User guide to mental health and addiction data in the Integrated Data Infrastructure (IDI)

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Introduction and scope

This guide describes the sources of mental health and addiction information available in the Integrated Data Infrastructure (IDI) as at August 2019. It is intended as a guide for IDI users who are planning to use mental health and addiction data. The guide provides an overview of each data source and lists some key limitations. The main focus is on administrative data sources with a particular focus on the key mental health or addiction data sources (PRIMHD, publicly funded hospital discharges, and Pharmaceutical Collection). Survey sources that contain mental health and addiction data are described briefly but are not the focus of this document. This guide does not discuss datasets that have been loaded for specific projects but are not available to other IDI users (such as the primary care mental health data loaded for Social Investment Agency projects).

This guide is not exhaustive. Mental health and addiction data can be complex and users should read the relevant data dictionaries and contact data providers for more detail about the measures they are planning to use.

We have also included information about self-harm and suicide in this guide as these events are often considered alongside mental health data. This guide does not cover intellectual disabilities, dementia, or behavioural measures not specifically designed to measure psychological health (such as the SDQ administered as part of the B4 School Check).

The Appendix at the end of this guide lists other sources of mental health data available outside the IDI. This list was created by Kendra Telfer as part of work for the Government Inquiry into Mental Health and Addiction and was current as at October 2018.

The NZ mental health and addiction system

Mental distress, mental illness, and addictions are common. It is estimated that each year approximately 20% (1 in 5) New Zealanders experience significant mental distress[1]. Internationally there is well-established evidence of a "treatment gap" where the majority of those with diagnosable mental illness do not receive formal treatment[2], although it has also been argued that the extension of current treatments to a wider population is not necessarily desirable and a focus on improving service quality and on prevention will have more of an impact on population mental health[3].

New Zealand's system of providing care for those experiencing mental illness has been evolving over the period since deinstitutionalisation of care and the closing of large asylums over the 1960s-1980s. In the 1990s it was recognised that the system of community care set up to replace institutional care was not meeting the needs of those with the highest mental health needs. In response to this a target of specialist mental health and addiction services providing care to the 3% of the population with highest mental health and addiction need was set following the Mason Inquiry[4] in 1996. Care for others in need of treatment for mental health conditions was to be provided by generalist primary care practitioners and in private by psychologists and psychiatrists.

Over time this model has evolved. Specialist (secondary and tertiary) care is provided by District Health Boards to approximately 4% of the population, and higher proportion of some groups (closer to 6% of Māori for example[5]). This represents the group with the highest mental health and addiction needs and with mental health problems that are likely to be most disruptive to their lives. The vast majority (over 90%) of this care is provided in community settings. A small number of inpatient beds are available and are mostly used for short stays. This care includes mainstream services as well as services utilising Māori and Pacific service models. The Ministry of Health (MoH) also funds Non-Government Organisations (NGOs) to provide support services to those with the highest mental health needs, including residential and community based services and services using diverse models of care including peer led services.

The majority of formal mental health care in New Zealand is provided in a primary care setting by general practitioners and other primary care staff. Data from 2004 indicated that each year approximately 9% of the New Zealand population visit a general medical health provider for a mental health problem[6], and this is likely to have increased in the intervening period. This treatment can consist of medication, psychological therapies, self-help, and advice/support. There is at present limited publicly funded access to short-term psychological therapies available through brief

1 R. Cunningham, A. Kvalsvig, D. Peterson, S. Kuehl, S. Gibb, S. McKenzie, L. Thornley, S. Every-Palmer. (2018) Stocktake Report for the Mental Health and Addiction Inquiry. Available from https://mentalhealth.inquiry.govt.nz/whats-new/resources/

[2] Kohn R et al. The treatment gap in mental health care. Bulletin of the World Health Organization, 2004, 82:858–866.

[3] Jorm, A. F. (2014). Why hasn't the mental health of Australians improved? The need for a national prevention strategy. *Australian & New Zealand Journal of Psychiatry*, *48*(9), 795–801.

[4] Mason, K. 1996. Inquiry Under Section 47 of the Health and Disability Services Act 1993 in Respect of Certain Mental Health Services

[5] Ministry of Health (2018) Mental Health and Addiction: Service Use 2015/16. Available from https://www.health.govt.nz/publication/mental-health-and-addiction-service-use-2015-16

[6] Oakley Browne MA, Wells JE and Scott KM. (2006) Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health.

intervention programs in primary care. Figure 1 shows the stepped care model, which emphasises matching service intensity to need, with an increasingly small proportion of the population requiring increasingly intensive treatment, while also making explicit that a person's level of need will go up and down over time and so they will move up and down the levels of care.

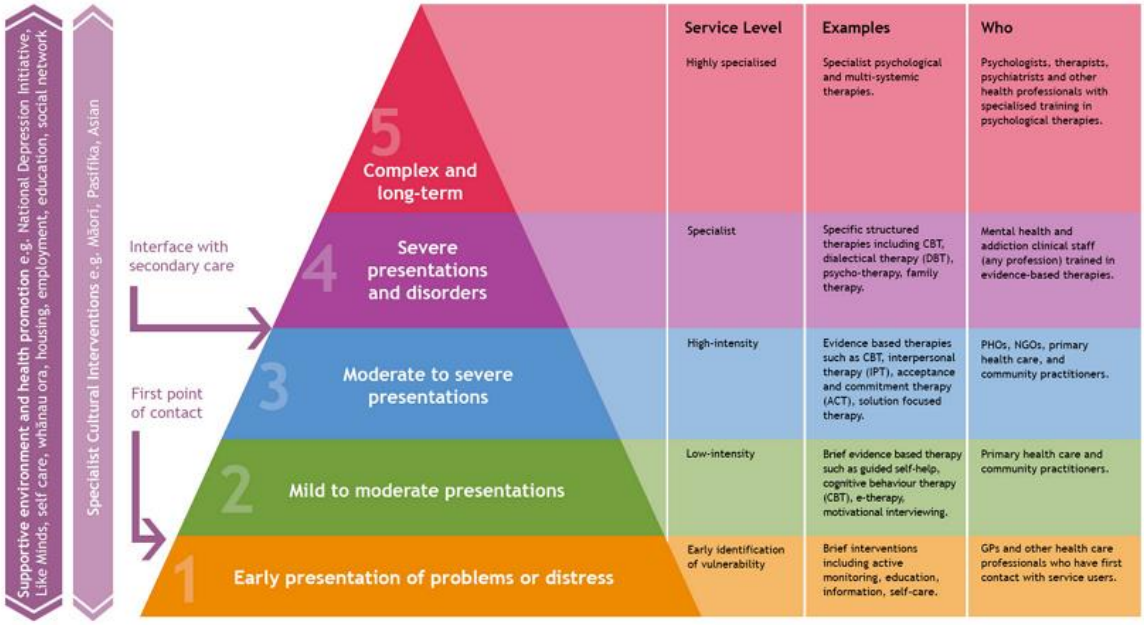
While most psychiatric care in New Zealand is publicly funded, there are some private mental health services in New Zealand. These are mainly community services, where psychiatrists and clinical psychologists provide care for those not meeting the high severity criteria for specialist public care. There is also a very small private psychiatric inpatient sector, however many of the patients using these facilities are publicly funded.

