

Microdata access information sheet

Last updated 18 October 2018

Before you start

We strongly recommend you discuss your proposed project with us first before submitting an application. We will give you helpful advice and information specific to your proposed project, including:

- the feasibility of your research
- what data is most relevant to your proposal
- experts you could talk to
- likely concerns to address in your application.

To arrange a pre-application meeting, contact us by phone at **(04) 931 4253** or email access2microdata@stats.govt.nz

Factors to consider when preparing your application

| | |
|--|---|
| Public interest value | Your proposed research must be of public interest. |
| Treaty responsiveness and human rights | You must analyse the data and share outputs in culturally appropriate ways. You must consider the potential impact of your research on the populations you are studying, particularly if your research involves Māori, Pasifika, or other underrepresented populations. |
| Confidentiality | All research outputs must protect the confidentiality of information supplied by respondents. |
| Ability of the research team | Researchers must have the quantitative research skills and experience needed to use microdata. If you want to use the IDI or LBD, we strongly recommend having intermediate SQL coding skills. Most researchers code in SAS or SQL, others use R or Stata. |
| Availability of alternatives to microdata | Applications are unlikely to be successful where there are good alternatives to using microdata. |
| Statistical purpose | You must be proposing to use the data for bona fide research or statistical purposes. |
| Suitable data is available | Suitable data must be available for your research. The data must be of sufficient quality for your analysis, and the counts of populations you are interested in must be high enough that there is no risk of identification of individual people or businesses. |
| Stats NZ can form an agreement | Researchers working within an organisation must be working with a reputable New Zealand-based organisation with whom Stats NZ can create and enforce an agreement for data access. Researchers undertaking research as a sole trader may still apply; in such cases the agreement is with the individual. |
| Public dissemination of results | The results of the research must be made publicly available. |

All access to microdata must be consistent with the requirements of the [Statistics Act 1975](#) (section 37).

Considerations that may affect access

| You should check with us first if... |
|--|
| Your research is for commercial gain |
| The population you are interested in has low numbers |
| One or more of your researchers is based overseas |
| The lead researcher on your project is a student or junior staff member |
| You are a non-government researcher requesting access to business tax data |

| Access is unlikely to be approved if... |
|---|
| Your research is about named people or businesses |
| You do not have the support of the organisation you work within |
| Your research will not be released publicly |
| Researchers do not have the skills needed to use the Data Lab |

Data Lab access

You can use the Data Lab in our Stats NZ offices:

- Auckland: NZ Mint Building, 48 Greys Avenue, Auckland
- Wellington: 8 Gilmer Terrace, Wellington
- Christchurch: BNZ Centre, Level 1, 120 Hereford Street, Christchurch

These locations are available Monday–Friday from 8:30am–5pm.

To book places, or to enquire about availability of space, contact the Microdata Access team at access2microdata@stats.govt.nz or Stats NZ Reception (04) 931 4600.

If you have a project that has been active for more than six months, you can apply to set up a remote Data Lab in your own workplace. Your location and project must meet security conditions. **Please contact us before applying** at (04) 931 4253 or email us at access2microdata@stats.govt.nz.

Privacy

We collect personal information from you, including information about your name, phone number or email, wi-fi activity, and session activity. This information will be used to manage microdata access, account billing, and for auditing purposes.

You have the right to ask for a copy of any personal information we hold about you, and to ask for it to be corrected if you think it is wrong. If you'd like to ask for a copy of your information, or to have it corrected, please contact us at (04) 931 4253 or email us at access2microdata@stats.govt.nz.

Software requirements

Researchers using the Data Lab need quantitative research skills and the ability to query large datasets based on their parameters of interest. If you intend to use the Integrated Data Infrastructure (IDI) or Longitudinal Business Database (LBD), we strongly recommend having intermediate SQL coding skills. Most researchers code in SAS or SQL, while others prefer coding in R or Stata. User support is not provided for statistical software packages. See [Resources for IDI and LBD users](#) for basic coding resources.

Stats NZ may be able to host additional software at an additional cost. Please discuss this with us.

