAD14C	Community coexisting disorders, mental health & addiction	5.00 Clinical FTEs
MHC33F	Consumer Leadership, Consultancy & Liaison	1.00 Consumer FTEs
MHC35F	Consumer Resource & Information Services	1.00 Consumer FTEs
MHD71C	Alcohol & other drug - consult & liaison service	1.25 FTE
MHD74A	Community based alcohol & other drug services	1.50 Senior Medical Clinical FTEs
MHD74C	Community based alcohol & other drug services	17.50 Other Clinical FTEs
MHD77	Managed withdrawal - inpatient services	365 Available bed days
MHD78A	Managed withdrawal - home/community	0.50 Senior Medical Clinical FTEs
MHD78C	Managed withdrawal - home/community	0.50 Clinical FTEs
MHDI48C	Child adolescent & youth alcohol & other drug community services	3.50 Other Clinical FTEs
MHD69	Methadone Treatment – General Practitioner	76 Case
MHD70	Methadone Treatment – Specialist	225 Case
MHE28C	Consultative service within a Specialist Eating Disorders	1.00 Clinical FTE
MHE29C	Clinical outpatient service for eating disorders	1.00 Clinical FTE
MHE30A	Community Service for Eating Disorders	0.20 Senior Medical Clinical FTEs
MHE30C	Community Service for Eating Disorders	1.00 Clinical FTE
MHF80A	Community Forensic Mental Health Service	1.00 Senior Medical Clinical FTEs
MHF80C	Community Forensic Mental Health Service	9.50 Clinical FTEs
MHF81	Extended Term Secure inpatient beds	2,190 Available bed days
MHF82	Medium Secure Inpatient beds	9,125 Available bed days
MHF83	Minimum Secure Inpatient beds	3,650 Available bed days
MHF84A	Prison Mental Health	2.50 Senior Medical Clinical FTEs
MHF84C	Prison Mental Health	15.55 Clinical FTEs
MHF85A	Court Liaison	1.00 Senior Medical Clinical FTEs
MHF85C	Court Liaison	6.00 Clinical FTEs
MHI40	Infant child adolescent & youth acute packages of care	108 Bed nights
MHI44A	Infant child adolescent & youth community	4.60 Senior Medical Clinical FTEs

Purchase unit code	Waikato DHB Provider Arm Service	Volume
	mental health services	
MHI44A	Infant child adolescent & youth community mental health services	0.50 Senior Medical Clinical FTEs
MHI44C	Infant child adolescent & youth community mental health services - primary liaison	0.50 Clinical FTEs
MHI44C	Infant child adolescent & youth community mental health services	26.10 Clinical FTEs
MHI44C	Infant child adolescent & youth community mental health services - after hours service	1.00 Clinical FTE
MHI44D	Infant child adolescent & youth community mental health services	1.00 Non-clinical FTE
MHI56	Infant child adolescent & youth - packages of care	494.02 Clients
MHK62E	Kaupapa maori consultation, liaison & advisory service	6.00 Cultural FTEs
MHM90A	Specialist Community Team - Maternal Mental Health	0.50 Senior Medical Clinical FTEs
MHM90C	Specialist Community Team - Maternal Mental Health	4.20 Clinical FTEs
MHO98	Acute inpatient service - older people	4,745 Available bed days
MHO99A	Specialist community team - older people services	2.20 Senior Medical Clinical FTEs
MHO99A	Specialist community team - older people services	1.00 Senior Medical Clinical FTEs
MHO99A	Specialist community team - older people services	0.70 Senior Medical Clinical FTEs
MHO99A	Specialist community team - older people services - memory clinic	0.40 Senior Medical Clinical FTEs
MHO99C	Specialist community team - older people services	9.70 Clinical FTEs
MHO99C	Specialist community team - older people services	3.00 Clinical FTEs
MHO99C	Specialist community team - older people services - memory clinic	3.50 Clinical FTEs
MHOI02C	Recovery rehabilitation day programme - older people service	4.00 Clinical FTEs
MHR94C	Specialist asian migrant & refugee mental health & addiction service	1.00 Clinical FTE
MHY87C	Specialist community youth forensic service	3.00 Clinical FTEs
MHQU	Research and Development	1 Programme
MHWF	Nurse Graduate programme - co-ordinator	1 Programme
MHWF	Nurse Graduate programme - places	6.00 Non-clinical FTE
MHWF	Allied Health Graduate programme - places	4.00 Non-clinical FTE
MHA09C	Community clinical mental health services - police consult liaison	1.00 Clinical FTE
MHQU	Police consult Liaison - Evaluation now due later	1.00 Programme
MHQU	MH Framework Project	1.00 Programme

Purchase unit code	Waikato DHB Provider Arm Service	Volume
MHQU	Pilot programme for children whose parents are MH sufferers - phase 1 (Sep 09 onwards)	1.00 Programme

Table 29: Bay of Plenty NGO services

Provider Name	Purchase unit code	NGO service	Volume
The Salvation Army New Zealand Trust	MHD73D	Community Recovery Programme Alcohol and other drug	2.00 Non-clinical FTE
Western Bay Of Plenty Mental Health Trust	MHW68D	W/U Family/whanau Support, Education, Information and Advocacy Service	1.00 Non-clinical FTE
Healthcare of New Zealand Limited	MHCR09.1	Home based support services	4.01 FTE
Healthcare of New Zealand Limited	MHCR09.1	Home based Support services	2.01FTE
Healthcare of New Zealand Limited	MHI55D	Community Support Options - Infant, child, adolescent	1.74 Non-clinical FTE
Healthcare of New Zealand Limited	MHFF	Community Support Options – flexifund	1.00 Programme
Healthcare of New Zealand Limited	MHRE01	Community Support Options - Adult Planned Respite	0.25 Programme
Healthcare of New Zealand Limited	MHA19D	Community Support Options - Package of Care	0.75 Non-clinical FTE
Healthcare of New Zealand Limited	MHA17	Planned Respite/Housing Co-ordination – Adult	187.50 Bed day
Healthcare of New Zealand Limited	MHA23C	Planned Respite/Housing Co-ordination	0.38 Nursing or Allied FTE
Runanga Ngai Tamawhariua Inc	MHK59C	Kaupapa Maori Child and Youth Mental Health Service - community clinic	1.00 Nursing or Allied FTE
Runanga Ngai Tamawhariua Inc	MHCK37F	Kaupapa Maori Child and Youth Mental Health Service - Peer Support Service	0.50 Peer support FTE
Te Runanga O Te Whanau Charitable Trust	MHADK14C	Kaupapa Maori Co Existing Disorders (mental health & Addiction)	1.50 Nursing or Allied FTE
Te Runanga O Te Whanau Charitable Trust	MHAK20D	Kaupapa Maori Co Existing Disorders (mental health & Addiction) - Adult community support service	0.75 Non-clinical FTE
Nga Kakano Foundation	MHDK74D	Kaupapa Maori Intensive Alchol & Drug Outpatient Service	1.50 Non-clinical FTE
Deo Gratias Trust	MHA24	Housing and Recovery Services Day Time/ Awake Night Support	2,555.00 Bed day
Vincent House Trust	MHCR03	Community Residential - Level III	2,922.67 Bed day
Vincent House Trust	MHA25	W/U Housing & Recovery Services and Adult Community Support - Day Time/ Responsive Night Support	1,461.33 Bed day
Vincent House Trust	MHA20D	W/U Housing & Recovery Services and Adult Community Support	1.00 Non-clinical FTE
Turning Point Trust	MHA21D	W/U Activity based recovery support service/ activities and living skills and vocational support services	4.00 Non-clinical FTE
Turning Point Trust	MHA22D	W/U Day Activity, Living Skills & Vocational Support Services	1.75 Non-clinical FTE
Turning Point Trust	MHC36F	W/U Day Activity, Living Skills & Vocational Support Services - Peer support service-Adults	1.50 Peer support FTE

Provider Name	Purchase unit code	NGO service	Volume
Turning Point Trust	MHC34F	Consumer Advocacy Service	0.83 Peer support FTE
Te Manu Toroa Trust	MHAK18A	Needs Assessment & Service Coordination	3.50 Senior Medical FTE
Te Manu Toroa Trust	MHK59C	Kaupapa Maori Child and Youth Mental Health Service - Kaupapa Maori community clinic	1.00 Senior Medical FTE
Te Manu Toroa Trust	MHCK37F	Kaupapa Maori Child and Youth Mental Health Service - Peer Support Service	1.20 Peer support FTE
Te Manu Toroa Trust	MHIKW68D	Kaupapa Maori Family and whanau support, education, information and advocacy	0.33 Non-clinical FTE
Te Manu Toroa Trust	MHAK20D	Kaupapa Maori Home Based Support Services	0.67 Non-clinical FTE
Ngati Awa Social and Health Services Trust	MHADK14D	Adult Mental Health Service - Co-existing disorders	1.10 Non-clinical FTE
Ngati Awa Social and Health Services Trust	MHAKW68D	Adult Mental Health Service - Family whanau support/education	1.10 Non-clinical FTE
Rakeiwhenua Trust t/a Tuhoe Hauora Trust	MHAK03C	Kaupapa Maori Adult Crisis Respite	0.67 Nursing or Allied FTE
Tirohia Te Kopere Trust	MHC36F	Peer Support Service for Adults	1.00 Peer support FTE
Tirohia Te Kopere Trust	MHC36F	Peer Support Service for Adults	1.00 Peer support FTE
Poutiri Charitable Trust	MHA20D	Adult Community Support Services	1.00 Non-clinical FTE
Challenge Trust	MHA07	Te Purei O te Hau: Intensive Rehabilitation Service Sub-acute, Extended Care	1,464.00 Bed day
Odyssey House Trust	MHD76	Intensive Alcohol and Other Drug Service with Accommodation	547.50 Bed day
Bay of Plenty Community Homes Trust	MHA25	Housing and Recovery Services Day Time/ Responsive Night Support	4,384.00 Bed day
Bay of Plenty Community Homes Trust	MHA20D	Adult Community Support Services - Non-clinical staff	0.63 Non-clinical FTE
Bay of Plenty Community Homes Trust	MHA20D	Community Residential and Support for Independence - Adult Community Support Services	0.63 Non-clinical FTE
Western Bay of Plenty Primary Health Organisation	MHCS29.1	Opioid substitution Services - Methadone Treatment – General Practitioner	48.75Cases
Hanmer BOP Charitable Trust	MHD74C	W/U Community based alcohol and other drug specialist services	3.76 Nursing or Allied FTE
EBAT Charitable Trust	MHA21D	Day Activity & Living Skills Service and Vocational Support Service	0.50 Non-clinical FTE
EBAT Charitable Trust	MHA21D	Day Activity & Living Skills Service and Vocational Support Service	1.50 Non-clinical FTE
EBAT Charitable Trust	MHA22D	Day Activity & Living Skills Service and Vocational Support Service	0.25 Non-clinical FTE
EBAT Charitable Trust	MHA22D	Day Activity & Living Skills Service and Vocational Support Service	0.75 Non-clinical FTE

Provider Name	Purchase unit code	NGO service	Volume
Tauranga Community Housing Trust	MHA23C	Housing Co-ordination Service	1.00 Nursing or Allied FTE
Grief Support Services Incorporated	MHW68D	Family whanau support education, information and advocacy service	1.00 Non-clinical FTE
Eastern BOP Supporting Families	MHW68D	Family and Whanau Support, Education, Information and Advocacy Service	0.17 Non-clinical FTE
Eastern BOP Supporting Families	MHW68D	Family and Whanau Support, Education, Information and Advocacy Service	1.54 Non-clinical FTE
Get Smart Tauranga Trust	MHDI48C	Infant, Child, Adolescent & Youth Alcohol and Other Drug Community Clinical Services	0.54 Nursing or Allied FTE
Get Smart Tauranga Trust	MHDI48C	Infant, Child, Adolescent & Youth Youth Alcohol & Other Drug Community Clinical Services	1.00 Nursing or Allied FTE
Get Smart Tauranga Trust	MHW68C	Child, Adolescent & Youth Alcohol & Other Drug Community Services - Family whanau support education, information and advocacy service	0.38 Nursing or Allied FTE
Nga Mataapuna Oranga Limited	MHCS39	Kaupapa Maori Mental Health Services - Tamariki and Rangatahi	2.00 FTE
Nga Mataapuna Oranga Limited	MHAK09C	Kaupapa Maori Community Mental Health Services	9.25 Nursing or Allied FTE
Nga Mataapuna Oranga Limited	MHADK14C	Kaupapa Maori Community Mental Health Services - Co-existing disorders	1.50 Nursing or Allied FTE
Nga Mataapuna Oranga Limited	MHDK74C	Kaupapa Maori Community based alcohol and other drug specialist services	2.00 Nursing or Allied FTE
Nga Mataapuna Oranga Limited	MHCS08A	Children & Young People Community Services	0.83 Senior Medical FTE
Nga Mataapuna Oranga Limited	MHCS06A1	Community Mental Health Services	2.00 Other Clinical FTE
Nga Mataapuna Oranga Limited	MHCS22.8	Community Mental Health Services - Advocacy/Peer Support – Family/whanau	0.50 Other Clinical FTE
Nga Mataapuna Oranga Limited	MHA09A	Community Mental Health Services	0.92 Senior Medical FTE
Nga Mataapuna Oranga Limited	MHI44A	Community Mental Health Services - Infant, child, adolescent & youth community mental health services	0.92 Senior Medical FTE

Table 30: Bay of Plenty provider arm services

Purchase unit code	Bay of Plenty DHB Provider Arm Service	Volume
MHA01	Acute 24 Hour Clinical Intervention (inpatient)	10,610 Available bed day
MHA02	Intensive Care	1,825 Available Bed Day
MHA04C	Crisis Intervention Service	19.19 Nursing/allied health FTE
MHA08A	General Hospital Liaison	0.70 Senior medical FTE
MHA08B	General Hospital Liaison	1.00 Junior medical FTE
MHA08C	General Hospital Liaison	2.35 Nursing/allied health FTE
MHA09A	Community Clinical Mental Health Service	7.50 Senior medical FTE
MHA09B	Community Clinical Mental Health Service	3.00 Junior medical FTE
MHA09C	Community Clinical Mental Health Service	50.00 Nursing/allied health FTE
MHA11C	Mobile Intensive Treatment Service	5.00 Nursing/allied health FTE
MHA13A	Mental Health with Intellectual Disability	0.20 Senior medical FTE
MHA13C	Mental Health with Intellectual Disability	2.00 Nursing/allied health FTE
MHA21D	Activity Based Recovery Support Services	2.00 Non-clinical FTE
MHAD14C	Co-existing disorders (mental health & addiction)	2.00 Nursing/allied health FTE
MHC33D	Consumer leadership, consultancy & liaison	2.80 Non-clinical FTE
MHCS01A	Community Alcohol & Drug Services	14.50 Senior medical FTE
MHCS01B	Community Alcohol & Drug Services	1.00 Senior Medical Clinical FTE
MHCS03	Detoxification - Home/Community	2.00 Clinical FTE
MHCS08A1	Children & Young People Community Services (Other Clinical FTEs) Includes sub units: · MHCS08A1: Needs Assessment & Service Co-ordination – Child & Youth	150 Assessments
MHCS18	Community Service - Older People	16.80 Clinical FTE
MHCS19C	Kaupapa Maori Mental Health Services - Adult Community Teams	5.00 Non-Clinical FTE
MHCS22	Advocacy/Peer Support - Families/Whanau Includes sub-units as follows: · MHCS22.1 Adults · MHCS22.2 Older Adults · MHCS22.4 Forensic Services · MHCS22.7 Child & Youth · MHCS22.8 Alcohol & Drug	1.00 FTE
MHCS28	Specialist Maternal Mental Health Service	3.00 Clinical FTE
MHCS29.1	Methadone Treatment – General Practitioner	26 Case
MHCS29.2	Methadone Treatment – Specialist	118.89 Case
MHCS45	Older Persons Day Hospital Programme	3.00 Clinical FTE
MHCS46	Kaupapa Maori Mental Health Services – Kaumatua and Taua (Kuia)	0.23 FTE
MHCS49	Child and Youth Acute Care Packages	1.00 Programme
MHDI48C	Child, adolescent and youth alcohol and drug community services	3.00 Nursing/allied health FTE
MHE30C	Community service for eating disorders	1.50 Nursing/allied health FTE
MHI44A	Infant, child, adolescent & youth community mental health services	2.30 Senior medical FTE

