# Insights report for Tūwharetoa Iwi Māori Partnership Board

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## Map of Tūwharetoa Iwi Māori Partnership Board (IMPB)

Figure 1 is a map of the boundary for Tūwharetoa IMPB against Aotearoa (left-hand-side) and highlights the main town(s) within the rohe (right-hand side) to give an indication of the areas covered.

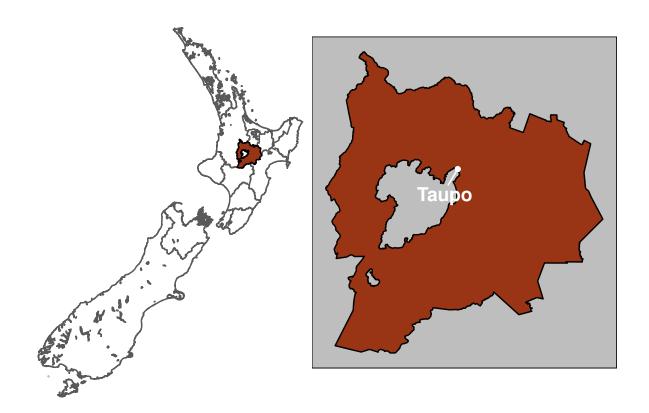


Figure 1: Location of Iwi Māori Partnership Board



## **Demographics**

#### Population base

There is an estimated **10,955 Māori** in Tūwharetoa IMPB (approximately 30 percent of the population within this rohe identify as Māori (40,244 people in total)). This is an estimated 1.4 percent of the total Māori population (806,351 Māori in Aotearoa).

#### **Enrolled population**

Enrolment in a primary health organisation (PHO) enables easier access to services, including vaccinations, and cheaper general practice visits. PHOs are the basis for many screening and prevention programmes.

Of the 10,955 Māori in Tūwharetoa IMPB, **89.9 percent are enrolled with a PHO**. That is less than the national average (91.1 percent of Māori are enrolled nationally).



#### Age and sex distribution

Figure 2 below shows the age distribution for the enrolled population within Tūwharetoa IMPB. The highest proportion of enrolled Māori are in the 05-09 years age group (11 percent of Māori are within this age group). In comparison, the majority of enrolled non-Māori non-Pacific peoples are aged between 75+ years (11.2 percent of non-Māori non-Pacific are within this age group).

Age distribution is an important determinant for health: older age groups are more likely to experience worse health outcomes and need more complex care. Māori are more likely to develop conditions at an earlier age than non-Māori non-Pacific peoples. To address this, programmes often target different age groups for Māori compared to non-Māori non-Pacific peoples (for example, Diabetes and heart checks start at 30 years (Males) and 40 years (Females) for Māori compared to 45 years (Males) and 55 years (Females) for European).

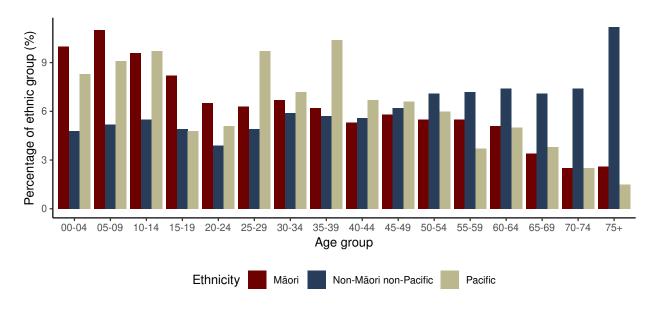


Figure 2: Age distribution of enrolled population by ethnicity, February 2022



Figure 3 below shows the sex distribution for the enrolled population within Tūwharetoa IMPB. The majority of enrolled Māori are Female (53.3 percent of Māori are Female). In comparison, the majority of enrolled non-Māori non-Pacific peoples are Female (50.5 percent of non-Māori non-Pacific are Female).

