



Rapua Te Ara Matua

Equity Report



Tēnā koutou

On our life's journey, at times we find ourselves in the main current, moving effortlessly and harmoniously, where everything is achievable and travelling is easy and safe.

Other times we find ourselves away from the strength and protection of the main current. We may find ourselves in eddies and whirlpools, seemingly going in circles and using all our precious energy just to stay afloat, or we may have come across an obstacle or undercurrent. At these times we can struggle to find our way to the main current and we are in need of help and support.

In te ao Māori the main current of a river is referred to as Te Ara Matua. While some may think it flows in the middle of the river, it actually flows from bend to bend. Those familiar with the river know intuitively where Te Ara Matua is, how to get to it and stay there. The same is in life. As we journey many know where and how to live our “best lives” while for others this is not so and navigation is needed.

The metaphor of the river where equity is likened to the flow of Te Ara Matua, which is the current we gain most benefit from travelling on, is used throughout this report.

The health equity gaps illustrated indicate the relative distance our communities are from Te Ara Matua. While many communities benefit from travelling on or close to the main current, this report illustrates the poor health outcomes experienced by communities who are distanced from Te Ara Matua. Inequities embedded in the healthcare system are experienced across a range of measures found at almost every bend of the river, at every stage of life.

In Aotearoa New Zealand, the persistent health equity gap between Māori and European/Other is greater than that between wealthy and poor, and can be seen in almost every health and wellbeing measure available. The equity gap results in differences in health outcomes that are not only avoidable but unfair and unjust¹.

Waikato District Health Board (DHB) is embedded in a healthcare system which has privileged the needs of the majority while failing to meet the needs of all, in particular Māori and Pacific peoples². As Crown entities and therefore partners to Te Tiriti o Waitangi, Waikato DHB is party to the systemic failure to adequately address and eliminate equity gaps and provide services that are culturally competent and holistic for tāngata whenua.

This systematic failure demonstrates an acceptance that a lack of equity is both inevitable and tolerable.

Waikato DHB acknowledges its responsibility to identify and address current equity gaps. This report focuses primarily on those who experience the most persistent equity gaps, Māori and Pacific peoples, while understanding that other population groups also experience an equity gap in health outcomes. A benchmark is provided for future use and Waikato DHB will continue to monitor and report annually on progress toward eliminating the equity gaps to ensure that all are successfully navigating Te Ara Matua.

Equity gaps do not need to be a feature of Aotearoa society and in health they can be reduced and eliminated. This report cites initiatives implemented by Waikato DHB that demonstrate how greater equity can be achieved in healthcare. Waikato DHB is also able to partner with those groups and agencies which provide support and services in other areas to improve

health and wellbeing outcomes. It should be noted that initiatives which benefit and uplift those who experience the greatest equity gaps are designed to improve the health outcomes for all and will not be undertaken at the expense of others.

It is important for Waikato DHB to inform the community and work with our partners to raise awareness, and signal our willingness to work with those also responsible for addressing underlying determinants of health inequity. Partners will include iwi Māori, local government, and organisations working across education and training, social services, housing and employment.

We acknowledge this report may not be easy reading for some and for others it is an affirmation of what is already a reality. Nevertheless, the information is presented with the intent to inform and as an invitation to collaborate in designing solutions.

Will you join with us in supporting those wanting to move from the whirlpools and eddies, past the undercurrents and obstacles and on to Te Ara Matua?

¹ Ministry of Health. 2019. Achieving Equity in Health Outcomes: Summary of a discovery process. Wellington: Ministry of Health.
² Came, H., McCreanor, T., Doole, C., & Rawson, E. (2016). The New Zealand Health Strategy 2016: wither health equity? NZMJ, vol 129, no 1447. pp.72-77.

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Hei whakataki

Setting the scene

From Mokau and Taumarunui in the south to Meremere and Coromandel in the north, the Waikato DHB region covers an area of more than 21,000km². Situated in the centre of Te Ika-a-Māui (the North Island), the region is the corridor for travel to the north and south.

There are an estimated 438,300 people³ in the region, with 23% of the population identifying as Māori and 3% as Pacific peoples (prioritised ethnicity). An additional 1.6% of population identify as having Pacific ethnicity as well as Māori. Waikato DHB serves the highest population of Māori of any DHB.

Iwi in the Waikato DHB region include Hauraki, Maniapoto, Raukawa, Waikato, Ngāti Tūwharetoa and Whanganui. A significant number of Māori living here affiliate to iwi outside the district. The figure 1 map shows the overlap between iwi rohe and the seven DHB localities.

Of Pacific peoples in the DHB region, the greatest number live in Hamilton City (5% of that area's population) while the highest concentration live in the South Waikato area (13%).