For a very small number of people, mental health and addiction treatment is provided with a level of compulsion. The legislative framework for compulsory mental health assessment and treatment in New Zealand is provided by the Mental Health (Compulsory Assessment and Treatment) Act (1992). More recently legislation allowing for compulsory treatment of addictions has also been enacted (the Substance Addiction (CAT) Act 2017). These Acts define the circumstances in which a person may be subject to compulsory psychiatric assessment and treatment. It also makes the rights of people undergoing such treatment explicit, and provides a system for protection of those rights. Compulsory treatment can be in inpatient or community settings, with short orders for compulsory assessment followed, if needed, by orders for compulsory inpatient or community treatment.

The 2018 Government Inquiry into Mental Health and Addiction[7] is set to have far-reaching implications for the services provided to support people with mental health and addictions needs in New Zealand. The Inquiry identified a high level of unmet need for mental health support, and has suggested that public services need to aim to meet the needs of those with mild to moderate as well as severe mental illness, moving away from the focus on reaching the 3% with the highest needs. It also identified the need for the services that are provided to adapt their service delivery models to better provide for the needs of those with experience of mental illness and addictions, moving towards co-designed services. The mental health and addiction care landscape in New Zealand is therefore likely to be transformed in the coming years.

[7] https://mentalhealth.inquiry.govt.nz/

Figure 1. Stepped care model of mental health care



Source: Te Pou o te Whakaaro Nui (https://www.tepou.co.nz/initiatives/brief-interventions/216)

Summary: IDI mental health and addiction data

IDI contains a range of administrative and survey data sources with information about mental health and addiction. Table 1 summarises the mental health and addiction data sources available in IDI. More detail on these data sources is available in the next section. All of the listed data sources have important limitations; these are also discussed in the next section.

Table 1. IDI datasets containing mental health and addiction information

Dataset	Description of contents	Examples of mental health information available	Time period covered
PRIMHD / MHINC	Publicly funded service use for specialist mental health and addiction services in NZ	Information about service contacts (date, service type, team, provider) Diagnosis information Legal status information for treatment provided under relevant acts Supplementary consumer records	PRIMHD July 2008- MHINC 2000-June 2008 Diagnosis 2000- Legal status July 2008- Supplementary consumer records 2016-
Public hospital discharges (NMDS)	Discharges from publicly funded hospital admissions	Admissions to mental health inpatient facilities (also recorded in PRIMHD) Mental health and addiction diagnoses (ICD-9 / ICD-10) may be recorded against admissions	1998-
Pharmaceutical Collection	Community dispensings of publicly funded medications in NZ	Date, cost, detailed information about type of medication dispensed	2005- (data are most reliable from 2007 onwards)
Mortality	Underlying cause of death for all deaths in NZ	Date of death (month and year), ICD codes for cause of death	1998- (latest records delayed by 2 to 3 years)
NNPAC	Publicly funded medical, surgical and ED outpatient visits	Date of attendance, type of service provided (purchase unit)	2007-
ACC	Injury claims	Flag for self-inflicted injury	1994-
SOCRATES	Needs assessments for	Diagnostic dataset contains some mental health diagnoses	2003- (data are most reliable from 2010 onwards)

	disability support services		
MSD Benefits	Administration of social welfare benefits	Incapacity codes include some mental health conditions	1992-
Auckland City Mission	Use of Auckland City Mission Services	Use of detoxification and crisis services, requests to see mental health nurse, drug and alcohol use	One-off extract as at 30 April 2016
Survey of Family, Income and Employment (SoFIE)	Panel survey of work, family, household and economic circumstances	Health module in waves 3, 5 and 7 contained Kessler-10 (K-10) scores and questions about alcohol use	8 waves spanning October 2002 to September 2010
General Social Survey	Nationally representative survey of wellbeing	SF-12 (mental health, mental distress and functioning)	2008, 2010, 2012, 2014 and 2016
Te Kupenga.	Post-census survey of Māori wellbeing	Mental health, life satisfaction, spirituality, social connectedness	2013

What can we measure well?

The majority of IDI mental health and addiction data sources record service use. Using these data sources it is possible to reliably identify individuals who are using publicly funded specialist mental health and addiction services and individuals who die by suicide. This cohort is likely to over-represent people who have the most severe and disruptive illness: the majority of formal mental health care, especially for mild to moderate problems, occurs in a primary care setting and this information is not available in IDI. In addition it is possible to identify individuals who have received mental health pharmaceuticals, but care should be taken with this approach as many pharmaceuticals have uses that are unrelated to mental health and there is a risk of overcounting the mental health service use population. Combining those using secondary specialist services with those prescribed medications will produce a very heterogeneous cohort.

Where are the gaps?

The health service data in IDI will not identify everybody with experience of mental illness. It will exclude those who do not seek treatment, those who are treated privately, and those who are treated in primary care without receiving funded pharmaceuticals. Where there are problems with access to health care, certain groups of the population such as ethnic or socioeconomic groups will be differentially missing from the people identified in IDI. As thresholds for access to specialist care change, the coverage of the datasets will change, and this will be important for considering trends over time in the data.

Some of the key gaps in IDI mental health and addiction data are:

- Primary care treatment: The IDI does not contain information about mental health treatment in a primary care setting, with the exception of pharmaceutical dispensings that may be prescribed by a primary care provider. Individuals who are treated in primary care without receiving mental health pharmaceuticals will not be captured.
- Treatment that is not government funded: Private (patient funded) treatment such as visits to psychiatrists, clinical psychologists, and counsellors, is not captured in the IDI. There are also a range of NGOs that provide mental health care that is not funded from the mental health budget; this data is not included in PRIMHD and is not available in the IDI.
- Mental health care for those aged over 65: not all DHBs report mental health treatment for people aged over 65 to PRIMHD and therefore coverage for this age group is incomplete.
- Detailed information about treatment: the type of treatment received in a secondary care setting is not always recorded. While we can identify pharmaceutical treatment, other therapy types such as psychological therapies are more difficult to identify and there are few specifics about the details of the treatment.
- Mental distress: individuals who experience mental distress or who are living with mental illness but do not seek treatment cannot be identified in IDI. For those who do seek treatment, measures of distress and functioning and changes in these over the course of treatment are not systematically recorded.
- Positive measures of mental health/resilience: the mental health measures in IDI are focussed around service use for people living with mental illness. They do not capture measures of resilience or positive mental health.

Detailed information: IDI mental health and addiction data

IDI contains a range of datasets with mental health and addiction information. These are summarised in Table 1 (page 7) and discussed in detail below.