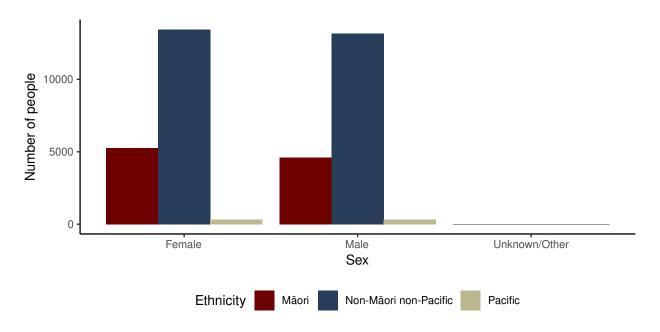


Figure 3: Sex distribution of enrolled population, by ethnicity as at February 2022



#### Lower cost general practice access

There have been various policies implemented to address cost barriers to primary care. Three policies currently implemented are:

- Community Services Cards (CSC) these enable people in need to access services and prescriptions cheaper. A higher proportion of CSC holders in your rohe means a high proportion with low income, or on the pension. A low proportion may mean a lack of awareness of the CSC beenfits, or a higher income community. Adults with a CSC won't pay more that \$19.50 for a standard visit and youth aged 14 to 17 years with a parent/caregiver with a CSC will be charged at most \$13.00. Read more here.
- Very Low Cost Access (VLCA) are general practices (GPs) with an enrolled population of 50 percent or more high needs patients (defined as Māori, Pacific or New Zealand Deprivation Index quintile 5) where the practice agrees to maintain patient fees at a low level. Similar to the CSC, VLCA GPs charge a maximum of \$19.50 for adults aged 18 years and over and \$13.00 for those aged 14-17 years. Read more here.
- Zero Fees for under-14s is a nation-wide service in which children aged 00-13 years enrolled with a general practice will not be charged a fee for a standard visit with a doctor or nurse. In addition, Under-14s will not be charged an after-hours fee or the regular \$5.00 prescription fee (at participating clinics and pharmacies). Read more here.

Figure 4 shows the proportion of Māori in your rohe that have access to these services (left) and the proportion of Māori that have access to at least one of these services (right). 9,775 Māori have access to at least one of the three services named above (99.2 percent of the enrolled Māori population in Tūwharetoa IMPB).

Māori with access to at least one of these services were most likely to have access to a VLCA GP only (5,502 Māori).

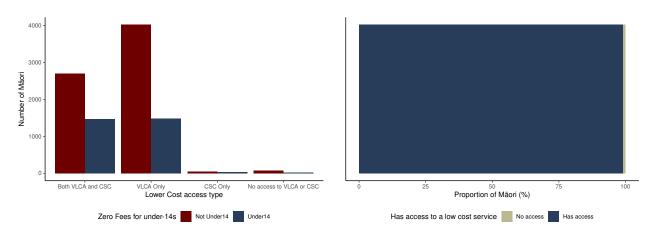


Figure 4: Enrolled Māori population with access to lower cost general practices, by service, as at February 2022



## Social determinants of health

Social determinants of health are the circumstances in the environments in which people are born, grow up, live, learn and work. These circumstances can lead to inequitable health outcomes and are a main focus for public health prevention.

#### Health access deprivation

Health access deprivation is a deprivation score determined by an enrolee's distance from hospitals and general practices. A high proportion of people within the higher deciles (9 and 10) means more people that face geographical difficulties in accessing health services. Potential service innovations that have been used to address these difficulties include the mobilisation of services, for example: the mobilisation of influenza outreach services (See here for a report)[https://www.health.govt.nz/publication/more-just-jab-evaluation-maori-influenza-vaccination-programme-part-covid-19-maori-health-response].

Figure 5 shows the distribution across these deciles by ethnic group. It is evident from this figure that 100 percent of Māori live in high deprivation (decile 9 or 10) areas in relation to access to health care services. In comparison, 100 percent of non-Māori non-Pacific peoples live in high deprivation areas in relation to health care access.