Purchase unit code	Bay of Plenty DHB Provider Arm Service	Volume
MHI44B	Infant, child, adolescent & youth community mental health services	1.00 Junior medical FTE
MHI44C	Infant, child, adolescent & youth community mental health services	29.10 Nursing/allied health FTE
MHI44D	Infant, Child, Adolescent & Youth Community Senior	0.32 Non-clinical FTE
MHI44E	Infant, child, adolescent & youth community mental health services	2.00 Cultural FTE
MHI46C	Child, adolescent and youth intensive clinical support	1.40 Nursing/allied health FTE
MHI54C	Child, adolescent and youth community based day activity service	2.00 Nursing/allied health FTE
MHIS02	Older People Inpatient Beds	3,650 Available Bed Day
MHO101C	Regional Dementia Service	1 Programme
MHQI01	Quality Improvements	1 Programme
MHRE01	Adult Planned Respite	3 Programme
MHRE02	Adult Crisis Respite	1 Programme
MHWD01	Workforce Development	1 Programme

Table 31: Lakes NGO services

Provider Name	Purchase unit code	NGO service	Volume
Te Runanga O Ngati Pikiao Trust	MHA20E	Adult Community Support Services - Mental Health and Addictions	2.00 cultural FTE
Bainbridge House Charitable Trust	MHD53C	AoD Community Respite and AOD Treatment Options	1.00 Nursing Allied health FTE
Bainbridge House Charitable Trust	MHD53D	AoD Community Respite and AOD Treatment Options	4.00 Non clinical FTE
Bainbridge House Charitable Trust	MHA03	Adult Community Respite and AOD Treatment Options	4.00 occupied bed day
Healthcare of New Zealand Limited	MHA06D	Wrap Around Community Services	2.60 Non clinical FTE
Healthcare of New Zealand Limited	MHA03D	Wrap Around Community Services	2.00 Non clinical FTE
Healthcare of New Zealand Limited	MHA17D	Wrap Around Community Services	2.00 Non clinical FTE
Healthcare of New Zealand Limited	MHA20D	Wrap Around Community Services	6.00 Non clinical FTE
Healthcare of New Zealand Limited	MHA26	Wrap Around Community Services – supportive landlord service	1.00 client
Healthcare of New Zealand Limited	MHA19D	Wrap Around Community Services	2.00 Non clinical FTE
Healthcare of New Zealand Limited	MHI56	Wrap Around Community Services – infant, child, adolescent and youth	2.00 clients
Healthcare of New Zealand Limited	MHI55D	Wrap Around Community Services – infant, child, adolescent and youth	2.00 Non clinical FTE
The Karlton Trust	MHA20D	Adult Community Living Supports	2.00 Non clinical FTE

Provider Name	Purchase unit code	NGO service	Volume
The Karldon Trust	MHA25D	Community Living Supports – housing and recovery services	3.50 Non clinical FTE
The Karldon Trust	MHA17D	Community Living Supports – planned adult respite	2.00 Non clinical FTE
Braemore Ltd	MHA19	Package of Care	1.00 package of care
Braemore Ltd	MHA20D	Adult Community Housing and Recovery Services	2.50 Non clinical FTE
Braemore Ltd	MHA25C	Housing and Recovery Services	1.00 Nursing/allied health FTE
Braemore Ltd	MHA25D	Housing and Recovery Services	2.00 Non clinical FTE
Pretoria Lodge Limited	MHA20D	Adult Community Living Supports	4.00 Non clinical FTE
Pretoria Lodge Limited	MHA20C	Adult Community Living Supports	1.00 Nursing/allied health FTE
Pretoria Lodge Limited	MHA25D	Community Living Supports – housing and recovery	4.00 Non clinical FTE
Pretoria Lodge Limited	MHA25C	Community Living Supports – housing and recovery	1.00 Nursing/allied health FTE
Pretoria Lodge Limited	MHA17D	Community Living Supports – planned adult respite	2.00 Non clinical FTE
Pretoria Lodge Limited	MHQI01	PRIMHD Host Portal – quality improvement	0.75 FTE
Contact Trust Rotorua	MHA21D	Beverly House Activities Centre – activity based recovery support	4.00 Non clinical FTE
Schizophrenia Fellowship - Rotorua	MHA19C	Counselling for Families – package of care	0.30 Nursing/allied health FTE
Schizophrenia Fellowship - Rotorua	MHCS22.1	Support for Families – advocacy peer support for adults	2.00 FTE
Schizophrenia Fellowship - Rotorua	MHWD01	Support for Families – workforce development	2.50 FTE
Schizophrenia Fellowship - Rotorua	MHCS22.1	Support for Families – advocacy/peer support for adults	0.50 FTE
Te Uthina Manaakitanga Trust	MHCR07	Midland Kaupapa Maori AOD Residential Treatment Service	2.00 Clinical FTE
Te Uthina Manaakitanga Trust	MHCR07	Midland Kaupapa Maori AOD Residential Treatment Service	5.10 Non clinical FTE
Te Uthina Manaakitanga Trust	MHDIK48C	Community Alcohol and Drug Services	3.00 Nursing/allied health FTE
Te Uthina Manaakitanga Trust	MHDI48C	Community Alcohol and Drug Services	4.00 Nursing/allied health FTE
Te Uthina Manaakitanga Trust	MHDK74C	Community Alcohol and Drug Services	4.00 Nursing/allied health FTE
Te Uthina Manaakitanga Trust	MHD74C	Community Alcohol and Drug Services	5.00 Nursing/allied health FTE
Hauora Waikato Maori Mental Health Services	MHFK84A	Mental health in Reach Service to Te Mahioha o Parekarangi	0.225 Senior Medical FTE
Hauora Waikato Maori Mental Health Services	MHFK84C	Mental health in Reach Service to Te Mahioha o Parekarangi	1.20 Nursing/allied health FTE
Hauora Waikato Maori	MHFK84E	Mental health in Reach Service to Te	0.07 Cultural FTE

Provider Name	Purchase unit code	NGO service	Volume
Mental Health Services		Mahioha o Parekarangi	
Drug and Alcohol Support Taupo Trust	MHD74C	Community Alcohol and Drug Services	6.00 Nursing/allied health FTE
Drug and Alcohol Support Taupo Trust	MHD74D	Community Alcohol and Drug Services	0.20 Non clinical FTE
Challenge Trust	MHI42C	Community Based Services for Infant, Children, Adolescent and Youth	0.80 Nursing/allied health FTE
Challenge Trust	MHI52D	Community Based Services for Infant, Children, Adolescent and Youth – planned respite	0.80 Non clinical FTE
Challenge Trust	MHI55D	Community Based Support Services for Infant, Children, Adolescent and Youth	1.70 Non clinical FTE
Challenge Trust	MHI54D	Community Based Services for Infant, Children, Adolescent and Youth – day activity	0.80 Non clinical FTE
Challenge Trust	MHDI49	Community Based Services for Infant, Children, Adolescent and Youth – alcohol and drug service	0.80 FTE
Challenge Trust	MHI40D	Community Based Services for Infant, Children, Adolescent and Youth – acute packages of care	1.70 Non clinical FTE
Te Aroha o Hinemaru Trust	MHA20D	Community Living Supports - Older People	2.00 Non clinical FTE
Te Aroha o Hinemaru Trust	MHA20C	Community Living Supports - Older People	1.00 Nursing/allied health FTE
Te Aroha o Hinemaru Trust	MHA24C	Community Living Supports - Older People	1.00 Nursing/allied health FTE
Te Aroha o Hinemaru Trust	MHA24D	Community Living Supports - Older People	2.00 Non clinical FTE
Te Aroha o Hinemaru Trust	MHA21D	Community Living Supports - Older People – activity based support	2.00 Non clinical FTE
Te Aroha o Hinemaru Trust	MHA17D	Community Living Supports - Older People – planned adult respite	2.00 Non clinical FTE
Workwise Employment Limited	MHA22D	Employment Facilitation Service – vocational support services	5.00 Non clinical FTE
Workwise Employment Limited	MHA19D	Employment Facilitation Service – package of care	0.10 Non clinical FTE
Post Natal Therapy Service Limited	MHM90C	Mother Matter Perinatal Therapy	1.00 Nursing/allied health FTE
Te Whare Hauora o Ngongotaha Trust	MHA21D	Day Activity and Living Skills Service – activity based recovery	2.30 Non clinical FTE
Logan and Roberts Limited	MHCR03	Community - Residential Support – beds and services	1,095 bed days
Logan and Roberts Limited	MHCR04	Community - Residential Support – beds and services	1,095 bed days
Mana Mental Health Services Limited	MHC36F	Peer Support Services – adult	3.00 Peer support FTE
Independent Living Choices	MHA26	Independent Living Choices – supportive	2.00 clients

Provider Name	Purchase unit code	NGO service	Volume
Limited		landlord service	
Central Health Limited	MHDI49	Te Waireka - Alcohol & Drug Residential Centre- child and adolescent community	640 occupied bed days
Central Health Limited	MHI56	Te Waireka - Alcohol & Drug Residential Centre- infant, child, adolescent	11.4 packages of care
Tuwharetoa Health Charitable Trust	MHA21D	Activity Based Recovery Support Service	2.00 Non clinical FTE
Community Dentistry Limited	MHCS06A	Mental Health Dental Project	0.10 other clinical FTE
S4 Holdings Limited	MHA21C	Day Activity Package of Care for Client BMQ7327 – activity based recovery support	0.15 package of care
Central Counselling and Psychotherapy	MHCS48	Child Psychotherapy Service – child and youth wrap around services	24 Programme
Central Counselling and Psychotherapy	MHCS48	Child Psychotherapy Service – mental health	72 Programme

Table 32: Lakes provider arm services

Purchase unit code	Lakes DHB Provider Arm Service	Volume
MHCS16	Activity-Based Rehabilitation Service/Day Activity and Living Skills	1.00 Clinical FTE
MHCS18	Community Service - Older People	7.40 Clinical FTE
MHCS19	Kaupapa Maori Mental Health Services - Adult Community Teams	5.00 Clinical FTE
MHCS19C	Kaupapa Maori Mental Health Services - Adult Community Teams	4.50 Non-Clinical FTE
MHCS29.2	Methadone Treatment – Specialist	90 Case
MHIS02	Older People Inpatient Beds	730 Available Bed Day
MHQI01	Quality Improvements	1.0 Programme
MHWD01	Workforce Development	1.0 Programme
MHA01	Acute 24 Hour Clinical Intervention (inpatient)	4,380 Available bed day
MHA08C	General Hospital Liaison	2.00 Nursing/allied health FTE
MHA09A	Community Clinical Mental Health Service	5.60 Senior medical FTE
MHA09C	Community Clinical Mental Health Service	39.50 Nursing/allied health FTE
MHAD14C	Co-existing disorders (mental health & addiction)	5.00 Nursing/allied health FTE
MHC33F	Consumer leadership, consultancy & liaison	2.00 Peer Support FTE
MHE30C	Community service for eating disorders	1.00 Nursing/allied health FTE
MHE31C	Eating disorders DHB liaison	0.40 Nursing/allied health FTE
MHI44A	Infant, child, adolescent & youth community mental health services	1.50 Senior medical FTE
MHI44C	Infant, child, adolescent & youth community mental health services	19.70 Nursing/allied health FTE

Table 33: Taranaki NGO services

Provider Name	Purchase unit code	NGO service	Volume
Pathways Trust	MHCR17	Supported Landlord Service	2 Clients
Pathways Trust	MHCR04	Community Residential - Level IV	365 Bed days
Pathways Trust	MHCR09.1	Home based support services	3.00 FTE
Pathways Trust	MHCR09.1	Home based support services	1.00 FTE
Pathways Trust	MHCR09.1	Home based support services	1.50 FTE
Pathways Trust	MHCS06A	Home Based Support Services – Community Mental Health Service	1.50 Senior Clinical FTE
Mount View Residential Trust	MHCR03	Community Residential Services	1,825 Bed days
Te Whare Puawai O Te Tangata Trust	MHCS21.1	Advocacy/Peer Support – Consumer (Adults)	2.00 FTE
Tui Ora Limited	MHCR15	Mental Health Community Services and Residential Services Level 3 (Te Ihi Rangi Trust)	1,825 Bed days
Tui Ora Limited	MHCR15	Mental Health Community Services and Residential Services Level 3 (Te Whare Puawai-Pukekohatu)	1,095. Bed days
Tui Ora Limited	MHCR15	Mental Health Community Services and Residential Services Level 3 (Te Whare Puawai-Pukekohatu)	730 Bed days
Tui Ora Limited	MHCR16	Mental Health Community Services and Residential Services	365 Bed days
Tui Ora Limited	MHCR16	Mental Health Community Services and Residential Services (Te Whare Puawai)	63.40 Bed days
Tui Ora Limited	MHCS21.1	Advocacy/Peer Support – Consumer (Adults)	0.50 FTE
Tui Ora Limited	MHCS08A	Child and Youth Community Services	1.00 FTE
Tui Ora Limited	MHCS39	Kaupapa Maori Mental Health Services - Tamariki and Rangatahi	1.00 FTE
Tui Ora Limited	MHCS43	Kaupapa Maori Mental Health Services - Dual Diagnosis with Alcohol and Drug problems	1.00 FTE
Tui Ora Limited	MHCS02A	Kaupapa Maori Alcohol & Drug Services	2.00 Other Clinical FTE
Tui Ora Limited	MHCS02A	Kaupapa Maori Alcohol & Drug Services	1.00 Other Clinical FTE
Tui Ora Limited	MHCS04	Dual Diagnosis - Mental Health and Alcohol and Drug	1.00 Clinical FTE
Tui Ora Limited	MHCS28	Specialist Maternal Mental Health Service	0.50 Clinical FTE
Tui Ora Limited	MHCS01A	Community Alcohol & Drug Services	0.50 Other Clinical FTEs
Tui Ora Limited	MHCS16	Activity-Based Rehabilitation Service/ Day Activity and Living Skills	0.68 Clinical FTE