Key data sources

Within the IDI the key sources of information about mental health and addiction are the Programme for Integration of Mental Health Data (PRIMHD) dataset, publicly funded hospital discharges, and the Pharmaceutical Collection. PRIMHD contains data on publicly funded specialist mental health service use. The Pharmaceutical collection contains information about prescriptions dispensed at community pharmacies and can be used to infer mental health treatment in some cases. Publicly funded hospital discharges can be used to identify self-harm, and also some cases of prevalent mental illness.

Each of these sources is discussed in detail below.

PRIMHD

The core PRIMHD data is split into three datasets in the IDI: the main PRIMHD dataset containing information about service contacts; the diagnosis dataset; and the legal status dataset. An additional dataset also contains supplementary consumer record (SCR) information. HoNOS[8] and ADOM[9] outcomes data is not currently available in the IDI.

PRIMHD service contact dataset

The PRIMHD dataset records all service uses for specialist mental health and addiction services nationally. This includes children and young people's mental health services, and all publicly funded inpatient and community based services, as well as some NGO services where the NGO is funded by the Ministry of Health (MoH) to deliver mental health services[10]. PRIMHD does not include primary care mental health services. For some District Health Boards (DHBs) psychogeriatric care (for those over 65) is categorised as mental health care and reported to the PRIMHD database, while for other DHBs it is categorised as geriatric care and not reported to this database. PRIMHD includes the date, location and provider for all mental health service contacts, and some information on the type of service provided. Records in PRIMHD can relate to a wide range of service types[11] including face-to-face treatment contacts, assessments, inpatient and residential bednights, family support contacts where the client may or may not be present, phone calls, text messages and letters.

[8] https://www.tepou.co.nz/outcomes-and-information/HoNOS-family-of-measures/28
[9] https://www.tepou.co.nz/outcomes-and-information/alcohol-and-drug-outcome-measure/117
[10] Note that there are many NGOs that provide mental health care that is not funded by MoH; this data is not included in PRIMHD and is not available in the IDI.
[11] https://www.health.govt.nz/publication/guide-primhd-activity-collection-and-use

Many data users are interested in distinguishing 'face to face' or 'treatment' service contacts from assessments, phone calls and other types of contacts that are recorded in PRIMHD. This is not straightforward and relies on a combination of activity type and activity setting codes. Some researchers vary the definition slightly depending on their requirements.

Team codes and team type codes in PRIMHD can be used to identify the type of treatment being received, for example specialist addiction teams providing addiction treatment.

PRIMHD began collecting data in 1 July 2008. From July 2000 to June 2008 similar information was collected in Mental Health Services Information Collection (MHINC), which is also available in the IDI on request. Early MHINC data is incomplete as some service providers did not report data in the early years. Ministry of Health recommends using MHINC from July 2001 onwards, when information is more complete.

PRIMHD diagnosis data

PRIMHD diagnosis data has only recently begun to be used for research. For this reason there has been less monitoring of data quality and reporting than with other PRIMHD collections. While PRIMHD diagnosis data is a useful source of mental health and addiction information, researchers should take more care than with other PRIMHD collections.

At present the diagnosis data is not attached to the main PRIMHD dataset but is available in the IDI_Adhoc area. As it is loaded separately the coverage dates for the PRIMHD diagnosis dataset do not always align with the main PRIMHD dataset. At the time of writing the PRIMHD diagnosis dataset covered from 1 July 2008 up to end 2016 (while the main PRIMHD dataset covered up to end 2017). Diagnosis data for 2000 to 2008 (from MHINC) is available on request within the IDI.

The diagnosis data is mostly provided by DHB-funded services. NGO services do not generally provide diagnosis information, although there are a small number of exceptions.

Multiple psychiatric diagnoses can be recorded for each individual on PRIMHD records, including 'principal', 'secondary', and 'provisional' diagnoses. Diagnoses can be submitted in either ICD-10-AM or DSM-IV. The principal diagnosis is usually a mental health diagnosis, but secondary diagnoses can be non-mental health diagnoses. Diagnoses are attached to referrals and each diagnosis has a start and end date attached to it. As is common with psychiatric diagnoses, PRIMHD diagnoses are unstable and can change over the course of a referral, between referrals, and between clinicians.

There are two major limitations around the completeness of PRIMHD diagnosis data:

- Missing diagnoses. Some individuals in contact with mental health services do not have any diagnosis information recorded. Many of these are individuals who have had only short-term contact with services (there is a requirement for service providers to enter a diagnosis within 91 days of the first face-to-face contact with mental health services).
- Nonspecific diagnoses. Even when individuals have diagnostic information recorded, many of these diagnoses are non-specific. Examples of non-specific diagnoses include the DSM-IV code 'V7109 No Diagnosis or Condition on Axis I or Axis II' and the ICD-10-AM code 'R69 Unknown and unspecified causes of morbidity'.

The levels of missing and non-specific diagnoses vary between DHBs, client groups and setting (inpatient vs community).

Detailed metadata for PRIMHD diagnosis data is available on request from the Ministry of Health.

PRIMHD Legal Status data

The legal status dataset records a mental health consumer's status under a range of Acts including the Mental Health Act, Alcoholism and Drug Addiction Act, Substance Addiction (CAT) Act 2017, Criminal Procedure (Mentally Impaired Persons) Act, and Intellectual Disability Act. Information is recorded about the legal act used, specific legal status, and start and end dates. This information can be used to identify individuals who have had specific legal statuses, such an inpatient or community compulsory treatment orders.

At present the legal status data is not attached to the main PRIMHD dataset but is available on request from the IDI_Adhoc area. As it is loaded separately the coverage dates for the PRIMHD legal status dataset do not always align with the main PRIMHD dataset. At the time of writing the PRIMHD legal status dataset covered from 1 July 2008 up to end 2016 (while the main PRIMHD dataset covered up to end 2017). Legal status data for 2000 to 2008 (from MHINC) was not available within the IDI.

Legal status records are not attached to a specific episode of treatment and a person's legal status can change over time. Consumers who do not have a specific legal status will not have records in this dataset. Legal status data is submitted by DHBs only (NGOs do not submit legal status information).

Detailed metadata for PRIMHD Legal Status data is available on request from the Ministry of Health.

Supplementary consumer records

Supplementary Consumer Records (SCRs) capture details of three social outcome indicators (employment, accommodation and education) for individuals using specialist mental health services, and also whether or not a wellness plan is in place.

As SCR data are relatively new there are some concerns around data quality and completeness. For example, of all SCR-eligible patients with face-to-face treatment contacts in PRIMHD only around 40% had an SCR record as at December 2017[12]. MoH recommends reading the SCR metadata (available on request from MoH) and using caution.