Māori and Pacific peoples have more youthful populations than the rest of the Waikato population. This means more are under five-years-old (Māori 12%, Pacific 15% and European/Other 6%) and fewer are over the age of 65 (Māori 5%, Pacific 2% and European/Other 18%).

As you will see in the body of this report, the differences in age structure can be attributed to higher birthing rates and higher rates of avoidable deaths for both Māori and Pacific peoples.

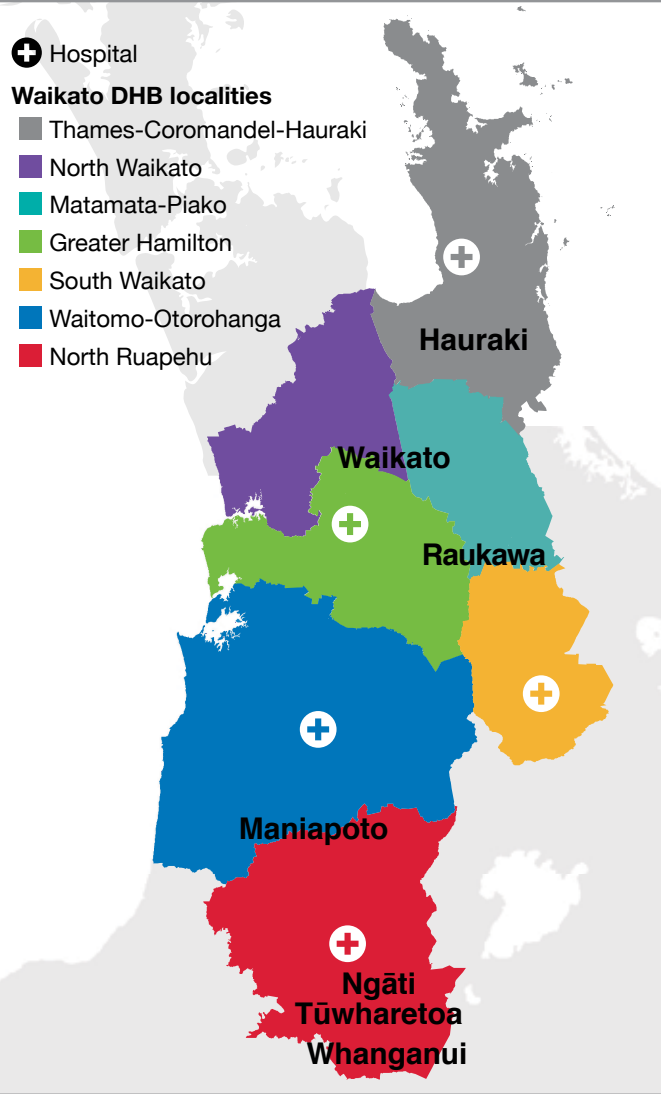


Figure 1: Iwi rohe and Waikato DHB Localities

³ Statistics NZ, 2020 Population estimate for Waikato DHB



He piko he taniwha

Challenges at each bend

Aue, taukiri e!!

The inequities identified in this report present a distressing life journey for Māori children born today. In all the reported measures, Māori are consistently further from Te Ara Matua. To assist with your understanding of what this report is sharing, imagine your journey along the river of life if born to a wāhine Māori in 2020.

As a whānau living in a deprivation 10 (highest deprivation) area where access to maternity care and resources is limited both in person and via technology, your mother would be less likely to have had the support of a midwife and/or GP (i.e. registered with a primary health organisation) during the first trimester. This increases the risk that health issues such as gestational diabetes and congenital defects would have gone undetected. Without midwife or GP support the likelihood that your mother and whānau would have received education or support about the importance of being smokefree and alcohol free during pregnancy or the importance of you being breastfed is reduced. At birth your health has already been compromised by increased risk of low birth weight, ear infections, asthma, leukaemia and sudden unexplained death in infancy (SUDI).

It is more likely as Māori that you will be living in high deprivation (poorer) areas and in poor quality housing. Living in a cold, drafty and damp home increases the possibility that you will be admitted to hospital in your

first 1000 days with respiratory issues. These hospital admissions are likely to be more frequent if your mother smoked during her pregnancy and if you were not breastfed.

As a Māori infant there is a greater possibility that you would not have been fully immunised by eight months and are not protected against preventable childhood diseases including rotavirus, whooping cough, and measles – all of which may require hospitalisation and can, at times, lead to death at an early age.

At the start of primary school you may be one of the 65% of tamariki Māori who has already developed tooth decay. You may also be one of the nearly 20% who has not had their teeth checked by oral health services at school.