Stats NZ provides access to the following software for use in the Data Lab:

| | |
|---|--|
| ✓ | Microsoft Office suite |
| ✓ | Microsoft SQL Server Management Studio |
| ✓ | Stata |
| ✓ | RStudio |

SAS access is not given automatically. You will need to provide us with the names of any researchers who require access to SAS in section 1.7. We will install SAS Enterprise Guide and assign a licence to each researcher.

Publishing your research

We encourage you to talk to us before you publish your research. We would like to work with you to see how we can help promote your research, e.g. a joint media release, or the opportunity for you to present your work at one of our user forums.

Once your research has been published, please let us know, and send us a link if possible. This includes anything you've produced – journal articles, reports, presentations, websites, etc. Please send links to access2microdata@stats.govt.nz.

We publish links to all research using Stats NZ microdata in our research database, [Research using Stats NZ microdata](#).

Microdata access checklist

| Before you apply | |
|------------------|--|
| X | Pre-application meeting (team met with Barry Milne at COMPASS) |
| X | Make sure your project fits the criteria in the Microdata Access Information Sheet (attached) |
| X | Give some thought to how your application will address the factors to consider listed in the Microdata Access Information Sheet (attached) |
| X | Read the Microdata Access Guide [link] |

| Your application should include... | |
|------------------------------------|--|
| X | The completed application form |
| | CVs for all new researchers (including those who require Data Lab viewing access) NO RESEARCHERS NEW TO THE IDI |
| | Names and contact details of two referees for each new researcher (referees cannot be researchers on the project) NO RESEARCHERS NEW TO THE IDI |
| X | If you are applying to access Ministry of Health data in the IDI: either your approved HDEC application, or a letter of confirmation from HDEC that your project is out of scope for review |
| | Any other information you would like to include as context to your application (eg university ethics approval, evidence of consultation with iwi) |

Email your completed application form in Microsoft Word format, and any additional documents, to access2microdata@stats.govt.nz.

Application to access microdata in the Stats NZ Data Lab



Last updated 15 October 2018

Instructions

Fill in this form if you want to apply for a new microdata project.

- The application process runs on a six-week cycle. Applications received before the deadline for a cycle will be processed in that batch; applications received after the deadline will go into the following batch.
- Final approval rests with the Government Statistician or delegated authorised person. Once approved, we will work with you to arrange a contract and prepare for your arrival in the Data Lab.
- See [Apply to use microdata for research](#) for deadlines and more details about the application process.

Email your completed application form in Microsoft Word format to access2microdata@stats.govt.nz.
Remember to attach CVs and ethics approval (where applicable).

Project title

Enter the name of your proposed microdata project.

Do psychiatric disorders in young adulthood co-occur in sequence with later physical diseases in IDI registers?

Part 1: About you

1.1 Main contact

Provide details of the main contact for your project.

Note: We'll publish your contact email on our website for the general public to read (see [Research using Stats NZ microdata](#)).

| Name | Organisation and position (eg Stats NZ, Senior researcher) | Phone | Email |
|-------------|---|-------------|------------------------|
| Barry Milne | Director, COMPASS Research Centre, University of Auckland | 09 923 9168 | b.milne@auckland.ac.nz |

1.2 Alternative contact

In case we can't contact the lead researcher while we assess this application, provide details of an alternative contact person.

| Name | Organisation and position (eg Stats NZ, Senior researcher) | Phone | Email |
|-------------------|--|-------------|----------------------------|
| Martin von Randow | Analyst, COMPASS Research Centre, University of Auckland | 09 923 4499 | m.vonrandow@auckland.ac.nz |

1.3 Researcher(s) requiring Data Lab login

Provide details of all researchers who will work on your project in the Data Lab. Subject to checks, we will give them access to microdata via a unique login account, and confidentiality training if this is their first project. If your main or alternative contact require Data Lab login, please also list them here.