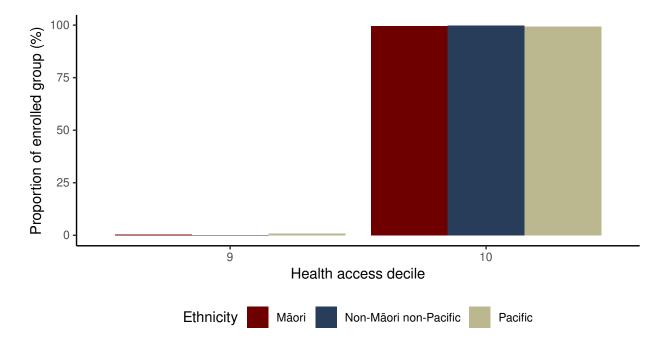


Figure 5: Distribution across health access deprivation quintiles for enrolled population, by ethnicity, as at 2018



#### Overall deprivation

**Overall deprivation** is a combination of the employment, income, crime, housing, health, education and access deprivation measures. These are based on Auckland University's indices of multiple deprivation (IMD), further information on these can be found in this document. Higher deprivation deciles (i.e. 9 and 10) are more likely to experience worse health outcomes.

Figure 6 shows the distribution across the overall deprivation deciles by ethnic group. It is evident from this figure that 39.9 percent of Māori live in a high deprivation (decile 9 or 10) area. In comparison, 12.8 percent of non-Māori non-Pacific peoples live in a high deprivation area.

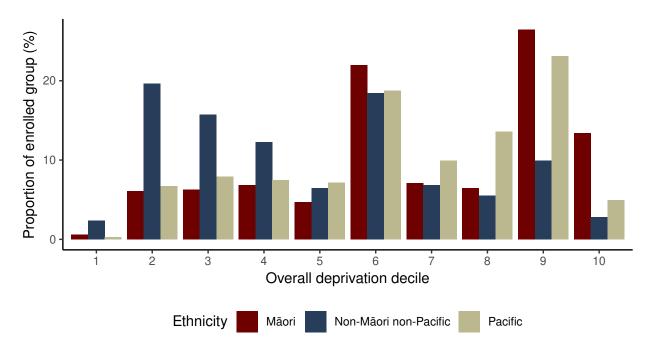


Figure 6: Distribution across overall deprivation quintiles for enrolled population, by ethnicity, as at 2018



#### Secondary deprivation measures

Further disaggregating the overall distribution from the figure above into the secondary determinants gives a more detailed insight into which determinants are most common for Māori within your rohe. The definitions of these determinants are as follows:

- Employment deprivation based on unemployment and sickness benefits.
- Income deprivation based on income related benefits and working for family benefits.
- Crime deprivation victimisation rates including assault, theft etc.
- Housing deprivation overcrowding in households (rented etc.)
- Education deprivation based on educational attainment.
- Access deprivation distance to essential services (i.e. GPs, supermarkets, etc.)

Figure 7 shows the proportion of Māori living in high deprivation for these secondary deprivation measures. Education is the most commonly experienced deprivation for Māori in Tūwharetoa IMPB (5,677 Māori live in areas with high Education deprivation - 57.6 percent of Māori).

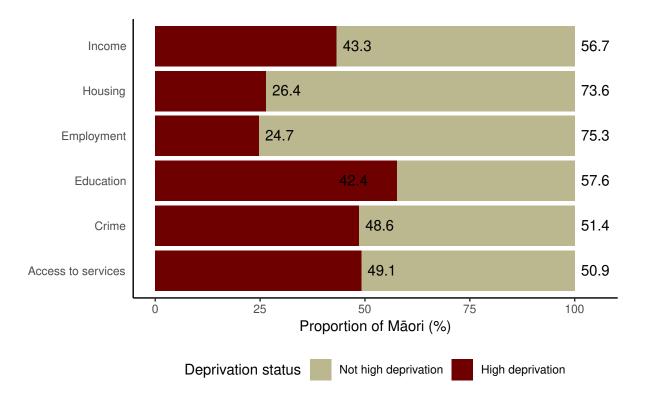


Figure 7: Proportion of Māori living in deprived areas, by secondary level deprivation measures, as at 2018



#### **Health Outcomes**

#### Secondary care usage

#### **Emergency Department events**

In New Zealand, emergency departments (EDs) provide care and treatment for patients with real or perceived, serious injuries or illness. This includes providing resuscitation and stabilisation of critically unwell or injured patients that often require admission to hospital. An ED will conduct sufficient work-up of a patient (eg, physical examination, laboratory tests, x-rays) to decide whether the patient should be discharged or admitted to the hospital.