You may also be at risk of developing a sore throat. This can be caused by a number of bacteria or viruses, but one bacteria – group A streptococcus (GAS) – can cause acute rheumatic fever if it is not treated. This can cause permanent damage to the heart. If you have had acute rheumatic fever, you will need to have monthly antibiotics and regular hospital follow ups to stop you having more sore throats caused by GAS, as this can cause further heart damage.

Having experienced health and hardship issues in childhood, it may be a challenge to maintain a healthy lifestyle as you enter your adolescent and young adult years (15-24) faced with pre-existing respiratory,

oral health or cardiac conditions. At this age you are also more likely to have left school without a qualification and be unemployed or not in education or training.

If living in a deprivation 10 area, you may experience limited access to transport and telecommunications which presents problems in getting to and engaging with health services. This is also a time in your life when you are more likely to have taken up smoking tobacco and have a higher chance of needing support from the mental health system. Sadly, this is also a time when you are at highest risk of ending your life journey and you may be one of the many rangatahi Māori who die by suicide.

Another effect of not being enabled to lead a healthy lifestyle is the significant weight gain you may experience as you become an adult which will negatively impact your overall health and lead to more than one health condition (comorbidities). The continuing distance from Te Ara Matua, a pattern of not having the means to engage with health services, continues into your middle age years. This affects your ability to take up screening opportunities for preventable and manageable diseases such as breast cancer, diabetes and heart disease. The risk of heart attack, ischaemic heart disease and stroke becomes heightened, as does the likelihood that you will not be assessed for cardiovascular disease.

You will also be at higher risk of other chronic health conditions such as type 2 diabetes, cancer and renal failure which reduce both your quality of life and life expectancy.

As the stress of living in a high deprivation environment and the burden of health issues through preventable and treatable diseases continues, your mental wellness is increasingly at risk. You are more likely to be placed in a mental health facility through the courts and may choose to act on your suicidal thoughts.

If you have navigated your life journey into retirement years (over 65) hospitalisation for avoidable conditions will continue at a significantly higher rate.

When looking back across your life journey, the majority has been lived away from Te Ara Matua. It is expected that your life will end 5-10 years earlier than those born at the same time as you who have had the privilege of a life within or closer to Te Ara Matua.

We also note that even if you had been born into a Māori whānau living in a low deprivation environment (the most wealthy) you would likely have a higher risk of earlier death than a European/Other infant born into a family living in a high deprivation (the most poor) environment.

In Aotearoa, through no fault of your own or your whānau, being born tangata whenua Māori, increases the risk of greater adverse health impacts than if you were born European/Other.



This section contains a selection of 20 measures that are useful indicators of how life's journey is progressing for Māori and Pacific peoples. The measures have been clustered into the stages of life (each bend in the river), and flow from birth onwards.

1 Measure 1 Primary Health Organisation (PHO) enrolment

Access to healthcare in the community is largely provided by a general practitioner (GP), practice nurse, nurse practitioner, pharmacist, or other health professional working within a general practice. These health services are part of PHOs. As a first point of contact primary care offers a broad range of health services including diagnosis and treatment, health education, counselling, disease prevention and screening. Access to primary healthcare is linked to early detection of health issues such as diabetes, obesity, asthma (and other respiratory conditions), cancer, and heart disease, leading to better health outcomes.

Figure 2 shows:

- an equity gap of approximately 11% between Māori and European/Other enrolled with a PHO
- an equity gap of approximately 13% between Māori and Pacific peoples enrolled with a PHO
- an additional enrolment of 3.3% (3464) Māori is needed to reach the national target of 90% in the Waikato DHB region