The rules around collection of SCR records in PRIMHD are complex. SCR records should be reported to PRIMHD on all referrals starting on or after 1 July 2016 with a few exceptions including involuntary discharges, did not attend, and referral declined. In some cases they have been reported prior to 2016. SCRs are expected to be submitted within 91 days of the first face to face activity, then annually while the referral remains open, and finally within 91

[12] 'PRIMHD SCR – Summary and Metadata, V1.3 prepared May 2018'. Available on request from data-enquiries@health.govt.nz.

days before the referral end. They may be submitted more often than this, it is recommended that they are collected every three months and if there is change in the social outcome indicators or wellness plan.

More information on SCRs is available from the PRIMHD Code Set documentation on the MoH website[13] and from a guide from Te Pou[14]. Detailed metadata and data quality information is available from MoH on request.

SCR data are currently stored in the IDI_Adhoc area.

PRIMHD issues to be aware of

PRIMHD does not contain records for:

- Individuals treated in primary care. The majority of mental health care in New Zealand happens in a primary care setting. Individuals managed in primary care tend to have more moderate and less disruptive illness than those managed in specialist mental health and addiction services.
- Private mental health care. There is very little private mental health care for serious mental illness in New Zealand. Private health insurance provides little cover for mental health care so there is a significant cost barriers for individuals. This cost barrier is exacerbated by the link between serious mental illness and poverty. Individuals with mild to moderate illness may access private counselling, clinical psychology, and even psychiatric services and these will not be captured in PRIMHD.

PRIMHD data are not complete for those aged 65 or over, because of different reporting practices across the country (with psychogeriatric care reported as part of geriatric care in some places and as part of psychiatric care in others)[15]. This means that it is not possible to use PRIMHD to identify a national cohort of people in contact with mental health and addiction services aged 65 or older. Data on those over 65 using services in the Northern and Midland DHB regions is however more complete.

Rates of NGO reporting have increased over time. If not taken into account this may create artificial trends in service use over time.

The PRIMHD dataset is designed for contractual and financial reporting, rather than for research. In particular it is somewhat complex to extract information on contact with services, because a multitude of different types of contact are recorded, often with many different contacts recorded on a single day. For example, a period of outpatient contact may include records for an assessment, treatment sessions, family/whanau support contacts,

[13] http://www.health.govt.nz/publication/hiso-1002332017-primhd-code-set-standard

[14] Guide to PRIMHD supplementary consumer record (SCR) requirements, including social outcome indicators, available here: https://www.tepou.co.nz/resources/guide-to-primhd-supplementary-consumer-record-collection-and-use/706

[15] Cunningham, Ruth, Debbie Peterson, and Adam Sims. "Specialist mental health care for older adults in New Zealand-an exploration of service models and routine data." *The New Zealand Medical Journal (Online)* 132.1489 (2019): 30-38.

phone calls, and letters. This is in contrast to the hospital service use data more usually used in research, which is recorded as discrete admission episodes.

Not all PRIMHD records will be relevant for all analyses. For example, many users will want to exclude records where the patient did not attend, or where the patient was on leave from an inpatient stay. PRIMHD will include people with fleeting contacts with services, which may have been prompted by protocol rather than symptoms of mental illness (for example, psychiatric assessment is required before certain medical procedures such as organ or bone marrow transplant). It is not always easy to identify a population of people receiving clinically significant treatment in PRIMHD. Some researchers limit their population to those with a recorded psychiatric diagnosis in order to limit the heterogeneity of the group identified as in contact with mental health services, or by service contact length, or by excluding people with contact only on a single day (who may have had a single assessment only).

PRIMHD does not contain detailed information about the type of treatment provided and therefore it is not possible to distinguish between different psychological therapies, medication, and other treatment types.

Psychiatric diagnosis is missing for many individuals in PRIMHD. This is partly due to gaps in reporting, but also to the requirement for diagnosis to be recorded only after three months of service contact (unlike publicly funded hospital discharge data where a clinically coded diagnosis is mandatory for all discharge records).

Intellectual disability information is incomplete in PRIMHD, as some treatment for people with intellectual disability is funded from a different source. Dual mental health and intellectual disability diagnoses can be identified using the 'Intellectual Disability Dual Diagnosis' team type.

Publicly funded hospital discharges

Publicly funded hospital discharge data[16] includes records of all inpatient and day admission contacts with public hospital services in New Zealand. This includes emergency department visits of longer than 3 hours. Psychiatric inpatient stays that are recorded in PRIMHD should also be recorded in the hospital discharge dataset.

The main (event) dataset includes admission and discharge dates, facility details, and cost weights. A separate table (diagnosis) can be linked to the event table and contains all diagnoses made and interventions received in a given admission. This includes all disease, injury, external cause, morphology and procedure codes. Disease codes are split into principal diagnoses (main diagnosis responsible for the hospital admission), and additional diagnoses (any other diagnoses thought to affect patient management). Mental health and addiction diagnoses can be found in principal diagnoses and, more commonly, in additional diagnoses. Admissions for self-harm can be identified by searching the external cause of injury codes for the relevant ICD codes. Overdoses are coded into "accidental poisoning" or

[16] Outside the IDI the publicly funded hospital discharge tables are usually referred to as the National Minimum Dataset (NMDS).

"intentional poisoning" according to the intent. Where the intent was not clear they are coded with ICD codes for “undetermined intent”. It is important to note that, as well as overdoses, these codes also include wrong drugs given in error, drugs taken by mistake and accidents in the use of drugs in medical and surgical procedures.

The publicly funded hospital discharge dataset dates back to 1988 and can therefore be used to identify inpatient mental health and addiction admissions prior to the start of MHINC and PRIMHD (pre-2000).

An important limitation of hospital discharge data is the changing coverage of short stay emergency department visits over time[17]. Prior to 2012 the reporting of short stay ED visits varied between DHBs. Reporting increased over time and from July 2012 onwards all DHBs were reporting short stay ED visits consistently. This limitation is especially relevant for ED visits related to self-harm, mental health and addiction, many of which are short stay visits. Failure to take account of this limitation may produce artificial trends in ED service use over time.

Detailed publicly funded hospital discharge metadata is available from Statistics New Zealand[18] or Ministry of Health[19].

The IDI also contains information about private hospital admissions in New Zealand. As there is very little privately funded inpatient mental health care in New Zealand the dataset contains very few records related to mental health. Therefore this dataset is unlikely to be useful for mental health research. More detail about the private hospital data can be found in the NMDS data dictionary on the MoH website[20].

Pharmaceutical Collection

The pharmaceutical Collection contains records of all community dispensings of publicly funded medications in New Zealand. Medications dispensed in hospital are not covered. There are some complexities around the coverage of this dataset, including bulk funding of pharmaceuticals. See the IDI data dictionary[21] for more details about the coverage of this dataset. The dataset started in 2005, but National Health Index (NHI) coverage was low in the first years so it is generally used from 2007 onwards when NHI coverage was above 94%.

The pharmaceutical dataset can be used to identify individuals who have received medicines commonly used to treat mental health and addiction conditions, such as antidepressants or antipsychotics. Drug coding is very finely detailed and specific brands and formulations can be identified.