Provider Name	Purchase unit code	NGO service	Volume
Tui Ora Limited	MHCS19	Te Rau Pani - Kaupapa Maori	2.00 Clinical FTE
Tui Ora Limited	MHCS46	Kaupapa Maori Mental Health Services – Kaumatua and Taua (Kuia)	2.00 FTE
Tui Ora Limited	MHCS46	Kaupapa Maori Mental Health Services – Kaumatua and Taua (Kuia)	0.50 FTE
Tui Ora Limited	MHCS44	Kaupapa Maori Mental Health Services - Early Intervention	1.00 FTE
Tui Ora Limited	MHCS06A1	Community Mental Health Service	1.00 Other Clinical FTE
Tui Ora Limited	MHCS21.1	Advocacy/Peer Support – Consumer (Adults)	0.50 FTE
Tui Ora Limited	MHCS08A	Child and Youth Community Services	1.00 Other Clinical FTE
Tui Ora Limited	MHCS39	Kaupapa Maori Mental Health Services - Tamariki and Rangatahi	1.00FTE
Tui Ora Limited	MHCS43	Kaupapa Maori Mental Health Services - Dual Diagnosis with Alcohol and Drug problems	1.00 FTE
Tui Ora Limited	MHCS02A	Kaupapa Maori Alcohol & Drug Services (Other Clinical FTEs)	1.00 Other Clinical FTE
Tui Ora Limited	MHCS06A	Community Mental Health Service	1.00 Other Clinical FTE
Tui Ora Limited	MHCS16	Activity-Based Rehabilitation Service/ Day Activity and Living Skills	1.43 Clinical FTE
Tui Ora Limited	MHCS06A5	Community Mental Health Service	1.00 Other Clinical FTE
Tui Ora Limited	MHCS06A1	Community Mental Health Service	2.00 Other Clinical FTE
Tui Ora Limited	MHCS06A6	Community Mental Health Service Intensive Treatment Service – Mobile	1.00 Other Clinical FTE
Tui Ora Limited	MHCS46	Kaupapa Maori Mental Health Services – Kaumatua and Taua (Kuia)	0.50 FTE
Tui Ora Limited	MHCS14C	Rehabilitation/Employment and Educational Support Service	2.00 Non-clinical FTE
Tui Ora Limited	MHCS46	Kaupapa Maori Mental Health Services – Kaumatua and Taua (Kuia)	0.50 FTE
Tui Ora Limited	MHCS06A	Community Mental Health Service	0.50 Other Clinical FTE
Tui Ora Limited	MHCS06A	Community Mental Health Service	0.50 Other Clinical FTE
Tui Ora Limited	MHCS18	Community Service – Older People	0.50 Clinical FTE
Tui Ora Limited	MHCS16C	Activity-Based Rehabilitation Service/ Day Activity and Living Skills	0.50 Non-clinical FTE
Tui Ora Limited	MHCS14C	Work Rehabilitation/Employment and Educational Support Service	1.00 Non-clinical FTE
Odyssey House Trust	MHCR07	Residential Treatment – Alcohol and Drug	365 Bed days

Provider Name	Purchase unit code	NGO service	Volume
		Service	
Linkage Trust	MHCS34	Mental Health Community Services - Sub-contracted Services	40.00 FTEs
Mental Health Solutions Limited	MHCS06A	Taranaki Community Mental Health Service	2.40 Other Clinical FTE
Mental Health Solutions Limited	MHCR09.2	Other Residential Support · Community Support Work	12.80 FTE
Workwise Employment Limited	MHCS14C	Work Rehabilitation/Employment and Educational Support Services	5.20 Non-clinical FTE
Ngati Ruanui Tahua Trust	MHCS26	Early Intervention Alcohol and Drug	1.00 Clinical FTE

Table 34: Taranaki provider arm services

Purchase unit code	Taranaki DHB Provider Arm Service	Volume
MHCR06	Detoxification - Residential	1.0 Bed Day
MHCR09.2	Other Residential Support– Community Support Work	2.90 FTE
MHCS01A	Community Alcohol & Drug Services	10.80 Other Clinical FTE
MHCS01B	Community Alcohol & Drug Services	1.10 Senior Medical Clinical FTE
MHCS06A	Community Mental Health Service (Other Clinical FTE) Includes sub units: · MHCS06A1: Needs Assessment & Service Co-ordination · MHCS06A2: Crisis Intervention · MHCS06A4: Community Day Hospital Programme · MHCS06A5: Early Intervention for people with first time psychosis · MHCS06A6: Intensive Treatment Service – Mobile · MHCS06A7: Clinical Rehab. Service – Community	50.80 Other Clinical FTE
MHCS06B	Community Mental Health Service Includes sub units: · MHCS06B1: Needs Assessment & Service Co-ordination · MHCS06B2: Crisis Intervention · MHCS06B4: Community Day Hospital Programme · MHCS06B5: Early Intervention for people with first time psychosis · MHCS06B6: Intensive Treatment Service – Mobile · MHCS06B7: Clinical Rehab. Service – Community	6.10 Senior Medical Clinical FTE
MHCS08A	Children & Young People Community Services Includes sub units: · MHCS08A1: Needs Assessment & Service Co-ordination – Child & Youth	16.60 Other Clinical FTE
MHCS08B	Children & Young People Community Services	2.00 Senior Medical Clinical

Purchase unit code	Taranaki DHB Provider Arm Service	Volume
	Includes sub units: · MHCS08B1: Needs Assessment & Service Co-ordination – Child & Youth	FTE
MHCS09	Eating Disorders Service – Community	0.40 Clinical FTE
MHCS18	Community Service - Older People	7.30 Clinical FTE
MHCS21	Advocacy/Peer Support – Consumers Includes sub-units as follows: · MHCS21.1 Adults · MHCS21.2 Older Adults · MHCS21.4 Forensic Services · MHCS21.7 Child & Youth · MHCS21.8 Alcohol & Drug	1.00 FTE
MHCS22	Advocacy/Peer Support - Families/Whanau Includes sub-units as follows: · MHCS22.1 Adults · MHCS22.2 Older Adults · MHCS22.4 Forensic Services · MHCS22.7 Child & Youth · MHCS22.8 Alcohol & Drug	1.00 FTE
MHCS28	Specialist Maternal Mental Health Service	1.50 Clinical FTE
MHCS29.1	Methadone Treatment – General Practitioner	50 Case
MHCS29.2	Methadone Treatment – Specialist	96 Case
MHCS48	Child and Youth Wrap Around Services	1.0 Programme
MHCS49	Child and Youth Acute Care Packages	1.0 Programme
MHIS02	Older People Inpatient Beds	1,460 Available Bed Day
MHRD01	Research and Development	1.0 Programme
MHRE01	Adult Planned Respite	1.0 Programme
MHRE04	Child and Youth Planned Respite	1.0 Programme
MHRE05	Child and Youth Crisis Respite	1.0 Programme
MHWD01	Workforce Development	1.0 Programme
MHA01	Acute 24 Hour Clinical Intervention (inpatient)	6,935 Available bed day
MHA02	Intensive Care	1,460 Available bed day
MHA03	Adult Crisis Respite	654.6 Occupied bed day

Table 35: Tairawhiti NGO services

Provider Name	Purchase unit code	NGO service	Volume
Schizophrenia Fellowship – Tairawhiti	MHW68D	Family whanau support education -, information and advocacy service	2.00 Non-clinical FTE
Te Hauora O Turanganui A Kiwa Limited	MHWD01	Kaupapa Maori Mental Health & Alcohol & Drug Services - Workforce Development	0.50 Programme
Te Hauora O Turanganui A Kiwa Limited	MHCS26	Kaupapa Maori Mental Health & Alcohol & Drug Services - Early Intervention Alcohol & Drug Service	0.50 Clinical FTE
Te Hauora O Turanganui A Kiwa Limited	MHK61E	Kaupapa Maori Mental Health & Alcohol & Drug Services - Kaumatua Roles	1.00 Cultural FTE
Te Hauora O Turanganui A Kiwa Limited	MHK60D	Kaupapa Maori Mental Health & Alcohol & Drug Services - Kaupapa Maori	2.00 Non-clinical FTE

Provider Name	Purchase unit code	NGO service	Volume
Te Hauora O Turanganui A Kiwa Limited	MHD72C	Kaupapa Maori Mental Health & Alcohol & Drug Services- Early intervention and other drug service	0.75 Nursing and allied FTE
Te Hauora O Turanganui A Kiwa Limited	MHD72C	Kaupapa Maori Mental Health & Alcohol & Drug Services - Early intervention and other drug service	0.50 Nursing and allied FTE
Te Hauora O Turanganui A Kiwa Limited	MHCS02C	Kaupapa Maori Mental Health & Alcohol & Drug Services - Kaupapa Maori Alcohol & Drug Services	0.75 Non-clinical FTE
Ngati Porou Hauora Incorporated	MHCS02C	Kaupapa Maori Alcohol & Drug Services	1.00 Non-clinical FTE
Ngati Porou Hauora Incorporated	MHK61E	Kaupapa Maori- Kaumatua Roles	1.00 Cultural FTE
Ngati Porou Hauora Incorporated	MHK60D	Kaupapa Maori Whanau Ora	2.00 Non-clinical FTE
Ngati Porou Hauora Incorporated	MHA09C	Kaupapa Maori Community Mental Health Service	3.00 Nursing and allied FTE
Ngati Porou Hauora Incorporated	MHD72D	Kaupapa Maori - Early intervention and other drug service	1.25 Non-clinical FTE
Ngati Porou Hauora Incorporated	MHD72D	Kaupapa Maori - Early intervention and other drug service	1.25 Non-clinical FTE
Ngati Porou Hauora Incorporated	MHI44C	Kaupapa Maori - Infant, child, adolescent & youth community mental health services	2.00 Nursing and allied FTE
Ngati Porou Hauora Incorporated	MHD74C	Kaupapa Maori - Community based alcohol and other drug specialist services	0.50 Nursing and allied FTE
Ngati Porou Hauora Incorporated	MHD74C	Kaupapa Maori - Community based alcohol and other drug specialist services	0.50 Nursing and allied FTE
Challenge Trust	MHA25D	Housing and Recovery Services Day time/Responsive Night support	4.00 Non-clinical FTE
Challenge Trust	MHA24C	Housing and Recovery Services Day time/Awake Night support	3.00 Nursing and allied FTE
Challenge Trust	MHA17	Adult Planned Respite	218 Bed days
Challenge Trust	MHA21D	Activity based recovery support service/ activities and living skills	2.00 Non-clinical FTE
Challenge Trust	MHA21E	Day Activities and Living Skills	1.00 Cultural FTE
Challenge Trust	MHA22D	Vocational Support Services	1.00 Non-clinical FTE
Challenge Trust	MHA23C	Housing Coordination Service	1.00 Nursing and allied FTE
Challenge Trust	MHA26	Supportive Landlord	0.20
Challenge Trust	MHA20D	Adult Community Support Services	3.00 Non-clinical FTE
Te Kupenga Net Trust	MHW68D	Family whanau support education, information and advocacy service	1.70 Non-clinical FTE
Te Kupenga Net Trust	MHC34F	Advocacy - Consumers (Adults)	2.00 Peer support FTE

Table 36: Tairawhiti provider arm services

Purchase unit code	Tairawhiti DHB Provider Arm Service	Volume
MHCS01A	Community Alcohol & Drug Services	3.50 Other Clinical FTE
MHCS01B	Community Alcohol & Drug Services	0.30 Senior Medical Clinical FTE
MHCS01C	Community Alcohol & Drug Services	1.00 Non-Clinical FTE
MHCS18	Community Service - Older People	1.00 Clinical FTE
MHCS19	Kaupapa Maori Mental Health Services - Adult Community Teams	4.50 Clinical FTE
MHCS26	Early Intervention Alcohol & Drug Service	3.00 Clinical FTE
MHCS28	Specialist Maternal Mental Health Service	0.50 Clinical FTE
MHCS29.2	Methadone Treatment – Specialist	47 Case
MHCS40	Kaupapa Maori Mental Health Services - Consultation / Liaison	0.50 FTE
MHCS45	Older Persons Day Hospital Programme	3.00 Clinical FTE
MHCS46	Kaupapa Maori Mental Health Services – Kaumatua and Taua (Kuia)	1.00 FTE
MHIS02	Older People Inpatient Beds	412 Available Bed Day
MHQI01	Quality Improvements	1.50 Programme
MHWD01	Workforce Development	3.00 Programme
MHA01	Acute 24 Hour Clinical Intervention (inpatient)	2,600 available bed day
MHA02	Intensive Care	368 Available bed day
MHA03	Adult Crisis Respite	1.0 Occupied bed day
MHA09A	Community Clinical Mental Health Service	1.70 Senior medical FTE
MHA09C	Community Clinical Mental Health Service	12.00 Nursing/allied health FTE
MHA13C	Mental Health with Intellectual Disability - Nursing and/or allied staff	1.00 Nursing/allied health FTE
MHAD14C	Co-existing disorders (mental health & addiction) - Nursing and/or allied health staff	1.00 Nursing/allied health FTE
MHA18C	Needs Assessment and Service Coordination	2.00 Nursing/allied health FTE
MHI38	Infant, child, adolescent & youth inpatient beds	20.0 Available bed day
MHI44A	Infant, child, adolescent & youth community mental health services	1.20 Senior medical FTE
MHI44C	Infant, child, adolescent & youth community mental health services	11.60 Nursing/allied health FTE
MHDI48C	Child, adolescent and youth alcohol and drug community services	4.10 Nursing/allied health FTE
MHFF	Mental Health Flexi Funding (blueprint)	1.0 Programme

APPENDIX 5: NEED AND UNMET NEED FOR EACH OF THE MIDLAND REGION DHBS

These tables sit alongside tables 7-10 in the main document which provides information about need and unmet need for New Zealand and for the Midland region as a whole.

Table 37: Number of people of all ethnicities receiving services in a 12 months period compared with the number that could be expected to receive services in that time on the basis of Te Rau Hinengaro prevalence rates

	BoP				Lakes				Tairarwhiti				Taranaki				Waikato			
	Expected numbers receiving services in 12 months (using PRIMHD data)	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Bay of Plenty unmet need	Bay of Plenty % unmet need	Expected numbers receiving services in 12 months (using PRIMHD data)	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Lakes unmet need	Lakes % unmet need	Expected numbers receiving services in 12 months (using PRIMHD data)	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Tairarwhiti unmet need	Tairarwhiti % unmet need	Expected numbers receiving services in 12 months (using PRIMHD data)	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Taranaki unmet need	Taranaki % unmet need	Expected numbers receiving services in 12 months (using PRIMHD data)	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Waikato unmet need	Waikato % unmet need
All disorders																				
6-15 est	2055	1137	918	45	1096	524	572	52	535	428	107	20	1053	334	719	68	3673	1006	2667	73
16-24	1668	1,209	459	28	889	509	380	43	410	370	40	10	911	512	399	44	3493	1,450	2043	58
25-44	2856	2,248	608	21	1499	1,024	475	32	643	660	-17	-3	1533	1,099	434	28	5340	3,133	2207	41
45-64	2106	1,214	892	42	1002	619	383	38	450	328	122	27	1097	639	458	42	3422	1,824	1598	47
65 +	392	882	-490	-125	147	373	-226	-154	64	126	-62	96	189	424	-235	-124	540	1,228	-688	-127
Total pop over 15	7681	5,553	2128	28	3662	2525	1137	31	1618	1484	134	8	4003	2,674	1329	33	13146	7,635	5511	42
Total pop over 15 adjusted to take account of estimated clients not recorded in PRIMHD (see note 1)	5,636		2044	27	3662	2563	1099	30	1618	1506	110	7	4003	2714	1289	32	13146	9724	3422	26

	BoP				Lakes				Tairāwhiti				Taranaki				Waikato			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Bay of Plenty unmet need	Bay of Plenty % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Lakes unmet need	Lakes % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Tairāwhiti unmet need	Tairāwhiti % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Taranaki unmet need	Taranaki % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Waikato unmet need	Waikato % unmet need
Substance Use Disorders																				
6–15		4				3				2				11				6		
16-24	656	331	325	50	350	50	300	86	161	104	57	35	358	174	184	51	1374	264	1110	81
25-44	610	721	-111	-18	320	125	195	61	137	230	93	68	327	447	-120	-37	1141	865	276	24
45-64	196	251	-55	-28	93	46	47	51	42	74	32	76	102	186	-84	-82	319	375	-56	-18
65 +	1	22	-21	-2100	1	3	-2	-200	1	3	2	-200	1	21	-20	-2000	1	28	-27	-2700
Total population over 15	1634	1,325	309	19	779	224	555	71	344	411	-67	-19	852	828	24	3	2797	1,532	1265	45

Note 1: Advice from the Ministry of Health indicates that around 3% of unique clients each year are seen solely in the NGO sector (i.e. with no provider arm involvement) and that for the Midland region, around half of those would not have been reporting to PRIMHD for the 12 months that the data was collected for this report. The impact therefore is relatively small for most DHBs in the region (1.5%) except for Waikato which has a relatively large number of NGOs that were not reporting to PRIMHD during the period covered in this report (April 2009-March 2010) and whose clients were not captured by provider arm data. The adjustment of 2,089 clients for Waikato is made up as follows:

Child and youth (including AoD): 723 unique clients
Hauora Waikato services: 479 unique clients
Community AoD services: 775 unique clients
Residential AoD services: 112 unique clients
The other DHBs have been adjusted by 1.5%.