The vast majority of EDs are open 24 hours a day, seven days a week. They are publicly-funded, although some facilities may charge for general practitioner (GP)-level care at an ED.

Figure 8 shows the rate (per 100,000 enrolees) of ED events by ethnicity (left-hand-side), and the rate (per 100,000 enrolees) of ED events not covered by ACC by ethnicity (right-hand-side). Higher ED events give an indication as to health need that isn't being met by primary healthcare. Removing ACC claims gives a stronger indication of this as it removes ED events known to be accident-related. This figure is intended to give a high-level indication of ED use in your rohe, it is difficult to draw further conclusions on the cause of ED events without investigating the underlying conditions related to the ED attendances. It is evident from this figure that Māori experience an inequitable rate of non-ACC covered ED attendances in 14 of the age groups. The 70-74 age group has the largest difference between Māori and non-Māori non-Pacific peoples ED attendance rates (Māori aged between 70-74 are 2 times more likely to attend an ED for a non-ACC related event).



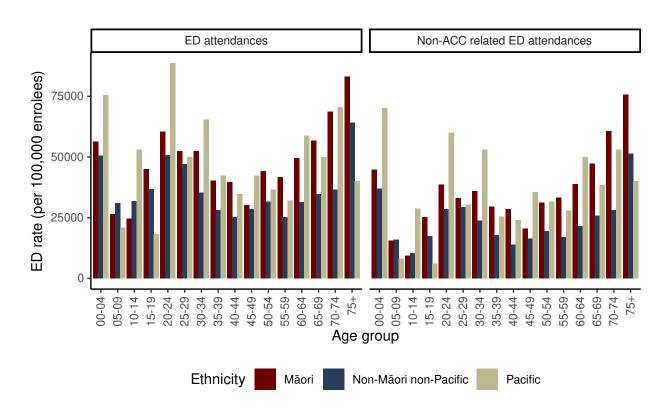


Figure 8: Age-specific emergency department usage per 100,000 enrolees - all and non-ACC related, by ethnicity and age, 2021/22



#### **Hospitalisations**

Figure 9 shows the rate (per 100,000 enrolees) of hospitalisations by ethnicity (left-hand-side), and the rate (per 100,000 enrolees) of hospitalisations not covered by ACC by ethnicity (right-hand-side). This figure gives a good indication the sub-population groups with high secondary care usage.

It is evident from this figure that Māori experience an inequitable rate of non-ACC related hospitalisations in 14 of the age groups. The 15-19 age group has the largest difference between Māori and non-Māori non-Pacific peoples hospitalisation rates (Māori aged between 15-19 are 2.1 times more likely to be hospitalised for a non-ACC related event as non-Māori non-Pacific peoples).

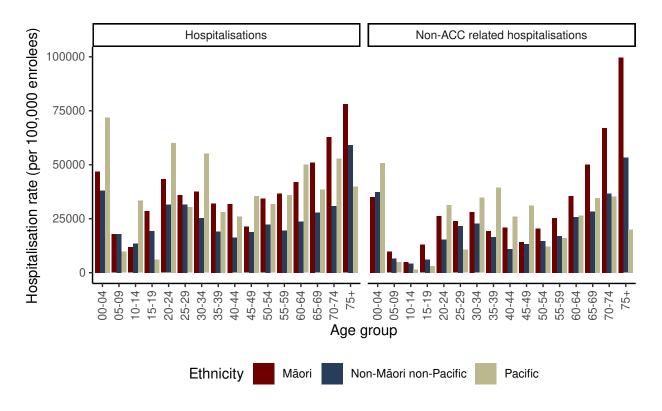


Figure 9: Age-specific hospitalisation rates per 100,000 enrolees - all and non-ACC related, by ethnicity and age, 2021/22