Pharmaceutical Collection issues to be aware of

[17] https://www.health.govt.nz/publication/factsheet-short-stay-emergency-department-events
[18] http://archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/integrated-data-infrastructure/idi-data/publ-fund-hosp-disch.aspx
[19] https://www.health.govt.nz/publication/national-minimum-dataset-hospital-events-data-dictionary
[20] https://www.health.govt.nz/publication/national-minimum-dataset-hospital-events-data-dictionary
[21] http://archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/integrated-data-infrastructure/idi-data/pharmaceutical-data.aspx

Some researchers have used pharmaceutical dispensing as indicators of mental health service use or mental distress. This approach should be used with caution as there are many psychiatric medications that are commonly used for other conditions. For example, low dose formulations of the antipsychotic quetiapine are commonly prescribed as a sleep aid and if used as an indication of mental health conditions will vastly overestimate rates, especially in older people. Similarly, the antidepressant amitriptyline is prescribed for neuropathic pain, but the same formulations are also used as antidepressants. In both cases these medications are regularly prescribed to individuals with no psychiatric illness. There are many other examples. As the pharmaceutical dataset does not contain any information about the reasons (indications) for a prescription, we cannot differentiate psychiatric uses from non-psychiatric uses.

Pharmaceutical data is collected for the purpose of paying community dispensing claims and this has an impact on data quality. For example, the data dictionary[22] details various data quality concerns including reversals and bulk funding. These should be kept in mind when using pharmaceutical data. Researchers should be alert for any unexpected trends that may be caused by changes to pharmaceutical funding or recording. For example, investigations at the University of Otago have revealed lower than expected rates of mental health pharmaceutical prescriptions for some groups of mental health service users, particularly those with serious mental illness. It is thought this may be related to changes in the way medications for long-term conditions are funded.

Other data sources

Mortality Collection

The Ministry of Health Mortality Collection[23] contains information about the underlying cause of death. Deaths by suicide and overdose can be identified by selecting the relevant ICD codes in this dataset. In some cases of overdose or accident the intent is not clear and these are assigned 'undetermined intent' ICD codes. The mortality dataset also contains flags to indicate if the death was alcohol or substance-related.

The mortality dataset contains records for deaths from 1988 onwards. The dataset is less up-to-date than other health datasets as the mortality data are not released until most coronial hearings have been completed. At the time of writing the mortality dataset contained records up to the end of 2015.

National non-admitted patient collection (NNPAC)

NNPAC contains information about publicly funded medical, surgical and ED outpatient visits. The records are associated with purchase units (types of service)[24], many of which relate to mental health and addiction. The dataset does not contain any diagnosis

[22] http://archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/integrated-data-infrastructure/idi-data/pharmaceutical-data.aspx

[23] Not to be confused with the Department of Internal Affairs death registration dataset, also available in the IDI, which does not contain cause of death information.

[24] https://nsfl.health.govt.nz/purchase-units/purchase-unit-data-dictionary-201718

information. Purchase unit information is detailed and care should be taken when using it. Input from clinicians and the Ministry of Health might be required to identify relevant purchase unit codes. Some information in NNPAC may overlap with publicly funded hospital discharges.

NNPAC data is available from July 2007 onwards.

ACC data

The ACC dataset contains information about claims for injuries in New Zealand from 1994 onwards. The dataset contains a flag for whether or not an injury was self-inflicted. This can be used to identify self-harm events. Some information in ACC will overlap with that in publicly funded hospital discharges.

SOCRATES

SOCRATES is the national database for disability support services. It contains information about needs assessments for people with disabilities. Several SOCRATES datasets are included in IDI. The 'disability' dataset contains information about the specific disabilities that clients have. The list of disabilities includes some mental health conditions. However, no formal clinical coding system is used to classify diagnoses in SOCRATES and therefore the coverage of mental health and addiction diagnoses is likely to be incomplete. Information is available about the dates at which needs assessments were completed, which may not correspond to the date at which a condition developed. Individuals who did not complete a needs assessment[25] will not be included in SOCRATES.

The dataset runs from approximately 2002/03 onwards, but data from 2010 onwards are most reliable. Records prior to 2010 have been migrated from other sources. The main Ministry of Health data dictionary in the IDI wiki contains some limited information about SOCRATES.

Ministry of Social Development (MSD) Benefits

IDI contains a range of datasets related to the administration of MSD social welfare benefits. One of these datasets (msd_incapacity) contains information about reasons for incapacity. Some of these reasons include mental health conditions. The incapacity information is completed by a medical professional. The incapacity categories are broad and include several psychiatric diagnoses such as schizophrenia and bipolar disorder. They also include many non-specific categories such as "mental illness". At present little is known about the quality of the diagnostic information in the incapacity dataset. Given the limited range of diagnostic categories contained in the dataset, it is likely that the incapacity codes do not accurately reflect formal psychological diagnoses.

[25] https://www.health.govt.nz/your-health/services-and-support/disability-services/getting-support-disability/needs-assessment-and-service-coordination-services

Benefits data in the IDI goes from 1992 onwards. See the MSD data dictionary in the IDI wiki for more information.

Auckland City Mission

This dataset contains a one-off extract of data from the Auckland City Mission database as at 30 April 2016. It contains information about people accessing Auckland City Mission services, which include crisis care and detoxification services. The dataset contains some information about alcohol and other drug use, use of detoxification programs, and requests by clients to see a mental health nurse.

Auckland City Mission submits data to PRIMHD as an NGO, so there may be some overlap between the two datasets.

Surveys

There are some surveys in the IDI that contain information about mental health and addiction. As these are not whole population datasets and contain small numbers of individuals, they are less likely to be useful for mental health research and therefore are not discussed in detail in this guide. Users should consult the relevant data dictionaries in the IDI wiki for more information.

Survey of Family, Income and Employment (SoFIE)

SoFIE was a panel survey that ran from October 2002 to September 2010. Around 15,000 households were selected for the first wave of SoFIE. The SoFIE Health module was completed in waves 3, 5 and 7 and included some information about mental health such as Kessler-10 scores (general measure of psychological distress), alcohol use, and the impact of emotional problems on life and functioning.

General Social Survey (GSS)

GSS is a nationally representative survey that ran in 2008, 2010, 2012, 2014 and 2016. Around 8,000 individuals were sampled in each round. The health section of the questionnaire contains the SF-12 which includes questions about mental health, mental distress and functioning.

Te Kupenga

Te Kupenga is a post-census survey of Māori wellbeing. The 2013 survey is available in IDI. It collected information on a wide range of topics to give an overall picture of the social, cultural, and economic well-being of Māori in New Zealand. This included a health module with information about overall health, physical health, and mental health. The survey also includes questions about spirituality and social connectedness.