Note: We will ask all researchers to sign a Declaration of Secrecy, Researcher Undertaking, and the IR 820 certificate of secrecy before accessing any microdata, as required by the Statistics Act 1975.

| Name | Organisation and position (eg Stats NZ, Senior researcher) | Phone | Email | Reason for access (eg lead researcher) |
|----------------------|---|--------------------|----------------------------------|---|
| Barry Milne | Director, COMPASS Research Centre, University of Auckland | 09 923 9168 | b.milne@auckland.ac.nz | Lead Researcher |
| Stephanie D'Souza | Statistician, COMPASS Research Centre, University of Auckland | 09 923 2940 | s.dsouza@auckland.ac.nz | Analyst |
| Leah Richmond-Rakerd | Postdoctoral Research Fellow, Duke University, USA | +1 919 684 6679 | leah.richmond rakerd@duke.edu | Postdoctoral Research Fellow |
| Renate Houts | Statistician, Duke University, USA | +1 919 684 6679 | Renate.houts@duke.edu | Analyst |
| | | | | |

1.4 Researcher(s) requiring Data Lab viewing access

Provide details of researchers who will need to access the secure Data Lab but will not be working directly with the microdata. We will **not** give these researchers access via a unique login account, but they will be required to undergo confidentiality training. If your main or alternative contact require Data Lab viewing access, please also list them here.

Note:

- While access to the Data Lab is restricted, we recognise that data experts may require access to view the data in the Data Lab in order to advise on the project. Please include an explanation of why the listed researchers require access to view unconfidentialised data in the Data Lab.
- We will ask all researchers to sign a Declaration of Secrecy, Researcher Undertaking, and the IR 820 certificate of secrecy before viewing any microdata, as required by the Statistics Act 1975.

| Name | Organisation and position (eg Stats NZ, Senior researcher) | Phone | Email | Reason for access (eg expert advisor on tax data) |
|----------------|---|-----------------|-------------------------|---|
| Avshalom Caspi | Professor, Duke University, USA | +1 919 684 6679 | Avshalom.caspi@duke.edu | Lead collaborator on project; expert on mental health and physical health comorbidities |
| Terrie Moffitt | Professor, Duke University, USA | +1 919 684 6679 | Terrie.moffitt@duke.edu | Lead collaborator on project; expert on mental health and physical health comorbidities |
| | | | | |

1.5 Curriculum vitae(s)

Attach a CV for researchers who will be using the Data Lab **for the first time, including researchers requiring Data Lab viewing access**. The CV should include:

- an up-to-date employment history
- examples of peer-reviewed research publications (if any)
- certified academic record from the issuing institution (for academic researchers)
- details of two referees we can contact (referees cannot be researchers on the project).

| | | |
|---|----------|------------------------------|
| Have you attached CVs for all first-time Data Lab researchers? Leave blank if not applicable. | YES / NO | No first time Data Lab users |
|---|----------|------------------------------|

1.6 Background check

Have any of the researchers named in this application been the subject of a disciplinary process or research ethics complaint? Is there any other reason why their character may be called into question regarding access to microdata?

| | | |
|----------|----|---------------------------------|
| YES / NO | NO | If YES , provide details |
|----------|----|---------------------------------|

1.7 Researchers requiring access to SAS

Stats NZ provides access to a set of standard programmes for use in the Data Lab. SAS access is not given automatically. List the names of **all researchers who will require SAS**. We will install SAS Enterprise Guide and assign a licence to each researcher.

| Name |
|----------------------|
| Barry Milne |
| Stephanie D'Souza |
| Renate Houts |
| Leah Richmond-Rakerd |

Part 2: About your organisation

2.1 Organisation(s)

Provide details of the organisation requesting access to microdata. If this is a joint project, list the other organisations.

| Name | Address |
|------------------------|----------------------------------|
| University of Auckland | Private Bag 92019, Auckland 1142 |
| | |

2.2 Does your organisation(s) support this research proposal?

| YES / NO | YES | If NO, provide details | |
|----------|-----|------------------------|--|
| | | | |

2.3 Does your organisation(s) have a history of carrying out research of a high standard? For example, peer-reviewed published papers, working papers informing government policy, or presentations to international conferences.

| YES / NO | YES | If NO, provide details | |
|----------|-----|------------------------|--|
| | | | |

2.4 Authorised signee

Provide details about the person authorised to sign a contract with Stats NZ for microdata access if this application is successful.

| Name | Position | Senior Contracts Manager | Organisation | University of Auckland |
|------------|----------|--------------------------|--------------|------------------------|
| Lisa Perry | | | | |

2.5 Invoicing

Provide details of the person to whom we should send invoices.