#### Ambulatory Sensitive Hospitalisations (ASH)

Ambulatory-sensitive hospitalisations (ASH) are defined as hospitalisations for conditions that could have been treated or managed in primary or community care, preventing the hospitalisation. Time trends of ASH events can be used to monitor improvement or to identify issues in the effectiveness of primary and community care. The current list of conditions has been used since September 2015.

ASH rates are also determined by other factors, such as hospital emergency departments, admission policies, health literacy and social determinants of health. This measure can also highlight variation between different population groups that could assist with planning to reduce disparities.

It has been suggested that admission rates can serve as proxy markers for primary care access and quality. High admission rates can indicate barriers to accessing primary care. Some of these barriers include an inability to access care in a timely fashion, poor care coordination or care continuity, or structural constraints such as limited supply of primary care workers. ASH events are only calculated for the 00 to 09 years and 45 to 69 years age groups.

In 2020/21, Māori in Tūwharetoa IMPB experienced a total of 193 ASH events. Figure 10 shows the age-specific ASH rates per 100,000 people by ethnicity. It is evident from this graph that Māori experience a higher ASH rate than non-Māori non-Pacific peoples in all of the age groups. The 05-09 age group has the largest difference between Māori and non-Māori non-Pacific peoples ASH rates (Māori aged between 05-09 are 4 times more likely to experience an ASH event).



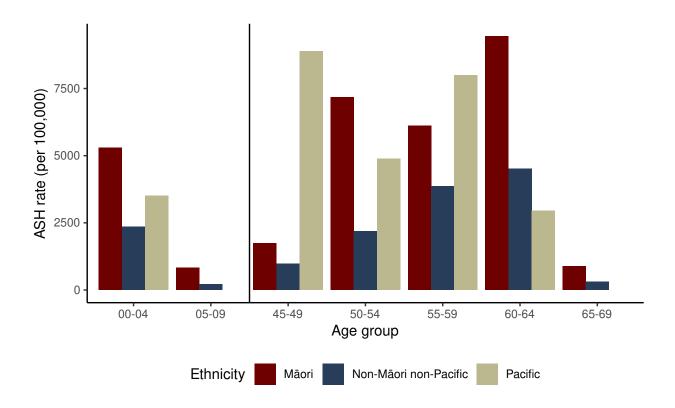


Figure 10: Age-specific ASH rates per 100,000 for enrolled population in 2020/21, by ethnicity

#### Mental Health and Diabetes

#### Mental health

Mental health is an important aspect of health. In this report, mental health is measured on an enrolee's use of a mental health services or are dispensed any known mental health related pharmaceutical. This is a proxy measure of mental health problems and may not reflect mental health problems that are not being addressed by the health system currently. It is well documented that rangatahi Māori suffer worse mental health outcomes than pakeke Māori as well as rangatahi Māori non-Māori non-Pacific peoples. Figure 11 shows the rate per 100,000 enrolees that either have accessed a mental health service or dispensed a mental health related drug.

It is evident from this graph that Māori experience higher rates of mental health problems for 3 of the age groups. The 00-04 age group has the largest difference between Māori and non-Māori non-Pacific peoples mental health rates (Māori aged between 00-04 are Inf times more likely to have accessed a mental health service or dispensed a mental health related drug).