Appendix: non-IDI sources of mental health and addiction data

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Note that InterRAI and New Zealand Health Survey are scheduled for inclusion in upcoming refreshes of the IDI

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
New Zealand Health Survey	Ministry of Health	Mental illness Gambling harm Substance use disorder Primary mental healthcare Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth Older people People living with a disability Rural population	New Zealand's 'usually resident' population of all ages, including those living in non-private accommodation. The survey is designed to yield an annual sample size of approximately 14,000 adults and 5,000 children.	The New Zealand Health Survey (NZHS) provides information about the health and wellbeing of New Zealanders. Data about mental health and addiction is available within the core component, problem gambling, alcohol, drug and mental health and substance use modules. The core survey contains some information about mental illness, addition and associated factors and the 2016/17 mental health and substance use module contains extensive information. The core component includes data related to mental illness includes psychological distress (K10, Kessler Psychological Distress Scale), ever diagnosed with a common mental health disorder and hazardous drinking (AUDIT, Alcohol Use Disorders Identification Test). The module includes data on specific provisional diagnoses (PHQ-SADS, Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales), substance abuse (ASSIST, Alcohol, Smoking and	Ad hoc data collection from 1992 onwards, with core component collected annually from July 2011 onwards. Mental health and substance use module - 2016/17 only.	The NZHS only uses screening tools, e.g. the K10, ASSIST and PHQ-SADs, not tools that are not used to give diagnoses. These tools only collect information on the risk of disorder but not whether the person has the disorder. The survey population excludes: • most types of non-private dwellings (prisons, mental health residential facilities, hospitals, hospices, dementia care units and hospital-level care in aged-care facilities) • households located on islands other than the North Island, South Island and Waiheke Island. In 2016/17, the final weighted response rate was 80 percent for both adults and children.

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
					Substance Involvement Screening Test), suicidal ideation, social isolation, service use, unmet need, emotional, hyperactivity and behavioural symptoms among children (SDQ, Strengths and Difficulties Questionnaire) and parental stress.		
Te Rau Hinengaro: The New Zealand Mental Health Survey	Ministry of Health	Mental illness Substance use disorder Primary mental healthcare Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth Older people People living with a disability Refugees and new migrants Rural population	People aged 16 and over living in permanent private dwellings throughout New Zealand. The survey design was for a nationally representative sample.	The four primary objectives of Te Rau Hinengaro: The New Zealand Mental Health Survey were to: • describe the one-month, 12-month and lifetime prevalence rates of major mental disorders among those aged 16 and over living in private households, overall and by sociodemographic correlates • describe patterns of and barriers to health service use for people with mental disorder • describe the level of disability associated with mental disorder • provide baseline data and calibrate brief instruments measuring mental disorders and psychological distress to inform the use of these instruments in future national health surveys.	Data collected in late 2003 and 2004. Findings published in 2006.	Data was collected in late 2003 and 2004 and is now out-of-date. The response rate was 73.3 percent. Detailed information about limitations are available within the Te Rau Hinengaro report (link provided).
International Resident Assessment Instrument (interRAI)	Central TAS	Mental illness Substance use disorder Groups of interest to MHI	Māori Pacific Older people People living with a disability Rural population	All older people with high needs that require support in the community and aged residential care.	Data collected on older people, using the interRAI suite of standardised clinical assessment tools. InterRAI used five different assessments within New Zealand, Long Term Care Facilities (LTCF) assessments in aged residential care facilities, and Homecare (HC) assessment	Data available from 2012 and complete enough for national analyses from 2015/16.	Completeness - in July 2015 it became compulsory to use the interRAI assessment tool within LTCF. Assessments are compulsory within 21 days of admission and reassessment is required every six months. LTCF data collection increased from 2014 onwards becomes relatively

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
					data being the most complete for research purposes. Data is collected on the person's cognition, mood and behaviour, with information about previous mental health diagnoses collected from doctor notes. In addition, interRAI contains derived variables including six clinical assessment protocol variables and the Depression Rating Scale. The Depression Rating Scale has been validated against the Hamilton Depression Rating Scale, the Cornell Scale for Depression and the Calgary Depression Scale. Some data is collected on alcohol use but not enough to form conclusions about alcohol abuse.		stable in 2015/16. Given interRAI is used for assessments of people with high needs, data should not be used to form conclusions about the health of the elderly population. In 2016/17 approximately 10 percent of the population aged 65 and older had an interRAI assessment.
The Dunedin Multidisciplinary Health and Development Study (the Dunedin study)	University of Otago	Mental illness Gambling harm Substance use disorder Primary mental healthcare Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth People living with a disability LGBTIQA+ community Prison population Rural population	1037 babies born between 1 April 1972 and 31 March 1973 at Queen Mary Maternity Hospital, Dunedin.	The Dunedin study is a longitudinal study that has followed the lives of 1037 babies born between 1 April 1972 and 31 March 1973 at Queen Mary Maternity Hospital, Dunedin, New Zealand, since their birth. The Dunedin study research unit was based within Otago University's Department of Psychology since 2015. The study examines almost all aspects of participants' physical and mental health - this includes mental health, psychosocial wellbeing, and detailed interviews about relationships, behaviour and family. Researchers have estimated the prevalence of	1972 -	The study collects comprehensive data of good quality. The retention rate is good, for example at age 38, a sample of 961 respondents was studied, representing 95% of the living respondents. A journal article within Social Psychiatry and Psychiatric Epidemiology provides a useful summary of the study and is available through the following link, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4412685/

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
					mental illness using the Diagnostic Interview Schedule (DIS) and other tools. The study strives to use the gold-standard tool at the time of research.		
The Christchurch Health and Development Study	University of Otago Christchurch	Mental illness Gambling harm Substance use disorder Primary mental healthcare Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth People living with a disability LGBTIQA+ community Prison population Rural population	1,265 children born in the Christchurch urban region in mid-1977.	Health, education and life progress of a group of 1,265 children born in the Christchurch (New Zealand) urban region during mid-1977. The research unit is based within the Department of Psychological Medicine at the University of Otago Christchurch and focusses on a range of social and health issues. Extensive information relating to mental health and addiction has been collected and published, for example, data on alcohol, smoking, depression, suicide and self-harm, anxiety, psychosis, childhood ADHD and conduct problems, personality, genetics, mental health and abortion, traumatic brain injury, bullying, antisocial and criminal behaviour. A few points about the study are relevant to highlight: • As the study covers an extended period, birth to age 40, and ongoing, it can be used to examine both the causes and outcomes of mental health problems in both childhood and adulthood. • The study used a number of tools to classify mental illness and substance use: including DISC (Diagnostic Interview	1977 onwards - the cohort has now been studied on a total of 24 occasions from birth to age 40 (age 40 data collection nearing completion).	The study collects comprehensive data of good quality. The retention rate is good, for example at age 35 a sample of 962 respondents was studied, representing 79% of the cohort. Researchers compared some data against other sources, e.g. administrative hospital event data, but comparison is not always possible nor practical.