Note:

- The Data Lab operates on a cost-recovery basis. See [Apply to use microdata for research](#) for a list of costs.
- Unsuccessful applications will not incur any charge.

| Name | Address | Phone | Email |
|---------------|---|-------------|-------------------------|
| Olivia Healey | COMPASS Research Centre University of Auckland Building 273 20 Wynyard Street Auckland 1010 | 09 923 2098 | o.healey@auckland.ac.nz |

Part 3: Your location

3.1 Research location(s)

Indicate (with an 'x') the location(s) where you plan to carry out your research.

Note: The Data Lab service is available at Stats NZ offices around New Zealand and at a number of secure research facilities. See the Microdata Access Information Sheet (attached) for more information about locations and opening hours.

| | | |
|---|--|--|
| | Stats NZ Auckland NZ Mint Building, 48 Greys Avenue | |
| | Stats NZ Wellington HP House, 8 Gilmer Terrace | |
| | Stats NZ Christchurch BNZ Centre, Level 1, 120 Hereford Street | |
| x | Existing secure research facility (remote lab) | |
| | Address of facility | COMPASS Research Centre, Room 273.201M, University of Auckland |
| x | Existing secure research facility (remote lab) | |
| | Address of facility | Public Policy Institute, Building 220, University of Auckland |

Part 4: Collaboration

4.1 MeetaData

MeetaData is an online collaboration space created by Stats NZ for all microdata users. MeetaData allows you to connect with other users, share knowledge, ask questions, share code, and talk about anything related to microdata.

Researchers in your project may be invited to join MeetaData when this application is received. If you have any questions about MeetaData, email meetadata@stats.govt.nz.

4.2 Discussions

Have you had a pre-application meeting with Stats NZ?

| | | | |
|--|----|--|--|
| YES / NO | NO | If YES , provide details (eg when, with whom) | |
| Have you had any other discussions with Stats NZ staff about this project? | | | |
| YES / NO | NO | If YES , provide details (eg when, with whom) | |
| Have you been referred by someone outside Stats NZ? | | | |
| YES / NO | NO | If YES , provide details (eg when, with whom) | |

Let us know if you would like us to connect you with other researchers with similar interests. Note that this will not slow down your application.

Part 5: About your project

We encourage you to give us as much detail as you can about your project to help us understand your application. Please write in **plain English** and **limit technical jargon** where possible.

5.1 Project title

Enter the name of your proposed microdata project.

Do psychiatric disorders in young adulthood co-occur in sequence with later physical diseases in IDI registers?

5.2 Project summary

Using plain English, write a **short paragraph** summarising your proposed project. We'll publish this summary on our website for the general public to read (see [Research using Stats NZ microdata](#)). Include:

- research question(s) to be investigated
- anticipated outcomes.

The prevention hypothesis posits that improving treatment for mental health disorders in young people could have the knock-on effect of reducing disease and health-service use in the same people when they reach later life. For this prevention model to be viable, there must be evidence that the same people who experience mental disorders as young adults go on to be at elevated risk of physical and neurodegenerative diseases in later life. Two prior studies have reported that the same people who have poor mental health while young tend to years later develop age-related physical diseases. One study, undertaken in the World Mental Health Survey, relied on older adult participants' long-term retrospective recall of lifetime psychiatric disorder and physical diseases. The other study relied on a modest-sized population medical-record register in Western Australia. This small but suggestive literature supports the premise of our project. We propose to study NZ-IDI registers of hospitalisations and pharmaceutical use, to test to what extent mental disorders tend to co-occur with and antedate physical diseases in the same individuals.

5.3 Project objectives

Elaborate on your project summary below, including more detail about:

- your research objectives
- research question(s) to be investigated
- anticipated outcomes
- how the research will contribute to the public good or the development of policy.