Table 38: Number of Maori receiving services in a 12 months period compared with the number that could be expected to receive services in that time on the basis of Te Rau Hinengaro prevalence rates

	BoP				Lakes				Tairawhiti				Taranaki				Waikato			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Bay of Plenty unmet need	Bay of Plenty % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Lakes unmet need	Lakes % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Tairawhiti unmet need	Tairawhiti % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Taranaki unmet need	Taranaki % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Waikato unmet need	Waikato % unmet need
All disorders																				
6-15 est	983	445	538	55	656	177	479	73	399	260	139	35	355	94	261	74	1482	238	1244	84
16-24	707	438	269	38	504	254	250	50	300	222	78	26	268	161	107	40	1181	465	716	61
25-44	1269	794	475	37	886	454	432	49	534	394	140	26	448	288	160	36	1988	956	1032	52
45-64	710	268	442	62	468	194	274	59	323	156	167	52	228	135	93	41	961	352	609	63
65 +	52	64	-12	-23	31	56	-25	-81	26	28	-2	-8	18	26	-8	-44	66	67	-1	-2
Total pop over 15	2885	1,564	1,321	46	1965	958	1,007	51	1265	800	465	37	1007	610	397	39	4340	1,840	2,500	58
Substance Use Disorders																				
6—15		3				2				1				7	-7			3		
16-24	501	130	371	74	357	20	337	94	213	75	138	65	190	64	126	66	838	106	732	87
25-44	348	259	89	26	243	59	184	76	147	164	-17	-12	123	132	-9	-7	546	236	310	57
45-64	86	56	30	35	57	9	48	84	39	44	-5	-13	28	45	-17	-61	117	60	57	49
65 +	3	2	1	33	2	2	0	0	1	1	0	0	1	2	-1	-100	4	3	1	25
Total pop over 15	962	444	518	54	655	88	567	87	422	284	138	33	336	243	93	28	1447	405	1042	72

Table 39: Number of Pacific people receiving services in a 12 months period compared with the number that could be expected to receive services in that time on the basis of Te Rau Hinengaro prevalence rates

	Bay of Plenty				Lakes				Tairarwhiti				Taranaki				Waikato			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Bay of Plenty unmet need	Bay of Plenty % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Lakes unmet need	Lakes % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Tairarwhiti unmet need	Tairarwhiti % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Taranaki unmet need	Taranaki % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Waikato unmet need	Waikato % unmet need
All disorders																				
6-15 est	50	10	40	80	38	9	29	76	15	2	13	87	17	1	16	94	141	17	124	88
16-24	33	7	26	79	39	6	33	85	11	3	8	73	16	4	12	75	130	37	93	72
25-44	50	31	19	38	45	18	27	60	17	6	11	65	20	12	8	40	158	63	95	60
45-64	19	9	10	53	21	5	16	76	8	2	6	75	7	6	1	14	61	20	41	67
65 +	3	2	1	33	3	3	0	0	1	0	1	100	1	2	-1	-100	12	12	0	0
Total pop over 15	107	49	58	54	110	32	78	71	38	11	27	71	44	24	20	45	364	132	232	64
Substance use disorders																				
6-15																				
16-24	15	2	13	87	18	1	17	94	5	0	5	100	7	1	6	86	60	5	55	92
25-44	10	11	(1)	-10	9	4	5	56	3	3	0	0	4	1	3	75	30	13	17	57
45-64	4	3	1	25	5	2	3	60	2	0	2	100	2	3	(1)	-50	13	3	10	77
65 +	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	100
Total pop over 15	59	16	43	73	55	6	49	89	20	3	17	85	23	5	18	78	188	21	167	89

Table 40: Number of non Maori, non Pacific people (other) receiving services in a 12 months period compared with the number that could be expected to receive services in that time on the basis of Te Rau Hinengaro prevalence rates

	Bay of Plenty				Lakes				Tairāwhiti				Taranaki				Waikato			
	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Bay of Plenty unmet need	Bay of Plenty % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Lakes unmet need	Lakes % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Tairāwhiti unmet need	Tairāwhiti % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Taranaki unmet need	Taranaki % unmet need	Expected numbers needing services in 12 months based on Te Rau Hinengaro	Actual number receiving services in 12 months (using PRIMHD data)	Waikato unmet need	Waikato % unmet need
All disorders																				
6-15 est	1123	682	441	39	809	338	471	58	177	166	11	6	699	239	460	66	2179	751	1428	66
16-24	989	764	225	23	411	249	162	39	141	145	-4	-3	635	347	288	45	2258	948	1310	58
25-44	1800	1423	377	21	822	552	270	33	279	260	19	7	1086	799	287	26	3504	2114	1390	40
45-64	1543	937	606	39	664	420	244	37	247	170	77	31	871	498	373	43	2570	1452	1118	44
65 +	326	816	-490	-150	115	314	-199	-173	43	98	-55	-128	162	396	-234	-144	449	1149	-700	-156
Total pop over 15	5268	3940	1328	25	2194	1535	659	30	789	673	116	15	2987	2040	947	32	9174	5663	3511	38
Substance use disorders																				
6-15		1				1				1				4				3		
16-24	291	199	92	32	121	29	92	76	41	29	12	29	187	109	78	42	738	153	585	79
25-44	324	451	-127	-39	148	62	86	58	50	63	-13	-26	195	314	-119	-61	631	616	15	2
45-64	136	192	-56	-41	59	35	24	41	22	30	-8	-36	77	138	-61	-79	227	312	-85	-37
65 +	1	20	-19	-1900	1	1	0	0	1	2	-1	-100	1	19	-18	-1800	1	25	-24	-2400
Total pop over 15	899	862	37	4	375	127	248	66	135	124	11	8	510	580	-70	-14	1566	1106	460	29

APPENDIX 6: COMPARATIVE BENCHMARKING DATA ACROSS MIDLAND REGION DHBS

Table 41: Benchmarking volumes against national and regional averages

Service	Age specific population	Midland	BoP	Lakes	Tairāwhiti	Taranaki	Waikato
		How many more or fewer beds or FTEs would be needed for the age specific population if Midland was providing services at the national average	How many more or fewer beds or FTEs would be needed for the age specific population if BoP was providing services at the national average	How many more or fewer beds or FTEs would be needed for the age specific population if Lakes was providing services at the national average	How many more or fewer beds or FTEs would be needed for the age specific population if Tairāwhiti was providing services at the national average	How many more or fewer beds or FTEs would be needed for the age specific population if Taranaki was providing services at the national average	How many more or fewer beds or FTEs would be needed for the age specific population if Waikato was providing services at the national average
Adult community clinical FTEs	20-65	0.0	0.0	-17.1	-10.0	-8.2	35.3
Adult inpatient beds	20-65	28.3	7.8	8.7	-1.2	-0.6	13.8
Adult community support FTEs	20-65	-16.5	-11.0	-19.9	-2.4	8.9	7.9
Adult residential beds	20-65	4.7	-3.3	-14.0	-4.1	3.4	22.7
AOD community FTEs	All	-47.7	-18.6	-9.2	-6.4	-1.0	-12.3
AOD beds	All	31.3	21.7	2.1	5.3	-7.3	9.5
Methadone places	All	87.9	9.8	22.0	2.4	-30.4	84.1
Child and youth community FTEs	0-19	-5.4	-9.4	0.3	-4.3	-1.3	9.3
Child and youth day programme	0-19	4.9	-0.1	2.4	1.2	1.5	-0.2
Child and youth beds (inpatient and community)	0-19	8.1	1.8	0.8	-0.1	1.5	4.1
Forensic beds	20-65	-4.3	-2.3	-1.4	2.4	-0.9	-2.1
Forensic community FTEs	20-65	-4.4	0.6	-0.3	0.0	-0.1	-4.5
Older people's community FTEs	65+	9.5	1.6	0.3	1.9	0.8	4.9
Older people's beds	65+	6.3	2.9	1.2	0.4	0.3	1.5
Older people's day programme	65+	-6.1	-2.4	0.5	-1.2	0.6	-3.5
Specialist community FTEs	All	4.6	1.3	1.7	-0.5	2.6	-0.6
Specialist Beds	All	5.7	1.5	0.7	0.3	0.8	2.5
Non Blueprint	All	0.0	0.0	0.0	0.0	0.0	0.0

Table 42: Benchmarking spending against national and regional averages

Service	Age specific population	Midland	BoP	Lakes	Tairawhiti	Taranaki	Waikato
		How much more or less would be spent on the age specific population if Midland was providing services at the national average \$m	How much more or less would be spent on the age specific population if BoP was providing services at the national average %m	How much more or less would be spent on the age specific population if Lakes was providing services at the national average \$m	How much more or less would be spent on the age specific population if Tairawhiti was providing services at the national average \$m	How much more or less would be spent on the age specific population if Taranaki was providing services at the national average \$m	How much more or less would be spent on the age specific population if Waikato was providing services at the national average \$m
Adult community clinical FTEs	20-65	0.9	0.6	-1.8	-0.5	-1.2	3.8
Adult inpatient beds	20-65	3.2	0.5	1.9	-0.3	-1.3	2.6
Adult community support FTEs	20-65	-1.3	-0.7	-1.2	-0.2	0.4	0.2
Adult residential beds	20-65	0.7	-1.2	-0.2	0.0	0.4	1.7
AOD community FTEs	All	-5.1	-2.0	-0.7	-0.5	-0.3	-1.6
AOD beds	All	0.6	0.8	-0.3	0.2	-0.1	0.1
Methadone places	All	0.3	0.1	0.0	0.0	-0.1	0.2
Child and youth community FTEs	0-19	-0.5	-0.7	0.1	-0.5	-0.3	0.8
Child and youth day programme	0-19	0.3	-0.1	0.2	0.1	0.1	-0.1
Child and youth beds (inpatient and community)	0-19	1.9	0.5	0.2	0.0	0.3	1.0
Forensic beds	20-65	-0.6	-0.5	-0.3	0.7	-0.1	-0.3
Forensic community FTEs	20-65	-0.4	0.1	0.0	0.0	0.0	-0.4
Older people's community FTEs	65+	-2.6	-1.0	-0.3	0.1	-0.3	-1.0
Older people's beds	65+	1.0	0.0	0.1	0.3	0.2	0.5
Older people's day programme	65+	1.3	0.6	0.3	0.1	0.0	0.3
Specialist community FTEs	All	-0.5	-0.2	-8.0	-0.1	0.1	-2.2
Specialist Beds	All	1.0	0.3	0.1	0.1	0.1	0.4
Non Blueprint funding	All	-2.2	0.8	-2.2	-0.3	-1.0	0.4

Table 43: Benchmarking volumes against blueprint target volumes: % of blueprint target reached (a figure > 100% indicates that the target has been exceeded, and a figure < 100% indicates that the target has not yet been achieved.)

Service	NZ % of target reached	Midland % of target reached	Bay of Plenty % of target reached	Lakes % of target reached	Tairāwhiti % of target reached	Taranaki % of target reached	Waikato % of target reached
Adult community clinical FTEs	104.4	104.9	107.5	136	147.6	121.2	84.5
Adult inpatient beds	77.4	65.7	66.7	45.5	88	82	63.2
Adult community support FTEs	110.7	117.2	128.6	156.6	124	94.3	105.5
Adult residential beds	51.3	51.7	56.9	70.4	64.7	49.2	42.6
AOD community FTES	92.1	123.9	140.8	140.2	172.1	98.7	111.3
AOD beds	100.2	74.5	22.6	87.4	14.1	158.7	82.4
Methadone places	70.2	66	71.8	57.6	71.7	92.9	56.4
Child and youth community FTES	73.4	76.4	90.8	73.4	105.4	78.2	64.9
Child and youth day programme	33	24.7	34.1	0	0	11.2	33.9
Child and youth beds (inpatient and community)	60	19.2	22.5	29.4	64.3	1.4	13.3
Forensic beds	79.5	89.5	101.5	99.8	0	95.8	89
Forensic community FTEs	208.1	238.8	208.9	221.4	210.8	220.7	269.1
Older people's community FTEs	72	60.6	65.4	68	24.4	64.5	57.9
Older people's beds	76.5	60.5	51.2	48.7	58.5	70.5	67.3
Older people's day programme	10.4	25.7	30.5	0	73.4	0	32.6
Specialist community FTEs	52.9	45.6	45.7	27.1	73.8	15.1	56.2
Specialist Beds	18.6	0.5	0	0	0	0	1.1
Non Blueprint funding							

Table 44: Benchmarking spending against blueprint target spending: % of blueprint target reached (a figure > 100% indicates that the target has been exceeded, and a figure < 100% indicates that the target has not yet been achieved.)