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
					Schedule for children) at the 15th and 16th-year assessments and CIDI (Composite International Diagnostic Interview) at age 30 and 35. • The study is the only one in the world that can prospectively measure the impact of a major natural disaster on mental health.		
Client Information Collection (CLIC)	Ministry of Health	Mental illness Gambling harm Substance use disorder Specialist mental healthcare Groups of interest to MHI	Maori Pacific Youth Older people Prison population	People experiencing gambling harm.	CLIC contains data on problem gambling intervention services funded by the Ministry of Health. Intervention services provide psychosocial support and clinical interventions for individuals affected by their own or someone else's gambling. Detailed event level data is available about the intervention, for example, data on the Problem Gambling Severity Index score, co-existing problems, suicide risk, the service type, the treatment provided, facilitation of access to other services and follow-up. CLIC cannot be linked to other datasets because it does not currently hold the NHI nor names for data linkage; however, data users can use the client ID for distinct counts.	July 2004 - Data that is available before this point is not good enough for research purposes.	The linked manual gives technical information about data submission requirements and can be used to understand what is collected. The Problem Gambling Service Intervention Service Practice Requirements Handbook also provides useful context about problem gambling services. The handbook can be found on the Ministry of Health's website, https://www.health.govt.nz/publication/problem-gambling-service-intervention-service-practice-requirements-handbook. Direct comparison between the July 2004 - June 2008 and July 2008 - present data has limitations for the following reasons: • new service specifications for problem gambling intervention service providers were implemented from January 2008 • equivalent intervention services provided by the Gambling Helpline have been included in the data since November 2008.
The New Zealand Mental	Health Promotion Agency	Mental illness Primary mental healthcare	Māori Pacific Youth	Adults aged 15 and over. In 2016: n=1646, including	The New Zealand Mental Health Monitor (NZMHM) is a nationally representative face-to-face	NZMHM years are 2015, 2016 and 2018	The survey questionnaire is also available on HPA's website, https://www.hpa.org.nz/research-

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
Health Monitor (NZMHM)		Specialist mental healthcare Groups of interest to MHI	Older people LGBTIQA+ community* (see note)	340 Māori, 345 Pasifika.	survey, conducted for the first time in 2015. The purpose of the NZMHM is to provide useful and up-to-date information about issues relating to mental distress and wellbeing in New Zealand. The NZMHM used the following psychometric scales Reported and Intended Behaviour Scale (RIBS), Mental Health Knowledge Schedule (MAKS), New Zealand Community Attitudes towards the Mentally Ill Scale (NZCAMI), Patient Health Questionnaire (PHQ-9), Generalized anxiety disorder (GAD-7) and Kessler psychological distress (K-10).	(in the field mid-2018)	library/research-publications/2016-new-zealand-mental-health-survey-questionnaire Small numbers of participants identifying as LGBTIQA+, therefore limited analysis opportunities; Combined 2015/16 dataset with Health and Lifestyles Survey (HLS) are available for some topics; Suite of questions on Māori social connectedness and connectedness to culture (reporting in progress mid-2018); increased focus on measures of connectedness in 2018 NZMHM. The overall weighted response rate for all components is 75.0%.
New Zealand National Gambling Study	Auckland University of Technology	Mental illness Gambling harm Substance use disorder Specialist mental healthcare Groups of interest to MHI	Māori Pacific Older people Refugees and new migrants Rural population	Adults aged 18+	The New Zealand National Gambling Study (NGS) is a nationally representative longitudinal survey of adults aged 18 years and older. The purpose of the NGS is to provide information on the prevalence, incidence, nature and effects of gambling in New Zealand. Participants in the NGS (n = 6,251) were recruited in 2012 (Wave 1), and then re-interviewed annually from 2013 to 2015 (Waves 2 to 4). An additional cohort of 106 regular gamblers was recruited in 2014/15 and re-interviewed in 2015/16 to boost the sample of high-risk gamblers in the study. A qualitative phase of 50 semi-structured interviews with NGS	2012 - 2015, main NGS 2014/15 - 2015/16, additional cohort 2018, qualitative study	A number of other reports were produced, see New Zealand 2012 National Gambling Study: Gambling harm and problem gambling. Report number 2, New Zealand 2012 National Gambling Study: Attitudes towards gambling. Report number 3, New Zealand National Gambling Study: Wave 2 (2013). Report number 4, New Zealand National Gambling Study: Wave 3 (2014). Report number 5 and New Zealand National Gambling Study: Wave 4 (2015). Report number 6.

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
					participants is taking place in 2018. The study covers extensive topics relating to gambling harm, mental illness and risk factors, including leisure activities, gambling participation, gambling behaviour change, problem gambling, help-seeking, other people's gambling, major life events, attitudes towards gambling, mental health, quality of life, alcohol use/misuse, tobacco use, other drug use/misuse, health conditions, social connectedness and cultural identity.		

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
Health Workforce Information Programme	Central TAS	Mental illness Substance use disorder Specialist mental healthcare Groups of interest to MHI	Māori Pacific	DHB Employed Workforce	The Health Workforce Information Programme is a well-established programme that has been capturing and reporting DHB employee demographic data since 2006. The data collected consists of 29 variables supported by an agreed data standard and code sets. The HWIP information is used to inform strategic and operational workforce analysis, development and planning at the local, regional and national level as well as inform ER strategic negotiations. It provides a foundation on which to build a richer picture of how best to deliver to New Zealand's future health sector workforce needs. Data is available by demographic and geographic breakdowns as well as the length of service and FTE turnover. The mental health and addiction workforce can be identified using the primary area of work codes, the job title and ANZSCO classification.	2010 - Data available from 2006 onwards but considered unreliable.	Link to further detail about the 29 variables, https://tas.health.nz/assets/SWS/HWIP/2018/HWIP-dataset-standard-2018-V.9.pdf Central TAS excludes staff with zero contracted hours, on parental leave, on leave without paid and contractors from their reporting.
Comorbid Substance Use Disorders and Mental Health Disorders among New Zealand Prisoners	Corrections	Mental illness Substance use disorder Groups of interest to MHI	Māori Pacific Youth Older people Prison population	The prison population. 1209 prisoners across 13 prisons were studied.	The study measures the prevalence for the 12-month and lifetime diagnosis of mental health and substance use disorders, using CIDI and Personality Diagnostic Questionnaire 4+ (PDQ-4). Data can be broken down by gender, age, and ethnicity.	The study was carried out between March and July 2015.	The study used validated instruments; the study sample was large; trained lay interviewers conducted the survey; the data was extensively checked for quality and consistency and weighted to reflect the New Zealand prison population as a whole. However, it was not possible to quantify the number of people approached to take part who declined. A high number of