Background

We have recently published the prevention hypothesis that improving treatment for mental health disorders in young people could have the knock-on effect of reducing disease and health-service use in the same people when they reach later life (Moffitt & Caspi, 2019, JAMA-Psychiatry). The sequential timing is right to support this prevention model: Mental-health conditions emerge first, with peak incidence and prevalence in young adulthood, whereas non-infectious physical diseases emerge in midlife, and neurodegenerative conditions emerge in late life. However, for this prevention model to be considered viable, evidence is needed that people who experience mental disorders as young adults are the same people who go on to be at elevated risk of physical and neurodegenerative diseases in later life. Two prior studies have reported that the same people who have poor mental health while young tend to years later have age-related physical diseases. One study, undertaken in the World Mental Health Survey, relied on older-adult participants' long-term retrospective recall of lifetime psychiatric disorder and physical diseases (Scott et al. 2016). The other study relied on a modest-sized population medical-record register in Western Australia (Lawrence et al, 2013). This is a small literature of two papers, one flawed by retrospective recall, and one which relied on a modest-sized sample. However, it is sufficiently suggestive to support the premise of our project.

Aims

1. We propose to study NZ-IDI registers of hospitalisations and pharmaceutical use, to test to what extent mental disorders tend to co-occur with and antedate physical diseases (and early mortality) in the same individuals.
2. We will test whether patterns of sequential comorbidity vary by sex.

Contribution to the development of policy

Three demographic trends are colliding to challenge the health and wellbeing of the population: The post-retirement portion of the population is swelling; the human lifespan is lengthening; the birth-rate is dropping. The result is that the balance of young-to-old is shifting, leaving fewer young workers to drive the economy and pay taxes to support more aging citizens. These three trends mean more stress for the young and less support for the old, bringing two opportunities for health policy. First, an opportunity to *prevent disability among young people*. Young people tend to be physically healthy but they are disabled by behavioral problems, emotional problems, substance abuse, and cognitive impairments. Second, an opportunity to *prevent ill health among older people*, to reduce the future burden of age-related disability from physical and neurodegenerative diseases. We have put forward the prevention hypothesis that better mental health treatment for young people today could have knock-on effects of improving their physical and cognitive health when they reach old age in the future.

Moffitt, TE and Caspi, A. (2019). Psychiatry's Opportunity to Prevent the Rising Burden of Age-related Disease. JAMA-Psychiatry.

Scott, K.M., Lim, C., Al Hamzawi, A., Alonson, J., et al. Association of Mental Disorders with Subsequent Chronic Physical Conditions: World Mental Health Surveys From 17 Countries. JAMA Psychiatry 2016; 73;150-158. DOI:10.1001/jamapsychiatry.2015.2688.

Lawrence, D., Hancock, K.J., Kisely, S. The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers. British Medical Journal 2013; 346, f2539. DOI: [10.1136/bmj.f2539](https://doi.org/10.1136/bmj.f2539)

5.4 Research methodology

To help us evaluate the feasibility of your proposed project, describe your research methodology and research design, and explain the significance of both to the questions you want to research. Elaborate on:

- the approximate size of your population of interest
- any variables of interest.

We will assess 10-year cohorts born from 1930-39 to 1980-89. Cohorts will be defined in such a way that each cohort overlaps with the one before it and the one after it by 5 years. For example: 1930-1939, 1935-1944, 1940-1949, 1945-1954, 1950-1959, 1955-1964, 1960-1969, 1965-1974, 1970-1979, 1975-1984, 1980-1989.

We are aware that the MOH registers do not go back far enough in time to allow us to track from the twenties to the eighties within the same individual. However, we will use statistical techniques designed for accelerated cohort study designs that analyse overlapping observation windows in successive adjacent cohorts to test temporal sequential inference (e.g., Wills AK, Lawlor DA., Matthews FE et al. (2011). Life course trajectories of systolic blood pressure using longitudinal data from eight UK cohorts. *PLoS Medicine*, 8:e1000440; Galbraith S, Bowden J, Mander A. (2017). Accelerated longitudinal designs: An overview of modelling, power, costs and handling missing data. *Stat Methods Med Res*;26(1):374-398).

We will assess psychiatric diagnoses and medical diagnoses of age-related diseases and neurodegenerative conditions in the following sectors:

- psychiatric hospitalisations (MOH) 1988-2018
- medical hospitalisation (MOH) 1988-2018
- mortality 1992-2018.
- pharmaceutical prescriptions (MOH) 2006-2018
- Chronic conditions: CHD, Gout, COPD, Diabetes, Cancer, Traumatic brain injury, Stroke, Myocardial infarction (MOH) ~1988-2018.