Service	NZ % of target reached	Midland % of target reached	Bay of Plenty % of target reached	Lakes % of target reached	Tairāwhiti % of target reached	Taranaki % of target reached	Waikato % of target reached
Adult community clinical FTEs	106	106	108	141	149	124	85
Adult inpatient beds	81	78.2	88	58	93	110	67
Adult community support FTEs	110	114	129	155	123	95	101
Adult residential beds	52	49	60	61	59	43	38
AOD community FTES	95.3	127	147	147	177	103	113
AOD beds	48	42	13	73	9	69	44
Methadone places	71	66	71	61	83	94	56
Child and youth community FTES	73	76	91	73	105	78	65
Child and youth day programme	30	25	37	0	0	11	32
Child and youth beds (inpatient and community)	63	20	23	30	66	1	13
Forensic beds	80	92	103	101	0	97	90
Forensic community FTEs	249	280	244	259	269	258	313
Older people's community FTEs	72	61	65	68	24	65	58
Older people's beds	77	61	51	49	59	71	67
Older people's day programme	10	26	31	0	73	0	33
Specialist community FTEs	57	51	51	27	77	18	61
Specialist Beds	27	0.4	0	0	0	0	0
Non Blueprint funding	\$42m	\$10.2m	\$1.2m	\$3.2m	\$0.7m	\$2m	\$3.1m

Table 45: Benchmarking current volumes against the volumes that would be required if provided on a PBF basis (+ve means more would be needed)

	Midland	BoP	Lakes	Tairawhiti	Taranaki	Waikato
Service type	Midland - How many more or less beds or FTEs are needed if volumes were PBF based	BoP - How many more or less beds or FTEs are needed if volumes were PBF based	Lakes - How many more or less beds or FTEs are needed if volumes were PBF based	Tairawhiti - How many more or less beds or FTEs are needed if volumes were PBF based	Taranaki - How many more or less beds or FTEs are needed if volumes were PBF based	Waikato - How many more or less beds or FTEs are needed if volumes were PBF based
Adult community clinical FTEs	58.7	10.6	-4.2	1.4	-7.1	58.0
Adult inpatient beds	51.3	11.9	13.8	3.3	-0.2	22.8
Adult community support FTEs	34.8	-1.8	-8.7	7.5	9.9	27.8
Adult residential beds	45.0	4.0	-5.2	3.8	4.1	38.3
AOD community FTEs	-30.5	-15.1	-5.4	-3.1	-0.7	-6.1
AOD beds	43.6	24.2	4.8	7.7	-7.0	14.0
Methadone places	187.1	29.9	43.6	21.8	-28.3	120.0
Child and youth community FTEs	5.2	-6.0	2.5	-2.2	-0.9	11.7
Child and youth day programme	6.0	0.3	2.6	1.4	1.6	0.0
Child and youth beds (inpatient and community)	8.8	2.0	1.0	0.1	1.5	4.2
Forensic beds	1.8	-1.2	-0.1	3.6	-0.8	0.2
Forensic community FTEs	0.6	1.5	0.8	0.9	0.0	-2.6
Older people's community FTEs	-19.4	-8.4	-2.1	1.2	-4.0	-6.1
Older people's beds	-8.2	-2.1	-0.1	0.0	-2.1	-4.0
Older people's day programme	-8.0	-3.1	0.3	-1.2	0.3	-4.3
Specialist community FTEs	7.7	2.0	2.4	0.1	2.7	0.6
Specialist Beds	6.4	1.6	0.9	0.5	0.8	2.7
Non Blueprint funding						

Table 46: Benchmarking current spending against the spending that would be required if provided on a PBF basis (+ve means would spend this much more)

Service Type	Midland Midland -How much more or less would be spent if spending was based on PBF \$m	BoP BoP -How much more or less would be spent if spending was based on PBF \$m	Lakes Lakes -How much more or less would be spent if spending was based on PBF \$m	Tairawhiti Tairawhiti -How much more or less would be spent if spending was based on PBF \$m	Taranaki Taranaki -How much more or less would be spent if spending was based on PBF %m	Waikato Waikato -How much more or less would be spent if spending was based on PBF \$m
Adult community clinical FTEs	7.6	1.8	-0.4	0.8	-1.1	6.4
Adult inpatient beds	8.0	1.3	2.9	0.6	-1.2	4.4
Adult community support FTEs	2.4	0.0	-0.3	0.5	0.4	1.7
Adult residential beds	2.6	-0.9	0.2	0.3	0.4	2.4
AOD community FTEs	-3.4	-1.6	-0.3	-0.2	-0.2	-1.0
AOD beds	1.1	0.9	-0.2	0.3	-0.1	0.3
Methadone places	0.6	0.1	0.1	0.1	-0.1	0.3
Child and youth community FTEs	0.7	-0.3	0.3	-0.2	-0.2	1.0
Child and youth day programme	0.4	-0.1	0.2	0.1	0.1	-0.1
Child and youth beds (inpatient and community)	2.1	0.5	0.2	0.0	0.3	1.0
Forensic beds	1.1	-0.2	0.1	1.0	-0.1	0.3
Forensic community FTEs	0.3	0.2	0.1	0.1	0.0	-0.2
Older people's community FTEs	-2.6	-1.2	-0.2	0.2	-0.4	-0.9
Older people's beds	-1.7	-0.5	0.0	0.0	-0.5	-0.8
Older people's day programme	-0.7	-0.3	-8.0	-0.1	0.0	-0.4
Specialist community FTEs	1.2	0.3	0.3	0.1	0.4	0.1
Specialist Beds	1.1	0.3	0.1	0.1	0.1	0.5
Non Blueprint funding	-1.3	1.0		-0.1	-0.9	0.7

APPENDIX 7: BAY OF PLENTY DATA NOT INCLUDED ELSEWHERE

Population data: Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Table 47: Population projections by age and ethnicity

Age	2010				2016				2021				2026			
	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People
00-14	1,530	17,870	24,020	950	2,090	18,850	23,350	1,040	2,640	19,700	23,130	1,120	3,000	19,720	22,890	1,170
15-24	990	9,390	15,490	470	1,000	9,960	14,940	570	1,110	9,660	14,000	630	1,410	10,530	13,710	690
25-44	2,270	12,440	33,730	800	2,870	12,960	34,680	850	3,380	14,010	36,240	890	3,810	15,080	37,860	1,030
45-65	1,260	9,590	44,120	450	1,610	10,720	46,720	610	1,780	11,250	47,080	730	1,970	11,120	45,830	790
65+	360	2,910	32,210	130	700	3,680	38,630	190	1,010	4,610	44,020	250	1,340	5,820	49,770	330
Total	6,410	52,200	149,570	2,800	8,270	56,170	158,320	3,260	9,920	59,230	164,470	3,620	11,530	62,270	170,060	4,010

Table 48: Population projections by age and % change between 2010 and 2026

Age	2010	2016	2021	2026	% increase from 2010-2026
00-14	44,370	45,330	46,590	46,780	5.4
15-24	26,340	26,470	25,400	26,340	0.0
25-44	49,240	51,360	54,520	57,780	17.3
45-65	55,420	59,660	60,840	59,710	7.7
65+	35,610	43,200	49,890	57,260	60.8
Total	210,980	226,020	237,240	247,870	17.5

Table 49: Deprivation (quintile 1 is lowest deprivation, quintile 5 is highest deprivation)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Maori	2,196	4,248	6,996	11,378	27,444	52,262
% of pop	4%	8%	13%	22%	53%	
Other	26,032	35,218	39,183	31,525	24,022	155,980
% of pop	17%	23%	25%	20%	15%	
Pacific	152	325	544	746	1,033	2,800
% of pop	5%	12%	19%	27%	37%	
Total population	28,380	39,791	46,723	43,649	52,499	211,042
% of pop	13%	19%	22%	21%	25%	

Utilisation data using the Te Rau Hinengaro age and ethnicity categories

Source: Ministry of Health PRIMHD 18 October 2010 for period 1 April 2009 – 31 March 2010.

DHB of domicile

Ethnicity is defined as the current ethnicity of the NHI

Table 50: Number of unique individuals accessing mental health AND alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	2,009	59	4682	6,750
	Male	1,161	33	2339	3533
	Female	848	26	2343	3217
0-15	Total	445	10	682	1,137
	Male	299	6	404	709
	Female	146	4	278	428
16-24	Total	438	7	764	1,209
	Male	262	4	400	666

Table 51: Number of unique individuals accessing alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	450	16	863	1,329
	Male	294	12	603	909
	Female	156	4	260	420
0-15	Total	3	0	1	4
	Male	3	0	-3	0
	Female	0	0	4	4
16-24	Total	130	2	199	331
	Male	97	2	143	242

		Maori	Pacific	Other	Total
	Female	176	3	364	543
25-44	Total	794	31	1423	2,248
	Male	459	14	734	1207
	Female	335	17	689	1041
45-64	Total	268	9	937	1,214
	Male	110	7	435	552
	Female	158	2	502	662
65+	Total	64	2	816	882
	Male	31	2	306	339
	Female	33	0	510	543
Also another cut for					
0-19	Total	678	14	1057	1,749
	Male	438	8	603	1049
	Female	240	6	454	700

		Maori	Pacific	Other	Total
	Female	33	0	56	89
25-44	Total	259	11	451	721
	Male	161	7	320	488
	Female	98	4	131	233
45-64	Total	56	3	192	251
	Male	32	3	125	160
	Female	24	0	67	91
65+	Total	2	0	20	22
	Male	1	0	14	15
	Female	1	0	6	7
Also another cut for					
0-19	Total	52	1	72	125
	Male	40	1	53	94
	Female	12	0	19	31

APPENDIX 8: LAKES DHB DATA NOT INCLUDED ELSEWHERE

Population data: Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Table 52: Population projections by age and ethnicity

Age	2010				2016				2021				2026			
	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People
00-14	780	11,960	10,340	720	980	12,250	9,100	670	1,170	12,420	8,230	630	1,270	12,070	7,410	620
15-24	600	6,600	6,210	510	590	6,740	5,490	470	530	6,480	4,780	430	650	6,900	4,230	410
25-44	1,360	8,690	15,070	720	1,550	8,800	14,010	740	1,770	9,260	13,390	790	1,890	9,730	12,940	780
45-65	880	6,320	18,650	510	1,090	7,060	18,560	570	1,130	7,320	17,990	580	1,100	7,050	16,540	560
65+	230	1,720	11,280	140	410	2,170	13,500	180	630	2,700	15,140	220	930	3,470	16,870	320
Total	3,850	35,290	61,550	2,600	4,620	37,020	60,660	2,630	5,230	38,180	59,530	2,650	5,840	39,220	57,990	2,690

Table 53: Population projections by age and % change between 2010 and 2026

Age	2010	2016	2021	2026	% increase from 2010-2026
00-14	23,800	23,000	22,450	21,370	-10.2
15-24	13,920	13,290	12,220	12,190	-12.4
25-44	25,840	25,100	25,210	25,340	-1.9
45-65	26,360	27,280	27,020	25,250	-4.2
65+	13,370	16,260	18,690	21,590	61.5
Total	103,290	104,930	105,590	105,740	2.3

Table 54: Deprivation (quintile 1 is lowest deprivation, quintile 5 is highest deprivation)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Maori	2,259	2,910	3,943	8,334	17,843	35,289
% of pop	6%	8%	11%	24%	51%	
Other	15,734	14,399	10,315	13,058	11,895	65,401
% of pop	24%	22%	16%	20%	18%	
Pacific	147	201	300	610	1,341	2,599
% of pop	6%	8%	12%	23%	52%	
Total	18,140	17,510	14,558	22,002	31,079	103,289
% of pop	18%	17%	14%	21%	30%	

Utilisation data using the Te Rau Hinengaro age and ethnicity categories

Source: Ministry of Health PRIMHD 18 October 2010 for period 1 April 2009 – 31 March 2010.

DHB of domicile

Ethnicity is defined as the current ethnicity of the NHI

Table 55: Number of individuals accessing mental health AND alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	1,135	41	1873	3,049
	Male	637	28	974	1639
	Female	498	13	899	1410
0-15	Total	177	9	338	524
	Male	115	7	227	349
	Female	62	2	111	175
16-24	Total	254	6	249	509
	Male	152	3	123	278

Table 56: Number of unique individuals accessing alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	92	7	128	227
	Male	54	7	82	143
	Female	38	0	46	84
0-15	Total	2	0	1	3
	Male	0	0	1	1
	Female	2	0	0	2
16-24	Total	20	1	29	50
	Male	10	1	20	31

		Maori	Pacific	Other	Total
	Female	102	3	126	231
25-44	Total	454	18	552	1,024
	Male	257	13	273	543
	Female	197	5	279	481
45-64	Total	194	5	420	619
	Male	87	4	216	307
	Female	107	1	204	312
65+	Total	56	3	314	373
	Male	26	1	135	162
	Female	30	2	179	211
Also another cut for					
0-19	Total	288	10	454	752
	Male	179	7	275	461
	Female	109	3	179	291

		Maori	Pacific	Other	Total
	Female	10	0	9	19
25-44	Total	59	4	62	125
	Male	37	4	40	81
	Female	22	0	22	44
45-64	Total	9	2	35	46
	Male	6	2	20	28
	Female	3	0	15	18
65+	Total	2	0	1	3
	Male	1	0	1	2
	Female	1	0	0	1
Also another cut for					
0-19	Total	14	0	5	19
	Male	5	0	5	10
	Female	9	0	0	9

APPENDIX 9: TAIRAWHITI DHB DATA NOT INCLUDED ELSEWHERE

Population data: Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Table 57: Population projections by age and ethnicity

Age	2010				2016				2021				2026			
	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People
00-14	195	7,270	3,790	305	235	7,390	3,310	290	265	7,480	2,980	265	270	7,180	2,710	270
15-24	90	3,960	2,320	155	100	3,930	1,750	175	120	3,580	1,380	210	145	3,800	1,110	200
25-44	275	5,240	5,300	265	305	5,260	5,130	255	300	5,580	4,840	255	355	5,770	4,510	285
45-65	165	4,360	7,110	195	185	4,810	6,940	220	205	4,830	6,510	250	190	4,590	5,870	250
65+	65	1,450	4,260	35	90	1,780	4,890	55	115	2,200	5,500	80	150	2,750	6,130	90
Total	790	22,280	22,780	955	915	23,170	22,020	995	1,005	23,670	21,210	1,060	1,110	24,090	20,330	1,095

Table 58: Population projections by age and % change between 2010 and 2026

Age	2010	2016	2021	2026	% increase from 2010-2026
00-14	11,560	11,225	10,990	10,430	-9.7
15-24	6,525	5,955	5,290	5,255	-19.4
25-44	11,080	10,950	10,975	10,920	-14.4
45-65	11,830	12,155	11,795	10,900	-7.9
65+	5,810	6,815	7,895	9,120	56.9
Total	46,805	47,100	46,945	46,625	-0.3

Table 59: Deprivation (quintile 1 is lowest deprivation, quintile 5 is highest deprivation)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Maori	688	1,151	1,812	3,804	14,824	22,279
% of pop	3%	5%	8%	17%	67%	
Other	3,633	4,570	4,171	5,567	5,630	23,571
% of pop	15%	19%	18%	24%	24%	
Pacific	6	56	70	165	658	955
% of pop	1%	6%	7%	17%	69%	
Total	4,327	5,777	6,053	9,536	21,112	46,805
% of pop	9%	12%	13%	20%	45%	

Utilisation data using the Te Rau Hinengaro age and ethnicity categories

Source: Ministry of Health PRIMHD 18 October 2010 for period 1 April 2009 – 31 March 2010.