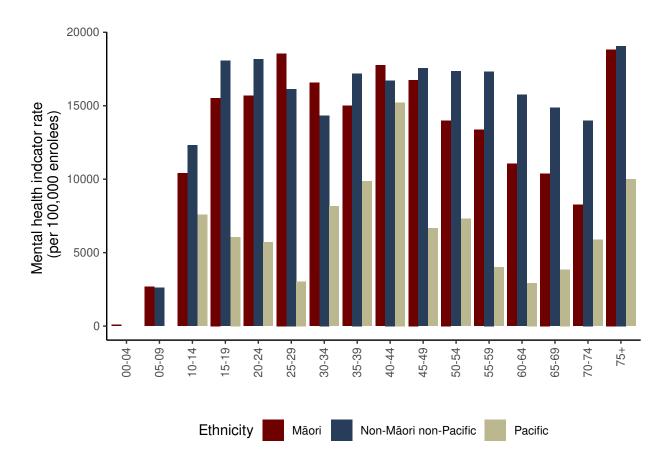


Figure 11: Age-specific rate of mental health indicators per 100,000 enrolled population in 2021/22, by ethnicity and age



#### **Diabetes**

Diabetes is a chronic condition that can lead to worse health outcomes (such as limb amputation or renal failure). In this report, diabetes refers to either type one or type two diabetes. Generally, most people with diabetes aged under 25 years will have type one diabetes and approximately 90 percent of those aged 25 years and over are expected to have type two diabetes. People with diabetes are more likely to have other conditions (such as chronic heart disease). More information is available on the Ministry website. Prevalence is a measure of how common a disease is at a point in time - it is used to measure the burden of a disease in the population, this helps us to understand the demand on health services to manage this disease.

Figure 12 shows the distribution of diabetes for the enrolled population by age and ethnicity. From this figure, it is evident diabetes is more prevalent for Māori in all of the age groups. The 40-44 age group has the largest difference between Māori and non-Māori non-Pacific peoples diabetes prevalence (Māori aged between 40-44 are 3.5 times more likely to have diabetes).

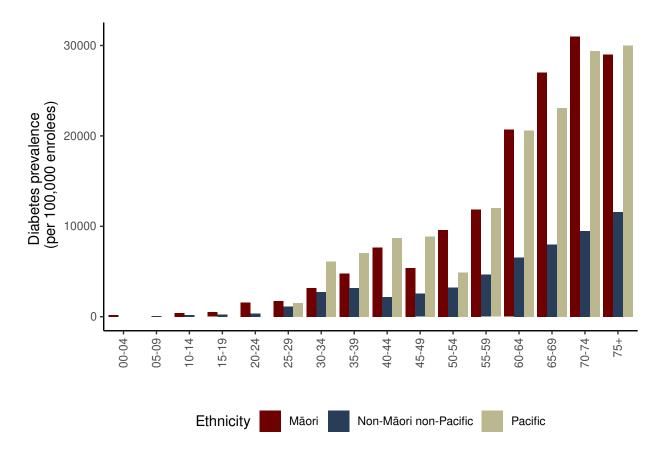


Figure 12: Age-specific rate of diabetes prevalence per 100,000 enrolled population in 2020/21, by ethnicity and age



### Appendix One - data sources

- Population data sourced from Stats NZ data finder, at Meshblock 2018 level.
- Enrolment, VLCA, CSC demographic, and qualifying encounters data sourced from the National Enrolment Scheme (NES), Ministry of Health, 2021/22.
- Enrolment numbers are used as a proxy measure for denominators when calculating rates, due to the absence of population estimates at the needed level.
- ASH events and hospitalisations sourced from the National Minimum Dataset (NMDS), Ministry of Health, 2021/22.
- Emergency Department Usage sourced from the National Non-Admitted Patient Collection (NNPAC), Ministry of Health, 2021/22.
- Diabetes estimates sourced from the Virtual Diabetes Register (VDR), Ministry of Health, 2020/21.
- Mental Health indicator sourced from a combination of PRIMHD and Pharmaceutical Collection (PHARMS).
- Information shown in this report has been calculated for the enrolled population only. Therefore, it is likely to undercount the true number and rates reported. This undercount is likely to impact Māori numbers and rates disproportionately to non-Māori non-Pacific peoples given the difference in enrolled population (as evident in the Enrolled population section). Results presented in this report may differ from other reports as different methods and criteria are used to analyse the data.