Each of the 10-year cohorts will contain approximately 500,000 individuals.

We will control for exposure opportunity (i.e., time out of the country and the any deaths that occur during the exposure period).

We will compare sequential patterns across sexes.

Sibling analysis: we will test if a sibling who has psychiatric disorder is also more likely to have physical disease, as compared to their sibling who did not have psychiatric disorder. This strategy would control for unobserved familial heterogeneity. Sibling comparisons have been undertaken using IDI data (e.g., for project MAA2016-12, Leong et al. has submitted at paper comparing siblings obesity outcomes in relation to antibiotic use). Such analyses are possible where shared parents can be identified using DIA births data – this will be possible for the youngest cohort only (born 1980-1989).

Amendment, 23 October 2020: Two new mechanisms by which to ascertain neurodegenerative conditions in the IDI have come available since we preregistered this proposal. We plan to use these in the proposed project. First, we will use a recently-published coding scheme to ascertain dementias from public-hospitalization, pharmaceutical, and mortality datasets (Walesby et al., 2020). Because records from public hospitals, death certificates, and pharmaceutical dispensing will fail to capture many dementia cases that are diagnosed in the community, we will also ascertain diagnoses of dementia from

the International Residential Assessment Instrument (interRAI) database, a geriatric assessment administered to all individuals in New Zealand requiring publicly-funded, long-term community services or aged residential care (Martinez-Ruiz et al., 2020).

Martinez-Ruiz, A., et al. (2020). Individual risk factors for possible undetected dementia amongst community-dwelling older people in New Zealand. *Dementia*, 19, 750-765.

Walesby, K.E., et al. (2020). Prevalence and geographical variation of dementia in New Zealand from 2012 to 2015: Brief report utilising routinely collected data within the Integrated Data Infrastructure. *Australasian Journal on Ageing*. doi: 10.1111/ajag.12790

5.5 Treaty responsiveness and human rights

You must consider the potential impact of your research on the population(s) you are studying, and the potential value of your research to them. In addition, your research should be supported by the population(s) you are studying, and if possible, should have involvement or advice from researchers or other experts representing these population(s). We strongly encourage you to begin consulting with your population(s) of interest before you begin the application process.

For example, if your project includes a focus on Māori, you will consider the potential cultural impact of your research outcomes on whānau, hapū, iwi and Māori groups, and seek appropriate advice and guidance from Māori cultural advisors.

You should elaborate on:

- any experience your research team has in working with or researching these groups
- whether these groups support your research
- the consultation you have already undertaken with these groups on the design and methodology of your research
- how you will continue to consult with these groups over the course of your project
- the potential value of your research to these groups
- any potential risks to these groups, and how these risks will be managed/mitigated.

We do not intend to single out any cultural or ethnic group in this research, and thus we do not anticipate any risk to Māori or other groups in New Zealand. However, we do anticipate potential benefits if the research findings should influence health policy. We have put forward the prevention hypothesis that better mental health care for young people today could have knock-on effects of improving their physical and cognitive health when they reach old age in the future. This hypothesis applies to all groups in New Zealand, including Māori. First, we see an opportunity to *prevent disability among young people*. Young people tend to be physically healthy but they are disabled by behavioral problems, emotional problems, substance abuse, and cognitive impairments, which require mental health care. Second, we see an opportunity to *prevent ill health among older people*, to reduce the future burden of age-related disability from physical and neurodegenerative diseases, by providing better mental health care in early life.

5.6 Anticipated outputs

Describe the anticipated outputs of your proposed project. Include all intermediate and final results; for example, aggregated tables, index, or new methodology. Elaborate on:

- the granularity of your results
- how you considered output rules and confidentiality in your outputs.

Note: We have limitations on outputs with small underlying counts. See [Microdata output guide](#) for the methods and rules for confidentialising output produced from Stats NZ's microdata.

Anticipated outputs will be tables of counts, conditional probabilities, and regression models. Each cell for reporting will be based on approximately 500,000 individuals.

5.7 Alternatives to microdata

Outline any alternatives to using the microdata you identified and explain why they are not appropriate for the proposed project.