DHB of domicile

Ethnicity is defined as the current ethnicity of the NHI

Table 60: Number of unique individuals accessing mental health AND alcohol and drug services

	Total	Maori	Pacific	Other	Total
All ages	Total	903	9	711	1,623
	Male	548	6	366	920
	Female	355	3	345	703
0-15	Total	232	1	152	385
	Male	161	0	93	254
	Female	71	1	59	131
16-24	Total	175	3	114	292
	Male	106	2	53	161
	Female	69	1	61	131

Table 61: Number of unique individuals accessing alcohol and drug services

	Total	Maori	Pacific	Other	Total
All ages	Total	226	2	90	318
	Male	163	2	65	230
	Female	63	0	25	88
0-15	Total	1	0	1	2
	Male	0	0	1	1
	Female	1	0	0	1
16-24	Total	49	0	16	65
	Male	34	0	12	46
	Female	15	0	4	19

		Maori	Pacific	Other	Total
25-44	Total	339	2	221	562
	Male	203	2	114	319
	Female	136	0	107	243
45-64	Total	137	3	141	281
	Male	68	2	70	140
	Female	69	1	71	141
65+	Total	20	0	83	103
	Male	10	0	36	46
	Female	10	0	47	57
Also another cut for					
0-19	Total	323	4	211	538
	Male	208	2	119	329
	Female	115	2	92	209

		Maori	Pacific	Other	Total
25-44	Total	143	2	48	193
	Male	102	2	33	137
	Female	41	0	15	56
45-64	Total	33	0	23	56
	Male	27	0	17	44
	Female	6	0	6	12
65+	Total	0	0	2	2
	Male	0	0	2	2
	Female	0	0	0	0
Also another cut for					
0-19	Total	26	0	5	31
	Male	17	0	4	21
	Female	9	0	1	10

APPENDIX 10: TARANAKI DHB DATA NOT INCLUDED ELSEWHERE

Population data: Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Table 62: Population projections by age and ethnicity

Age	2010				2016				2021				2026			
	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People
00-14	600	6,490	15,300	330	810	7,180	14,220	370	980	7,770	13,310	405	1,050	7,740	11,880	415
15-24	420	3,510	10,160	215	370	3,470	8,630	210	370	3,340	7,280	200	500	3,920	7,000	225
25-44	1,050	4,390	20,670	315	1,270	4,770	19,390	350	1,420	5,070	18,670	395	1,500	5,400	17,730	415
45-65	570	3,080	25,040	175	700	3,520	24,820	235	760	3,750	23,670	265	820	3,780	21,370	300
65+	220	980	15,960	55	390	1,290	18,450	100	580	1,560	20,590	140	770	1,990	22,990	180
Total	2,860	18,450	87,130	1,090	3,540	20,230	85,510	1,265	4,110	21,490	83,520	1,405	4,640	22,830	80,970	1,535

Table 63: Population projections by age and % change between 2010 and 2026

Age	2010	2016	2021	2026	% increase from 2010-2026
00-14	22,720	22,580	22,465	21,085	-7.2
15-24	14,305	12,680	11,190	11,645	-18.6
25-44	26,425	25,780	25,555	25,045	-5.2
45-65	28,865	29,275	28,445	26,270	-9.0
65+	17,215	20,230	22,870	25,930	50.6
Total	109,530	110,545	110,525	109,975	0.4

Table 64: Deprivation (quintile 1 is lowest deprivation, quintile 5 is highest deprivation)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Maori	807	2,121	4,015	5,034	6,472	18,449
% of pop	4%	11%	22%	27%	35%	
Other	12,171	20,244	23,621	21,909	12,045	89,990
% of pop	14%	22%	26%	24%	13%	
Pacific	29	97	404	259	301	1,090
% of pop	3%	9%	37%	24%	28%	
Total	13,007	22,462	28,040	27,202	18,818	109,529
% of pop	12%	21%	26%	25%	17%	

Utilisation data using the Te Rau Hinengaro age and ethnicity categories

Source: Ministry of Health PRIMHD 18 October 2010 for period 1 April 2009 – 31 March 2010.

DHB of domicile

Ethnicity is defined as the current ethnicity of the NHI

Table 65: Number of unique individuals accessing mental health and alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	704	25	2279	3,008
	Male	410	9	1162	1581
	Female	294	16	1117	1427
0-15	Total	94	1	239	334
	Male	63	0	147	210
	Female	31	1	92	124
16-24	Total	161	4	347	512
	Male	99	2	185	286

Table 66: Number of unique individuals accessing alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	250	5	584	839
	Male	163	4	352	519
	Female	87	1	232	320
0-15	Total	7	0	4	11
	Male	5	0	3	8
	Female	2	0	1	3
16-24	Total	64	1	109	174
	Male	48	1	72	121

		Maori	Pacific	Other	Total
	Female	62	2	162	226
25-44	Total	288	12	799	1,099
	Male	172	3	442	617
	Female	116	9	357	482
45-64	Total	135	6	498	639
	Male	67	4	229	300
	Female	68	2	269	339
65+	Total	26	2	396	424
	Male	9	0	159	168
	Female	17	2	237	256
Also another cut for					
0-19	Total	164	4	408	576
	Male	105	2	240	347
	Female	59	2	168	229

		Maori	Pacific	Other	Total
	Female	16	0	37	53
25-44	Total	132	1	314	447
	Male	84	1	187	272
	Female	48	0	127	175
45-64	Total	45	3	138	186
	Male	24	2	80	106
	Female	21	1	58	80
65+	Total	2	0	19	21
	Male	2	0	10	12
	Female	0	0	9	9
Also another cut for					
0-19	Total	33	1	48	82
	Male	24	1	35	60
	Female	9	0	13	22

APPENDIX 11: WAIKATO DHB DATA NOT INCLUDED ELSEWHERE

Population data: Source: Statistics NZ population projections at 30 June 2007 (2006 base) prepared for the Ministry of Health in September 2010

Table 67: Population projections by age and ethnicity

Age	2010				2016				2021				2026			
	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People	Asian	Maori	Other	Pacific People
00-14	4,510	27,110	45,230	2,710	5,750	29,240	43,000	2,910	7,020	30,770	40,730	3,060	7,690	30,380	38,120	3,150
15-24	4,600	15,370	32,310	1,760	4,910	15,190	31,480	1,740	4,920	14,990	29,410	1,740	5,570	16,920	28,880	1,890
25-44	7,960	19,490	62,120	2,500	9,800	21,220	59,020	2,760	11,490	22,680	58,820	3,020	12,360	23,770	58,760	3,220
45-65	4,140	12,990	71,460	1,450	5,250	14,800	73,130	1,830	5,830	15,730	71,350	2,060	6,900	16,230	66,640	2,270
65+	1,300	3,680	43,580	520	2,370	4,900	51,830	710	3,450	6,290	58,430	930	4,770	7,960	65,530	1,130
Total	22,510	78,640	254,700	8,940	28,080	85,350	258,460	9,950	32,710	90,460	258,740	10,810	37,290	95,260	257,930	11,660

Table 68: Population projections by age and % change between 2010 and 2026

Age	2010	2016	2021	2026	% increase from 2010-2026
00-14	79,560	80,900	81,580	79,340	-0.8
15-24	54,040	53,320	51,060	53,260	-1.4
25-44	92,070	92,800	96,010	98,110	6.6
45-65	90,040	95,010	94,970	92,040	2.2
65+	49,080	59,810	69,100	79,390	61.8
Total	364,790	381,840	392,720	402,140	10.2

Table 69: Deprivation (quintile 1 is lowest deprivation, quintile 5 is highest deprivation)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Maori	3,968	8,049	12,500	19,395	34,727	78,639
% of pop	5%	10%	16%	25%	44%	
Other	48,918	58,620	61,260	59,096	49,316	277,210
% of pop	18%	21%	22%	21%	18%	
Pacific	438	801	1,171	1,988	4,541	8,939
% of pop	5%	9%	13%	22%	51%	
Total	53,324	67,470	74,931	80,479	88,584	364,788
% of pop	15%	18%	21%	22%	24%	

Utilisation data using the Te Rau Hinengaro age and ethnicity categories

Source: Ministry of Health PRIMHD 18 October 2010 for period 1 April 2009 – 31 March 2010.

DHB of domicile

Ethnicity is defined as the current ethnicity of the NHI

Table 70: Number of unique individuals accessing mental health AND alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	2,078	149	6414	8,641
	Male	1181	79	3138	4398
	Female	897	70	3276	4243
0-15	Total	238	17	751	1,006
	Male	150	12	445	607
	Female	88	5	306	399
16-24	Total	465	37	948	1,450
	Male	264	16	475	755

Table 71: Number of unique individuals accessing alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	408	21	1109	1,538
	Male	255	12	692	959
	Female	153	9	417	579
0-15	Total	3	0	3	6
	Male	2	0	2	4
	Female	1	0	1	2
16-24	Total	106	5	153	264
	Male	68	4	101	173

		Maori	Pacific	Other	Total
	Female	201	21	473	695
25-44	Total	956	63	2114	3,133
	Male	549	35	1037	1621
	Female	407	28	1077	1512
45-64	Total	352	20	1452	1,824
	Male	185	11	733	929
	Female	167	9	719	895
65+	Total	67	12	1149	1,228
	Male	33	5	448	486
	Female	34	7	701	742
Also another cut for					
0-19	Total	452	27	1190	1,669
	Male	272	16	660	948
	Female	180	11	530	721

		Maori	Pacific	Other	Total
	Female	38	1	52	91
25-44	Total	236	13	616	865
	Male	149	8	380	537
	Female	87	5	236	328
45-64	Total	60	3	312	375
	Male	33	0	194	227
	Female	27	3	118	148
65+	Total	3	0	25	28
	Male	3	0	15	18
	Female	0	0	10	10
Also another cut for					
0-19	Total	46	0	49	95
	Male	30	0	36	66
	Female	16	0	13	29

APPENDIX 12: NEW ZEALAND AND MIDLAND UTILISATION DATA FOR DHBS TO BENCHMARKING AGAINST

Utilisation data using the Te Rau Hinengaro age and ethnicity categories

Source: Ministry of Health PRIMHD 18 October 2010 for period 1 April 2009 – 31 March 2010.

DHB of domicile. Ethnicity is defined as the current ethnicity of the NHI

New Zealand utilisation data

Table 72: Number of individuals accessing mental health AND alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	24,498	6,425	83,695	114,618
	Male	14,286	4,091	43,333	61,710
	Female	10,212	2,334	40,362	52,908
0-15	Total	4,273	1,034	11,914	17,221
	Male	2,762	617	7,118	10,497
	Female	1,511	417	4,796	6,724
16-24	Total	5,876	1,643	14,245	21,764
	Male	3,525	1,081	7,539	12,145
	Female	2,351	562	6,706	9,619
25-44	Total	10,206	2,668	28,171	41,045
	Male	5,878	1,803	14,832	22,513
	Female	4,328	865	13,339	18,532
45-64	Total	3,620	847	18,655	23,122
	Male	1,885	500	9,583	11,968
	Female	1,735	347	9,072	11,154
65+	Total	523	233	10,710	11,466
	Male	236	90	4,261	4,587
	Female	287	143	6,449	6,879
Also another cut for					

Table 73: Number of unique individuals accessing alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	7,444	1,399	18,460	27,303
	Male	4,851	1,145	12,049	18,045
	Female	2,593	254	6,411	9,258
0-15	Total	259	20	188	467
	Male	173	13	129	315
	Female	86	7	59	152
16-24	Total	1,994	451	3,407	5,852
	Male	1,395	386	2,424	4,205
	Female	599	65	983	1,647
25-44	Total	4,043	752	9,498	14,293
	Male	2,526	610	6,170	9,306
	Female	1,517	142	3,328	4,987
45-64	Total	1,123	170	4,964	6,257
	Male	737	131	3,093	3,961
	Female	386	39	1,871	2,296
65+	Total	25	6	407	438
	Male	20	5	238	263
	Female	5	1	169	175
Also another cut for					

		Maori	Pacific	Other	Total
0-19	Total	7,049	1,799	19,090	27,938
	Male	4,402	1,097	10,809	16,308
	Female	2,647	702	8,281	11,630

		Maori	Pacific	Other	Total
0-19	Total	1,049	169	1,386	2,604
	Male	733	31	1,120	1,884
	Female	316	138	266	720

Midland region utilisation data

Table 74: Number of individuals accessing mental health AND alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	6,621	281	15,668	22,570
	Male	3,802	154	7,801	11,757
	Female	2,819	127	7,867	10,813
0-15	Total	1,164	38	2,128	3,330
	Male	776	25	1,296	2,097
	Female	388	13	832	1,233
16-24	Total	1,430	56	2,114	3,600
	Male	841	27	1,052	1,920
	Female	589	29	1,062	1,680
25-44	Total	2,740	125	4,988	7,853
	Male	1,578	66	2,517	4,161
	Female	1,162	59	2,471	3,692
45-64	Total	1,061	43	3,401	4,505
	Male	504	28	1,656	2,188
	Female	557	15	1,745	2,317
65+	Total	227	19	2,800	3,046
	Male	104	8	1,138	1,250
	Female	123	11	1,662	1,796
Also another cut for					
0-19	Total	1,847	59	3259	5,165
	Male	1168	35	1865	3068
	Female	679	24	1394	2097

Table 75: Number of unique individuals accessing alcohol and drug services

		Maori	Pacific	Other	Total
All ages	Total	1,402	51	2710	4,163
	Male	912	37	1748	2697
	Female	490	14	962	1466
0-15	Total	16	0	10	26
	Male	10	0	8	18
	Female	6	0	2	8
16-24	Total	358	9	488	855
	Male	250	8	334	592
	Female	108	1	154	263
25-44	Total	818	31	1458	2,307
	Male	525	22	937	1484
	Female	293	9	521	823
45-64	Total	202	11	688	901
	Male	121	7	428	556
	Female	81	4	260	345
65+	Total	8	0	66	74
	Male	6	0	41	47
	Female	2	0	25	27
Also another cut for					
0-19	Total	165	2	176	343
	Male	112	2	131	245
	Female	53	0	45	98

APPENDIX 13: BENCHMARK CALCULATIONS

Table 76: Calculations of what would be spent if DHBs were spending at PBF share (positive means would spend more i.e. under PBF share)

	NZ	Midland				BoP				Lakes				Tairāwhiti				Taranaki				Waikato			
		\$s spent	\$s spent (21.25%)	How much more or less would be spent if spending was based on PBF	% variance from PBF share	\$s spent (5.26%)	How much more or less would be spent if spending was based on PBF	% variance from PBF share	\$s spent (2.83%)	How much more or less would be spent if spending was based on PBF	% variance from PBF	\$s spent (1.49%)	How much more or less would be spent if spending was based on PBF	% variance from PBF	\$s spent (1.49%)	How much more or less would be spent if spending was based on PBF	% variance from PBF	\$s spent	How much more or less would be spent if spending was based on PBF	% variance from PBF	\$s spent (9.12%)	How much more or less would be spent if spending was based on PBF	% variance from PBF		
Adult community clinical FTEs	269.8	49.7	57.3	7.6	13.3	12.4	14.2	1.8	12.6	8	7.6	-0.4	-4.8	3.2	4.0	0.8	20.4	8	6.9	-1.1	-16.3	18.2	24.6	6.4	26.0
Adult inpatient beds	188.6	32.1	40.1	8.0	19.9	8.6	9.9	1.3	13.3	2.4	5.3	2.9	55.0	2.2	2.8	0.6	21.7	6	4.8	-1.2	-24.8	12.8	17.2	4.4	25.6
Adult community support FTEs	150.3	29.5	31.9	2.4	7.6	7.9	7.9	0.0	0.1	4.6	4.3	-0.3	-8.1	1.7	2.2	0.5	24.1	3.4	3.8	0.4	11.3	12	13.7	1.7	12.5
Adult residential beds	74.9	13.3	15.9	2.6	16.4	4.8	3.9	-0.9	-21.8	1.9	2.1	0.2	10.4	0.8	1.1	0.3	28.3	1.5	1.9	0.4	21.5	4.4	6.8	2.4	35.6
AOD community FTES	77.1	19.8	16.4	-3.4	-20.9	5.7	4.1	-1.6	-40.6	2.5	2.2	-0.3	-14.6	1.3	1.1	-0.2	-13.2	2.2	2.0	-0.2	-11.9	8	7.0	1.0	-13.8
AOD beds	20.5	3.3	4.4	1.1	24.2	0.2	1.1	0.9	81.5	0.8	0.6	-0.2	-37.9	0	0.3	0.3	100.0	0.6	0.5	-0.1	-14.8	1.6	1.9	0.3	14.4
Methadone places	13.6	2.3	2.9	0.6	20.4	0.6	0.7	0.1	16.1	0.3	0.4	0.1	22.1	0.1	0.2	0.1	50.7	0.4	0.3	-0.1	-15.3	0.9	1.2	0.3	27.4
Child and youth community FTES	100.2	20.6	21.3	0.7	3.3	5.6	5.3	-0.3	-6.3	2.5	2.8	0.3	11.8	1.7	1.5	-0.2	-13.9	2.8	2.6	-0.2	-9.6	8.1	9.1	1.0	11.4
Child and youth day programme	7.8	1.3	1.7	0.4	21.6	0.5	0.4	-0.1	-21.9	0	0.2	0.2	100.0	0	0.1	0.1	100.0	0.1	0.2	0.1	49.7	0.8	0.7	0.1	-12.5
Child and youth beds (inpatient and community)	13.7	0.8	2.9	2.1	72.5	0.2	0.7	0.5	72.2	0.2	0.4	0.2	48.4	0.2	0.2	0.0	2.0	0	0.3	0.3	100.0	0.2	1.2	1.0	84.0
Forensic beds	67.4	13.2	14.3	1.1	7.8	3.7	3.5	-0.2	-4.4	1.8	1.9	0.1	5.6	0	1.0	1.0	100.0	1.8	1.7	-0.1	-4.7	5.8	6.1	0.3	5.6