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
							people did not complete the survey due to its length. The study did not over-sample certain population groups which limited the ability to obtain valid estimates for comparison with the general population. Translation services were not available for non-English speaking prisoners. The presentation of psychosis symptoms should not be interpreted as a diagnosis for psychosis. Methamphetamine use disorders among New Zealand prisoners is another key report published on Corrections' website, http://www.corrections.govt.nz/resources/newsletters_and_brochures/journal/volume_5_issue_2_november_2017/methamphetamine_use_disorders_among_new_zealand_prisoners.html
National Telehealth Service	Homecare Medical	Mental illness Gambling harm Substance use disorder Groups of interest to MHI	Māori Pacific Youth Older people	People that accessed a telehealth helpline.	The National Telehealth Service provides an integrated platform for people to access health information, advice and support from trained health professionals. When people access this platform, basic information is collected. Mental health or addiction helplines include: • Alcohol and other Drug Counselling • Mental Health, Depression and Anxiety Counselling Support • Gambling Counselling and Support	Data collected from late 2015 onwards.	NA

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
Contract Management System (CMS)	Ministry of Health	Mental illness Gambling harm Substance use disorder Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth Older people	Any health service contracts between the Ministry of Health and service providers (organisations and individuals).	The purpose of the CMS is to manage contracts between MoH and external entities, specifying services and payment schedules. The collection contains details of services contracted for (description, rate, start date, duration) and contract administration details. Used by Health to identify an NGO's funding DHB, mental health funding, FTE and beds estimates.	1998 -	Unit record data is not available to researchers, and only summary data is available at this stage. Health holds further contracting information is stored within Oracle and the Clients Claims Processing System (CCPS). These collections are out of scope for this stocktake.
HealthStat	CBG Health Research Limited	Mental illness Substance use disorder Primary mental healthcare Groups of interest to MHI	Māori Pacific Youth Older people	Patients receiving primary healthcare enrolled in a PHO with a Medtech patient management system (PMS). CBG can provide a random sample of this population, e.g. 10 percent of the population stratified by DHB.	HealthStat collects data from general practices with Medtech Patient Management Systems. Analysts/Researchers can use data from HealthStat at a practice, DHB and national level. HealthStat collects all primary care data in the PMS except the text of the consultation. All diagnostic codes are collected and reasons for the visit etc. All clinical data entered in a structured format is collected, e.g. K10 and PHQ-9.	2005 -	CBG can provide customised datasets, with the general practitioner's permission. HealthStat only provides aggregated, anonymous data to clients and practices are never identified.
Marama Real-time Consumer Experience Feedback	CBG Health Research Limited	Mental illness Substance use disorder Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth Older people Rural population	Consumers of mental health services	Mārama collects real-time feedback from mental health consumers, and their family/whānau, and presents the results in attractive graphical displays. CBG Health Research Limited developed the tool for the Health and Disability Commission. As at mid-2018, 18 of the 20 DHBs, and NGO providers, used the tool.	2015 -	NA

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
Attitudes and Behaviour towards Alcohol Survey	Health Promotion Agency	Mental illness Groups of interest to MHI	Māori Pacific Youth Older people LGBTIQA+ community Refugees and new migrants Rural population	Adults aged 15 and over.	The Attitudes and Behaviours towards Alcohol Survey provides nationally representative information on the attitudes and behaviour of New Zealanders aged 15 years and over concerning alcohol. The survey focuses on behaviour in the previous month and on the last drinking occasion and includes a range of questions on attitudes and opinions towards alcohol. Results from the survey are used to inform the planning and development of alcohol activities, policies and programmes that aim to reduce alcohol-related harm in New Zealand.	2008 - 2016	The 2015/16 survey consisted of four waves of data collection (n=4,000 in total), as well as a boost of Pacific people (n=200), with one wave occurring each month between November 2015 and February 2016. Households with landline telephone numbers were selected using a Random Digit Dialling (RDD) approach. The youngest person in the household was interviewed. The mode of the interview was Computer-Assisted Telephone Interviewing (CATI). The response rate was 31.5 percent. Numbers on LGBTIQA+ and refugee and migrant communities may be too low to be considered meaningful.
Health and Lifestyles Survey	Health Promotion Agency	Mental illness Gambling harm Substance use disorder Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth Older people	Adults aged 15 years and over, and parents and caregivers of 5 to16 year-olds. In 2016, n=3854 including 640 Māori and 430 Pasifika.	The Health and Lifestyles Survey (HLS) is a biennial face-to-face monitor of the health behaviour and attitudes of New Zealand adults aged 15 years and over, and parents and caregivers of 5 to 16 year-olds, first carried out in 2008. The HLS collects information relating to HPA's programme areas of alcohol, tobacco control, sun safety, minimising gambling harm, nutrition and physical activity, mental health and immunisation. In regards to alcohol and gambling harm, information about	The HLS is biennial from 2008: mental health data collected from 2012 onwards; problem gambling from 2008.	The survey questionnaire is available within the following link, https://www.hpa.org.nz/research-library/research-publications/2016-health-and-lifestyles-survey-questionnaire The weighted response rates are 66% for the adult sample and 65% for the parent/caregiver sample.

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
					demographics and attitudes are collected. Exposure and awareness of gambling harm is also measured as well as information about quitting and alcohol-related injuries. Mental health data is quite limited but includes K10 and data about stigma and discrimination. The survey enables linkage of alcohol, gambling harm and mental health data to risk behaviours.		
Gaming and Betting Activities Survey	Health Promotion Agency	Mental illness Gambling harm Substance use disorder Primary mental healthcare Specialist mental healthcare Groups of interest to MHI	Māori Pacific Youth	1774 adults, aged over 18, and 199 young people, aged 15 to 17.	Reports on participation in gambling and the prevalence of gambling harm. Although the focus is on gambling harm, limited information is also available on mental health, substance abuse and primary and specialist health services.	This was a one-off survey conducted in 2006/2007. It was replaced by the HLS gambling module from 2008	NA
New Zealand Mothers' Mental Health Survey (NMMHS)	Health Promotion Agency	Mental illness Primary mental healthcare Specialist mental healthcare Groups of interest to MHI	Māori Pacific	805 women who had given birth during the previous 2 years.	The New Mothers Mental Health Survey measured postnatal depression using the Edinburgh Postnatal Depression Scale (EPDS). The survey also includes questions relating to respondents' sociodemographic characteristics, feelings of social connectedness, family / whānau wellbeing, personal wellbeing, and help-seeking attitudes. The family / whānau wellbeing measure was derived, with permission, from Statistics New Zealand's Te Kupenga 2013 questionnaire on Māori wellbeing. The survey was used to derive	Conducted between July and September 2015	New mothers were surveyed as part of the 2015 New Zealand Mental Health Monitor (NZMHM). The methodology for this part of the survey was sufficiently different to justify a separate section, within this stocktake. A list of new mothers was obtained from New Zealand hospitals, new mothers were then contacted over the phone and invited to take part in an online survey. The 2015 NZMHM was a face-to-face survey. The survey had a low response rate (56.5%).

Dataset	Owner	Topics	Groups of Interest	Target Population	Summary	Time Period	Important Notes and Data Quality Issues
					postnatal depression prevalence as well as social factors and life experiences and help-seeking.		The survey called all respondents "new mothers" included women who had had a baby at any time in the previous two years but doesn't capture exactly when that was.