Studies of available datasets have been flawed by lifetime retrospective recall and small sample sizes. Data that will enable us to estimate the probability of physical disease diagnosis conditional on history of psychiatric disorder diagnosis are not available at the population level; microdata are the only option.

5.8 Dissemination methods

Describe how the results of your research will be disseminated. Elaborate on:

- the format(s) your results will be published in; for example, published report, in-house report, seminars, paper for journal, or conferences
- how the results of your research will be made available to the public.

Note: We expect researchers to document and share their code on the Wiki in the Data Lab, and on MeetaData once the code has cleared final checks. We also expect researchers to send us links to their research findings so that they can be shared on [Research using Stats NZ microdata](#).

The results will be written up for publication in scientific journals and presented at conferences and other fora in New Zealand and internationally. We would be happy to share code within the datalab, on meetadata, and on the VHIN website (<https://vhin.co.nz/guides/virtual-health-information-network-2/>).

| 5.9 Timeframe | |
|--|--------------|
| Indicate when you need access to the Data Lab. | |
| Preferred start date for access to the Data Lab | 1 July 2019 |
| Estimated end date for access to the Data Lab | 30 June 2020 |
| Outline any dependencies or important dates that affect your application | |

Part 6: Data requirements

Note: We remove or encrypt all personal identifiers in the datasets. Access to microdata is governed by the Statistics Act 1975, which means Stats NZ is legally required to protect confidential personal and business information.

6.1 Data

Through the Data Lab, researchers can access the IDI, LBD, and other Stats NZ surveys. See [Microdata available in the Data Lab](#) to find out what data can be accessed through the Data Lab.

List the data you need access to in order to answer your research question(s). To help us understand your request, explain why you need each dataset. We will need a reason for each dataset requested and it must be clear how each dataset relates to your research. For example:

- Do you need it to answer a certain question?
- Do you need it to control for a variable?

| Dataset name Contains the tables/variables you are interested in using. (eg B4 School Checks) | IDI application code If applying to use the IDI, quote the application code from Data in the IDI . (eg MOH_B4SC) | Reason for access Explain why the dataset is required. |
|---|--|---|
| International travel and migration | CUS | To control for time outside the country. |
| Mortality | MOH_MORTALITY | To test if young-adult psychiatric disorder predicts early mortality. (And to control for exposure time truncated by death.) |
| Pharmaceutical data | MOH_PHARMACEUTICAL | To obtain a proxy definition of treated psychiatric disorder and physical disease by using pharmaceutical prescription, as a sensitivity check on hospital data |
| Publically funded hospitalisation data | MOH_HOSPITAL_DISCHARGES | To estimate the co-occurrence and sequential order of psychiatric disorder and physical disease in individuals |
| Chronic disease dataset | MOH_CHRONIC_CONDITION | To estimate the co-occurrence and sequential order of psychiatric disorder and any chronic physical disease in individuals |
| Life event data | DIA | Using birth information to define cohorts |

If you are a researcher interested in linking data to the IDI or LBD, there is a separate application form to fill in. For more information, see [How to add a dataset to the IDI or LBD](#).

6.2 Ethics approval

If you are requesting access to any Ministry of Health data in the IDI, you will need to check if ethics review is required from the Health and Disability Ethics Committee (HDEC). You must supply us with documentation as follows:

- If HDEC ethics review **is required**, you will need to send us the findings of an HDEC ethics review.
- If HDEC ethics review **is not required**, you will need to send us a letter of confirmation that your project is out of scope for review from HDEC.

For instructions on how to apply for a review or request a letter of confirmation, go to [the HDEC website](#). For more information, see the HDEC website or contact us.

Have you attached either a copy of HDEC's findings, or the letter of confirmation your project is out of scope?
Leave blank if not applicable.

| | | | |
|----------|-----|-----------------------------------|--|
| YES / NO | YES | if NO , provide details | As well as HDEC out of scope (attached) we will also seek ethical review from the University of Auckland Human Participants Ethics Committee (UAHPEC). |
|----------|-----|-----------------------------------|--|

Email your completed application form in Microsoft Word format, and any additional documents, to access2microdata@stats.govt.nz.