	NZ	Midland				BoP				Lakes				Tairāwhiti				Taranaki				Waikato			
Forensic community FTEs	25.2	5.1	5.4	0.3	4.8	1.1	1.3	0.2	17.0	0.6	0.7	0.1	15.9	0.3	0.4	0.1	20.1	0.6	0.6	0.0	6.6	2.5	2.3	0.2	-8.8
Older people's community FTEs	18.8	6.6	4.0	-2.6	-65.2	2.2	1.0	-1.2	-122.5	0.7	0.5	-0.2	-31.6	0.1	0.3	0.2	64.3	0.9	0.5	-0.4	-87.7	2.6	1.7	0.9	-51.6
Older people's beds	15.9	5.1	3.4	-1.7	-50.9	1.3	0.8	-0.5	-55.4	0.4	0.4	0.0	11.1	0.2	0.2	0.0	15.6	0.9	0.4	-0.5	122.0	2.3	1.5	0.8	-58.6
Older people's day programme	0.9	0.9	0.2	-0.7	-370.6	0.3	0.0	-0.3	-533.7	8	0.0	-8.0	-31309.5	0.1	0.0	-0.1	645.7		0.0	0.0	100.0	0.5	0.1	0.4	509.2
Specialist community FTEs	18.7	2.8	4.0	1.2	29.5	0.7	1.0	0.3	28.8	0.2	0.5	0.3	62.2	0.2	0.3	0.1	28.2	0.1	0.5	0.4	79.0	1.6	1.7	0.1	6.2
Specialist Beds	5.3	0	1.1	1.1	100.0	0	0.3	0.3	100.0	0	0.1	0.1	100.0	0	0.1	0.1	100.0	0	0.1	0.1	100.0	0	0.5	0.5	100.0
Non Blueprint funding	41.8	10.2	8.9	-1.3	-14.8	1.2	2.2	1.0	45.4	3.2	1.2		-170.5	0.7	0.6	-0.1	-12.4	2	1.1	-0.9	-87.6	3.1	3.8	0.7	18.7

Table 77: Calculations of what volumes would be provided if DHBs were providing at PBF level (positive means would provide more services i.e. providing under PBF share)

	NZ	Midland				BoP				Lakes				Tairāwhiti				Taranaki				Waikato			
	Current volumes	Current volumes	Volumes if provided at PBF share (21.25%)	Midland - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share (positive means under pbf share)	Current volumes	Volumes if provided at PBF share (5.26%)	BOP - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share (positive means under pbf share)	Current volumes	Volumes if provided at PBF share (2.83%)	Lakes - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share	Current volumes	Volumes if provided at PBF share (1.49%)	Tairāwhiti - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share	Current volumes	\$s spent if PBF share (1.49%)	Taranaki - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share	Current volumes	Volumes if provided at PBF share (9.12%)	Waikato - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share
Adult community clinical FTEs	2334.6	437.4	496.1	58.7	11.8	112.2	122.8	10.6	8.6	70.3	66.1	-4.2	-6.4	33.4	34.8	1.4	4.0	66.6	59.5	-7.1	-11.9	154.9	212.9	58.0	27.2
Adult inpatient beds	918.7	143.9	195.2	51.3	26.3	36.4	48.3	11.9	24.7	12.2	26.0	13.8	53.1	10.4	13.7	3.3	24.0	23.6	23.4	-0.2	-0.7	61	83.8	22.8	27.2
Adult community support FTEs	2042.6	399.3	434.1	34.8	8.0	109.2	107.4	-1.8	-1.6	66.5	57.8	-8.7	-15.0	22.9	30.4	7.5	24.8	42.2	52.1	9.9	19.0	158.5	186.3	27.8	14.9
Adult residential beds	1608.7	296.8	341.8	45.0	13.2	80.6	84.6	4.0	4.7	50.7	45.5	-5.2	-11.4	20.2	24.0	3.8	15.7	36.9	41.0	4.1	10.0	108.4	146.7	38.3	26.1
AOD community FTEs	801.5	200.8	170.3	-30.5	-17.9	57.3	42.2	15.1	-35.9	28.1	22.7	-5.4	-23.9	15	11.9	-3.1	-25.6	21.1	20.4	-0.7	-3.2	79.2	73.1	-6.1	-8.3
AOD beds	571.1	77.8	121.4	43.6	35.9	5.8	30.0	24.2	80.7	11.4	16.2	4.8	29.5	0.8	8.5	7.7	90.6	21.6	14.6	-7.0	-48.3	38.1	52.1	14.0	26.8
Methadone places	4616.5	793.9	981.0	187.1	19.1	212.9	242.8	29.9	12.3	87	130.6	43.6	33.4	47	68.8	21.8	31.7	146	117.7	28.3	-24.0	301	421.0	120.0	28.5
Child and youth community FTEs	866.6	179	184.2	5.2	2.8	51.6	45.6	-6.0	-13.2	22	24.5	2.5	10.3	15.1	12.9	-2.2	-16.9	23	22.1	-0.9	-4.1	67.3	79.0	11.7	14.8
Child and youth day programme	92.6	13.7	19.7	6.0	30.4	4.6	4.9	0.3	5.6	0	2.6	2.6	100.0	0	1.4	1.4	100.0	0.8	2.4	1.6	66.1	8.4	8.4	0.0	0.5
Child and youth beds (inpatient and community)	59.5	3.8	12.6	8.8	69.9	1.1	3.1	2.0	64.9	0.7	1.7	1.0	58.4	0.8	0.9	0.1	9.8	0	1.5	1.5	100.0	1.2	5.4	4.2	77.9
Forensic beds	243.7	50	51.8	1.8	3.4	14	12.8	-1.2	-9.2	7	6.9	-0.1	-1.5	0	3.6	3.6	100.0	7	6.2	-0.8	-12.6	22	22.2	0.2	1.0

	NZ	Midland				BoP				Lakes				Tairāwhiti				Taranaki				Waikato			
	Current volumes	Current volumes	Volumes if provided at PBF share (21.25%)	Midland - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share (positive means under pbf share)	Current volumes	Volumes if provided at PBF share (5.26%)	BOP - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share (positive means under pbf share)	Current volumes	Volumes if provided at PBF share (2.83%)	Lakes - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share	Current volumes	Volumes if provided at PBF share (1.49%)	Tairāwhiti - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share	Current volumes	\$ spent if PBF share (1.49%)	Taranaki - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share	Current volumes	Volumes if provided at PBF share (9.12%)	Waikato - How many more or less beds or FTEs are needed if volumes were PBF based	% variance from pbf share
Forensic community FTEs	197.6	41.4	42.0	0.6	1.4	8.9	10.4	1.5	14.4	4.8	5.6	0.8	14.2	2	2.9	0.9	32.1	5	5.0	0.0	0.8	20.6	18.0	-2.6	-14.3
Older people's community FTEs	150.2	51.3	31.9	-19.4	-60.7	16.3	7.9	-8.4	106.3	6.4	4.3	-2.1	-50.6	1	2.2	1.2	55.3	7.8	3.8	-4.0	103.7	19.8	13.7	-6.1	-44.5
Older people's beds	75	24.1	15.9	-8.2	-51.2	6	3.9	-2.1	-52.1	2.2	2.1	-0.1	-3.7	1.1	1.1	0.0	1.6	4	1.9	-2.1	109.2	10.8	6.8	-4.0	-57.9
Older people's day programme	10.2	10.2	2.2	-8.0	370.6	3.6	0.5	-3.1	571.0	0	0.3	0.3	100.0	1.4	0.2	-1.2	821.2	0	0.3	0.3	100.0	5.2	0.9	-4.3	459.0
Specialist community FTEs	145.5	23.2	30.9	7.7	25.0	5.7	7.7	2.0	25.5	1.7	4.1	2.4	58.7	2.1	2.2	0.1	3.1	1	3.7	2.7	73.0	12.7	13.3	0.6	4.3
Specialist Beds	30.6	0.1	6.5	6.4	98.5	0	1.6	1.6	100.0	0	0.9	0.9	100.0	0	0.5	0.5	100.0	0	0.8	0.8	100.0	0.1	2.8	2.7	96.4
Non Blueprint funding																									

Maori

Table 78: Calculating the expected number of Maori with any disorder - mental health and substance use

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato	NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato
0-15	Any		241360	75130	19060	12720	7740	6880	28730	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		241360	75130	19060	12720	7740	6880	28730	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		241360	75130	19060	12720	7740	6880	28730	No information in Te Rau Hinengaro and no estimate made						
6--15	severe - estimate	8.6	144816	45078	11436	7632	4644	4128	17238	12454.176	3877	983	656	399	355	1482
16-24	Any	33.2	112160	34420	8220	5860	3490	3120	13730	37237	11427	2729	1946	1159	1036	4558
16-24	Mild and moderate	24.6	112160	34420	8220	5860	3490	3120	13730	27591	8467	2022	1442	859	768	3378
16-24	Severe	8.6	112160	34420	8220	5860	3490	3120	13730	9646	2960	707	504	300	268	1181
25-44	Any	32.9	166990	50250	12440	8690	5240	4390	19490	54940	16532	4093	2859	1724	1444	6412
25-44	Mild and moderate	22.7	166990	50250	12440	8690	5240	4390	19490	37907	11407	2824	1973	1189	997	4424
25-44	Severe	10.2	166990	50250	12440	8690	5240	4390	19490	17033	5126	1269	886	534	448	1988
45-64	Any	23.7	112900	36340	9590	6320	4360	3080	12990	26757	8613	2273	1498	1033	730	3079
45-64	Mild and moderate	16.3	112900	36340	9590	6320	4360	3080	12990	18403	5923	1563	1030	711	502	2117
45-64	Severe	7.4	112900	36340	9590	6320	4360	3080	12990	8355	2689	710	468	323	228	961
65+	Any	7.9	30800	10740	2910	1720	1450	980	3680	2433	848	230	136	115	77	291
65 +	Mild and moderate	6.1	30800	10740	2910	1720	1450	980	3680	1879	655	178	105	88	60	224
65 +	Severe	1.8	30800	10740	2910	1720	1450	980	3680	554	193	52	31	26	18	66
All ages over 15	Any	29.5	422850	131750	33,160	22590	14540	11570	49890	124740.75	38866	9782	6664	4289	3413	14718
All ages over 15	Mild	8.2	422850	131750	33,160	22590	14540	11570	49890	34674	10804	2719	1852	1192	949	4091
All ages over 15	Moderate	12.6	422850	131750	33,160	22590	14540	11570	49890	53279	16601	4178	2846	1832	1458	6286
All ages over 15	Severe	8.7	422850	131750	33,160	22590	14540	11570	49890	36787.95	11462	2885	1965	1265	1007	4340

Table 79: Calculating the expected number of Maori with substance use disorders

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato	NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato
0-15	Any		241,360	75,130	19,060	12,720	7,740	6,880	28,730	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		241,360	75,130	19,060	12,720	7,740	6,880	28,730	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		241,360	75,130	19,060	12,720	7,740	6,880	28,730	No information in Te Rau Hinengaro and no estimate made						
16-24	Any	18.2	112,160	34,420	8,220	5,860	3,490	3,120	13,730	20,413	6,264	1,496	1,067	635	568	2,499
16-24	Mild and moderate	12.1	112,160	34,420	8,220	5,860	3,490	3,120	13,730	13,571	4,165	995	709	422	378	1,661
16-24	Severe	6.1	112,160	34,420	8,220	5,860	3,490	3,120	13,730	6,842	2,100	501	357	213	190	838
25-44	Any	8.5	166,990	50,250	12,440	8,690	5,240	4,390	19,490	14,194	4,271	1,057	739	445	373	1,657
25-44	Mild and moderate	5.7	166,990	50,250	12,440	8,690	5,240	4,390	19,490	9,518	2,864	709	495	299	250	1,111
25-44	Severe	2.8	166,990	50,250	12,440	8,690	5,240	4,390	19,490	4,676	1,407	348	243	147	123	546
45-64	Any	2.6	112,900	36,340	9,590	6,320	4,360	3,080	12,990	2,935	945	249	164	113	80	338
45-64	Mild and moderate	1.7	112,900	36,340	9,590	6,320	4,360	3,080	12,990	1,919	618	163	107	74	52	221
45-64	Severe	0.9	112,900	36,340	9,590	6,320	4,360	3,080	12,990	1,016	327	86	57	39	28	117
65+	Any	0.4	30,800	10,740	2,910	1,720	1,450	980	3,680	123	43	12	7	6	4	15
65 +	Mild and moderate	0.3	30,800	10,740	2,910	1,720	1,450	980	3,680	92	32	9	5	4	3	11
65 +	Severe	0.1	30,800	10,740	2,910	1,720	1,450	980	3,680	31	11	3	2	1	1	4
All ages (over 15)	Any	8.6	422,850	131,750	33,160	22,590	14,540	11,570	49,890	36,365	11,331	2,852	1,943	1,250	995	4,291
All ages (over 15)	Mild	2.2	422,850	131,750	33,160	22,590	14,540	11,570	49,890	9,303	2,899	730	497	320	255	1,098
All ages (over 15)	Moderate	3.5	422,850	131,750	33,160	22,590	14,540	11,570	49,890	14,800	4,611	1,161	791	509	405	1,746
All ages (over 15)	Severe	2.9	422,850	131,750	33,160	22,590	14,540	11,570	49,890	12,263	3,821	962	655	422	336	1,447

Pacific

Table 80: Calculating the expected number of Pacific People with any disorder - mental health and substance use

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato	NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato
0-15	Any		94,550	5,315	1,020	770	310	345	2,870	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		94,550	5,315	1,020	770	310	345	2,870	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		94,550	5,315	1,020	770	310	345	2,870	No information in Te Rau Hinengaro and no estimate made						
6--15	severe - estimate	8.2	56,730	3,189	612	462	186	207	1,722	4,652	261	50	38	15	17	141
16-24	Any	28.4	46,985	2,790	400	470	140	190	1,590	13,344	792	114	133	40	54	452
16-24	mild and moderate	20.2	46,985	2,790	400	470	140	190	1,590	9,491	564	81	95	28	38	321
16-24	Severe	8.2	46,985	2,790	400	470	140	190	1,590	3,853	229	33	39	11	16	130
25-44	Any	26.8	77,755	4,600	800	720	265	315	2,500	20,838	1,233	214	193	71	84	670
25-44	mild and moderate	20.5	77,755	4,600	800	720	265	315	2,500	15,940	943	164	148	54	65	513
25-44	Severe	6.3	77,755	4,600	800	720	265	315	2,500	4,899	290	50	45	17	20	158
45-64	Any	17.1	46,515	2,780	450	510	195	175	1,450	7,954	475	77	87	33	30	248
45-64	mild and moderate	1.3	46,515	2,780	450	510	195	175	1,450	605	36	6	7	3	2	19
45-64	Severe	4.2	46,515	2,780	450	510	195	175	1,450	1,954	117	19	21	8	7	61
65+	Any	16.1	13,495	880	130	140	35	55	520	2,173	142	21	23	6	9	84
65 +	mild and moderate	13.8	13,495	880	130	140	35	55	520	1,863	121	18	19	5	8	72
65 +	Severe	2.3	13,495	880	130	140	35	55	520	310	20	3	3	1	1	12
All ages over 15	Any	24.2	184,750	11,050	1,780	1,840	635	735	6,060	44,710	2,674	431	445	154	178	1,467
All ages over 15	Mild	7.5	184,750	11,050	1,780	1,840	635	735	6,060	13,856	829	134	138	48	55	455
All ages over 15	Moderate	10.9	184,750	11,050	1,780	1,840	635	735	6,060	20,138	1,204	194	201	69	80	661
All ages over 15	Severe	6	184,750	11,050	1,780	1,840	635	735	6,060	11,085	663	107	110	38	44	364

Table 81: Calculating the expected number of Pacific people with substance use disorders

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato	NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato
0-15	Any		94,550	5,315	1,020	770	310	345	2,870	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		94,550	5,315	1,020	770	310	345	2,870	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		94,550	5,315	1,020	770	310	345	2,870	No information in Te Rau Hinengaro and no estimate made						
16-24	Any	8.8	46,985	2,790	400	470	140	190	1,590	4,135	246	35	41	12	17	140
16-24	Mild and moderate	5	46,985	2,790	400	470	140	190	1,590	2,349	140	20	24	7	10	80
16-24	Severe	3.8	46,985	2,790	400	470	140	190	1,590	1,785	106	15	18	5	7	60
25-44	Any	4.6	77,755	4,600	800	720	265	315	2,500	3,577	212	37	33	12	14	115
25-44	Mild and moderate	3.4	77,755	4,600	800	720	265	315	2,500	2,644	156	27	24	9	11	85
25-44	Severe	1.2	77,755	4,600	800	720	265	315	2,500	933	55	10	9	3	4	30
45-64	Any	2.2	46,515	2,780	450	510	195	175	1,450	1,023	61	10	11	4	4	32
45-64		1.3	46,515	2,780	450	510	195	175	1,450	605	36	6	7	3	2	19
45-64	Severe	0.9	46,515	2,780	450	510	195	175	1,450	419	25	4	5	2	2	13
65+	Any	0.2	13,495	880	130	140	35	55	520	27	2	0	0	0	0	1
65 +	Mild and moderate	0.1	13,495	880	130	140	35	55	520	13	1	0	0	0	0	1
65 +	Severe	0.1	13,495	880	130	140	35	55	520	13	1	0	0	0	0	1
All ages over 15	Any	4.9	184,750	11,050	1,780	1,840	635	735	6,060	9,053	541	87	90	31	36	297
All ages over 15	Mild	1.1	184,750	11,050	1,780	1,840	635	735	6,060	2,032	122	20	20	7	8	67
All ages over 15	Moderate	1.7	184,750	11,050	1,780	1,840	635	735	6,060	3,141	188	30	31	11	12	103
All ages over 15	Severe	2.1	184,750	11,050	1,780	1,840	635	735	6,060	3,880	232	37	39	13	15	127

Other

Table 82: Calculating the expected number of “other” with any disorder - mental health and substance use

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairāwhiti	Taranaki	Waikato	NZ	Midland	BOP	Lakes	Tairāwhiti	Taranaki	Waikato
0-15	Any		621,240	114,305	27,530	11,900	4,345	17,130	53,400	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		621,240	114,305	27,530	11,900	4,345	17,130	53,400	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		621,240	114,305	27,530	11,900	4,345	17,130	53,400	No information in Te Rau Hinengaro and no estimate made						
6–15	severe - estimate	6.8	372,744	68,583	16,518	7,140	2,607	10,278	32,040	25,347	4,664	1,123	809	177	699	2,179
16-24	Any	27.5	415,340	65,190	14,540	6,040	2,070	9,340	33,200	114,219	17,927	3,999	1,661	569	2,569	9,130
16-24	Mild and moderate	20.7	415,340	65,190	14,540	6,040	2,070	9,340	33,200	85,975	13,494	3,010	1,250	428	1,933	6,872
16-24	Severe	6.8	415,340	65,190	14,540	6,040	2,070	9,340	33,200	28,243	4,433	989	411	141	635	2,258
25-44	Any	23.7	931,870	149,805	36,000	16,430	5,575	21,720	70,080	220,853	35,504	8,532	3,894	1,321	5,148	16,609
25-44	Mild and moderate	18.7	931,870	149,805	36,000	16,430	5,575	21,720	70,080	174,260	28,014	6,732	3,072	1,043	4,062	13,105
25-44	Severe	5	931,870	149,805	36,000	16,430	5,575	21,720	70,080	46,594	7,490	1,800	822	279	1,086	3,504
45-64	Any	16.8	936,980	173,395	45,380	19,530	7,275	25,610	75,600	157,413	29,130	7,624	3,281	1,222	4,302	12,701
45-64	Mild and moderate	13.4	936,980	173,395	45,380	19,530	7,275	25,610	75,600	125,555	23,235	6,081	2,617	975	3,432	10,130
45-64	Severe	3.4	936,980	173,395	45,380	19,530	7,275	25,610	75,600	31,857	5,895	1,543	664	247	871	2,570
65+	Any	6.9	524,480	109,465	32,570	11,510	4,325	16,180	44,880	36,189	7,553	2,247	794	298	1,116	3,097
65 +	Mild and moderate	5.1	524,480	109,465	32,570	11,510	4,325	16,180	44,880	26,748	5,583	1,661	587	221	825	2,289
65 +	Severe	1	524,480	109,465	32,570	11,510	4,325	16,180	44,880	5,245	1,095	326	115	43	162	449
All ages over 15	Any	19.3	2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	542,073	96,086	24,799	10,327	3,714	14,060	43,186
All ages over 15	Mild	15.2	2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	426,918	75,674	19,530	8,134	2,925	11,073	34,012
All ages over 15	Moderate		2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	No information in Te Rau Hinengaro and no estimate made						
All ages over 15	Severe	4.1	2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	115,155	20,412	5,268	2,194	789	2,987	9,174

Table 83: Calculating the expected number of Pacific people with substance use disorders

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato	NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato
0-15	Any		621,240	114,305	27,530	11,900	4,345	17,130	53,400	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		621,240	114,305	27,530	11,900	4,345	17,130	53,400	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		621,240	114,305	27,530	11,900	4,345	17,130	53,400	No information in Te Rau Hinengaro and no estimate made						
16-24	Any	7.6	415,340	65,190	14,540	6,040	2,070	9,340	33,200	31,566	4,954	1,105	459	157	710	2,523
16-24	Mild and moderate	5.6	415,340	65,190	14,540	6,040	2,070	9,340	33,200	23,259	3,651	814	338	116	523	1,859
16-24	Severe	2	415,340	65,190	14,540	6,040	2,070	9,340	33,200	8,307	1,304	291	121	41	187	664
25-44	Any	3.5	931,870	149,805	36,000	16,430	5,575	21,720	70,080	32,615	5,243	1,260	575	195	760	2,453
25-44	Mild and moderate	2.6	931,870	149,805	36,000	16,430	5,575	21,720	70,080	24,229	3,895	936	427	145	565	1,822
25-44	Severe	0.9	931,870	149,805	36,000	16,430	5,575	21,720	70,080	8,387	1,348	324	148	50	195	631
45-64	Any	1	936,980	173,395	45,380	19,530	7,275	25,610	75,600	9,370	1,734	454	195	73	256	756
45-64	Mild and moderate	0.7	936,980	173,395	45,380	19,530	7,275	25,610	75,600	6,559	1,214	318	137	51	179	529
45-64	Severe	0.3	936,980	173,395	45,380	19,530	7,275	25,610	75,600	2,811	520	136	59	22	77	227
65+	Any	0	524,480	109,465	32,570	11,510	4,325	16,180	44,880	0	0	0	0	0	0	0
65 +	Mild and moderate	0	524,480	109,465	32,570	11,510	4,325	16,180	44,880	0	0	0	0	0	0	0
65 +	Severe	0	524,480	109,465	32,570	11,510	4,325	16,180	44,880	0	0	0	0	0	0	0
All ages over 15	Any	2.7	2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	75,834	13,442	3,469	1,445	520	1,967	6,042
All ages over 15	Mild	1	2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	28,087	4,979	1,285	535	192	729	2,238
All ages over 15	Moderate	1	2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	28,087	4,979	1,285	535	192	729	2,238
All ages over 15	Severe	0.7	2,808,670	497,855	128,490	53,510	19,245	72,850	223,760	19,661	3,485	899	375	135	510	1,566

All ethnicities

Table 84: Calculating the expected number of all ethnicities with any disorder - mental health and substance use

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairāwhiti	Taranaki	Waikato	NZ	Midland	BOP	Lakes	Tairāwhiti	Taranaki	Waikato
0-15	Any		957,150	196,740	47,580	25,370	12,380	24,370	85,030	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		957,150	196,740	47,580	25,370	12,380	24,370	85,030	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		957,150	196,740	47,580	25,370	12,380	24,370	85,030	No information in Te Rau Hinengaro and no estimate made						
6-15	severe - estimate	7.2	574,290	118,044	28,548	15,222	7,428	14,622	51,018	41,349	8,499	2,055	1,096	535	1,053	3,673
16-24	Any	28.6	574,485	102,380	23,160	12,350	5,695	12,655	48,520	164,303	29,281	6,624	3,532	1,629	3,619	13,877
16-24	Mild and moderate	21.4	574,485	102,380	23,160	12,350	5,695	12,655	48,520	122,940	21,909	4,956	2,643	1,219	2,708	10,383
16-24	Severe	7.2	574,485	102,380	23,160	12,350	5,695	12,655	48,520	41,363	7,371	1,668	889	410	911	3,493
25-44	Any	25.1	1,176,615	204,655	49,240	25,840	11,080	26,425	92,070	295,330	51,368	12,359	6,486	2,781	6,633	23,110
25-44	Mild and moderate	19.3	1,176,615	204,655	49,240	25,840	11,080	26,425	92,070	227,087	39,498	9,503	4,987	2,138	5,100	17,770
25-44	Severe	5.8	1,176,615	204,655	49,240	25,840	11,080	26,425	92,070	68,244	11,870	2,856	1,499	643	1,533	5,340
45-64	Any	17.4	1,096,395	212,515	55,420	26,360	11,830	28,865	90,040	190,773	36,978	9,643	4,587	2,058	5,023	15,667
45-64	Mild and moderate	13.6	1,096,395	212,515	55,420	26,360	11,830	28,865	90,040	149,110	28,902	7,537	3,585	1,609	3,926	12,245
45-64	Severe	3.8	1,096,395	212,515	55,420	26,360	11,830	28,865	90,040	41,663	8,076	2,106	1,002	450	1,097	3,422
65+	Any	7.1	568,775	121,085	35,610	13,370	5,810	17,215	49,080	40,383	8,597	2,528	949	413	1,222	3,485
65+	Mild and moderate	6	1,096,395	212,515	55,420	26,360	11,830	28,865	90,040	65,784	12,751	3,325	1,582	710	1,732	5,402
65 +	Severe	1.1	568,775	121,085	35,610	13,370	5,810	17,215	49,080	6,257	1,332	392	147	64	189	540
All ages over 15	Any	20.7	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	707,168	132,611	33,830	16,129	7,124	17,628	57,900
All ages over 15	Mild	6.6	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	225,474	42,282	10,786	5,143	2,271	5,621	18,461
All ages over 15	Moderate	9.4	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	321,129	60,220	15,362	7,324	3,235	8,005	26,293
All ages over 15	Severe	4.7	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	160,565	30,110	7,681	3,662	1,618	4,003	13,146

Table 85: Calculating the expected number of all ethnicities with substance use disorders

Age Group	Severity of disorder	National Prevalence	Demographic information - number of people							Expected number of people with mental health needs						
			NZ	Midland	BOP	Lakes	Tairawhiti	Taranaki	Waikato	NZ	Midland	BoP	Lakes	Tairawhiti	Taranaki	Waikato
0-15	Any		957,150	196,740	47,580	25,370	12,380	24,370	85,030	No information in Te Rau Hinengaro and no estimate made						
0-15	mild and moderate		957,150	196,740	47,580	25,370	12,380	24,370	85,030	No information in Te Rau Hinengaro and no estimate made						
0-15	severe		957,150	196,740	47,580	25,370	12,380	24,370	85,030	No information in Te Rau Hinengaro and no estimate made						
16-24	Any	9.6	574,485	102,380	23,160	12,350	5,695	12,655	48,520	55,151	9,828	2,223	1,186	547	1,215	4,658
16-24	Mild and moderate	6.8	574,485	102,380	23,160	12,350	5,695	12,655	48,520	39,065	6,929	1,567	836	385	856	3,284
16-24	Severe	2.8	574,485	102,380	23,160	12,350	5,695	12,655	48,520	16,086	2,899	656	350	161	358	1,374
25-44	Any	4.2	1,176,615	204,655	49,240	25,840	11,080	26,425	92,070	49,418	8,596	2,068	1,085	465	1,110	3,867
25-44	Mild and moderate	3.0	1,176,615	204,655	49,240	25,840	11,080	26,425	92,070	35,298	6,060	1,458	765	328	782	2,726
25-44	Severe	1.2	1,176,615	204,655	49,240	25,840	11,080	26,425	92,070	14,119	2,536	610	320	137	327	1,141
45-64	Any	1.2	1,096,395	212,515	55,420	26,360	11,830	28,865	90,040	13,157	2,550	665	316	142	346	1,080
45-64	Mild and moderate	0.8	1,096,395	212,515	55,420	26,360	11,830	28,865	90,040	8,771	1,798	469	223	100	244	762
45-64	Severe	0.4	1,096,395	212,515	55,420	26,360	11,830	28,865	90,040	4,386	752	196	93	42	102	319
65+	Any	<0.1	568,775	121,085	35,610	13,370	5,810	17,215	49,080	<569	<121	<36	<13	<6	<17	<49
65 +	Mild and moderate	0	568,775	121,085	35,610	13,370	5,810	17,215	49,080	0	0	0	0	0	0	0
65 +	Severe	0	568,775	121,085	35,610	13,370	5,810	17,215	49,080	0	0	0	0	0	0	0
All ages over 15	Any	3.5	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	119,569	22,422	5,720	2,727	1,205	2,981	9,790
All ages over 15	Mild	1.2	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	40,995	7,688	1,961	935	413	1,022	3,357
All ages over 15	Moderate	1.3	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	44,412	8,328	2,125	1,013	447	1,107	3,636
All ages over 15	Severe	1	3,416,270	640,635	163,430	77,920	34,415	85,160	279,710	34,163	6,406	1,634	779	344	852	2,797