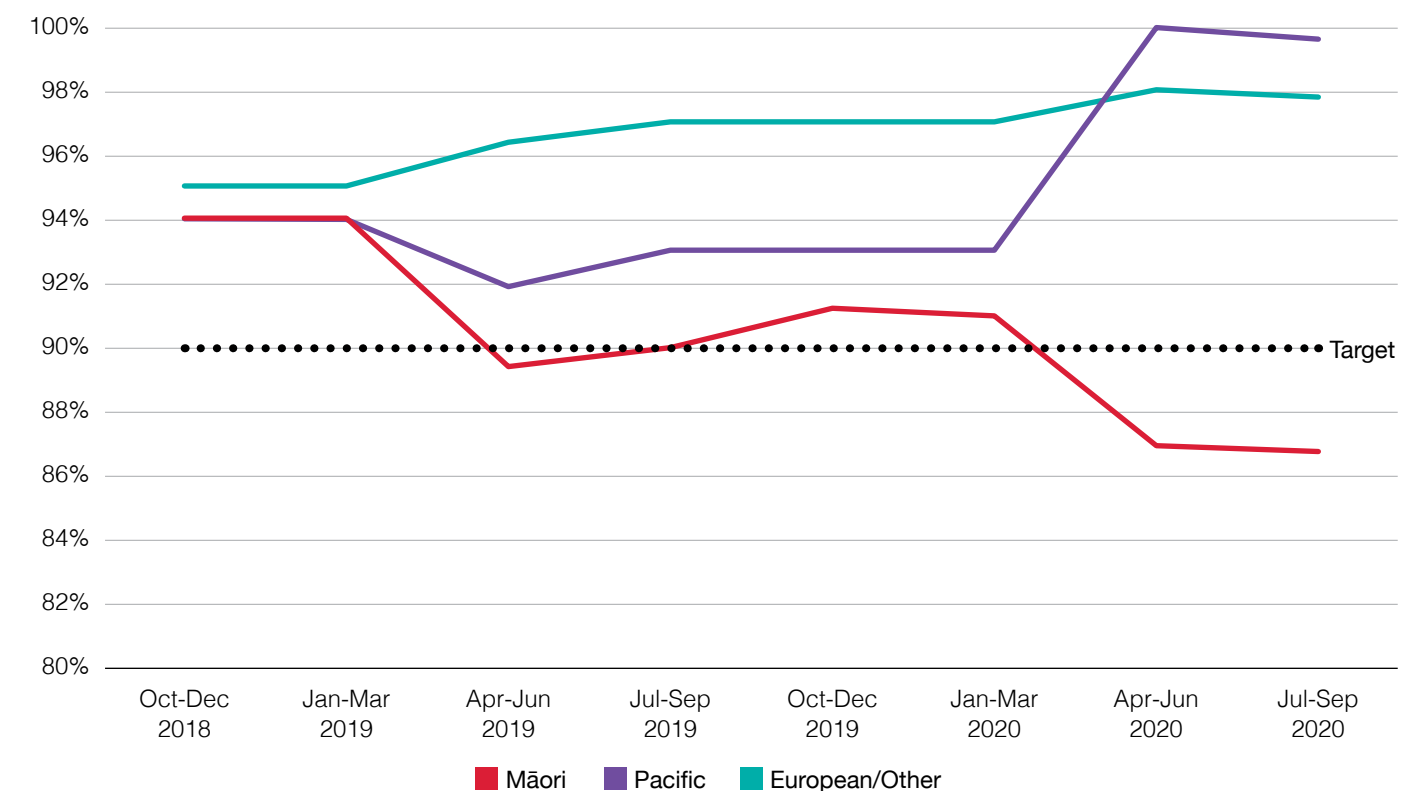


Figure 2: **Percentage of people enrolled with a PHO** Source: trendly.co.nz
NB: The change in the proportion enrolled in a PHO in the April-June 2020 quarter is due to a change in projected population denominator used by the Ministry of Health.

Data relating to Pacific peoples

Much of the data related to Pacific peoples throughout this report is based on low population group numbers. Smaller numbers are likely to present greater changes or fluctuations in data. Overall trends for Pacific peoples are more similar to Māori than to European/Other.

Mō ngā pēpi me ngā tamariki

Babies and children

Across the Waikato DHB region there are over 5000 births each year. Approximately 37% of the pēpi born have Māori whakapapa, which reflects a high birth rate for Māori. Over 80% of Waikato births occur in Hamilton city although approximately 60% of those are to women who live outside the city and travel to Hamilton to give birth. How well children do during their first 1000 days has a profound impact on a child's ability to grow, learn and thrive. This is when a child's brain begins to grow and develop. The foundations for a healthy life are laid in pregnancy, infancy and childhood⁴.

Across our region there are approximately 25,000 children aged under five of whom 10,000 are Māori. Equity gaps in the healthcare system for children include access to preventive activities such as immunisations and oral health checks.

The measures presented in this section as an indication of how life's journey is starting off for Waikato babies and children are:

- early registration with midwife
- tobacco smoking during pregnancy
- breastfeeding
- immunisation at eight months
- ambulatory sensitive hospitalisations
- oral health
- rheumatic fever



⁴ www.babyfriendly.org.nz/resource/benefits-of-breastfeeding

2 Measure 2

Early registration with midwife

Access to a midwife at an early stage and throughout pregnancy is central to our maternal healthcare system. Midwives:

- help to protect and enhance health and wellbeing for women, children, and whānau
- promote positive transition to parenthood
- support maternal health to give babies a great start at the beginning of life
- aim to meet the individual needs of women through engagement in the continuity of care model of midwifery

Figure 3 shows:

- there is a 20% or greater equity gap for Māori and Pacific women compared to European/Other women registered with a midwife early in their pregnancy
- while there was a decrease in registrations across all groups in 2018, the registrations for European/Other women showed a greater increase in 2019 than for Māori and Pacific women

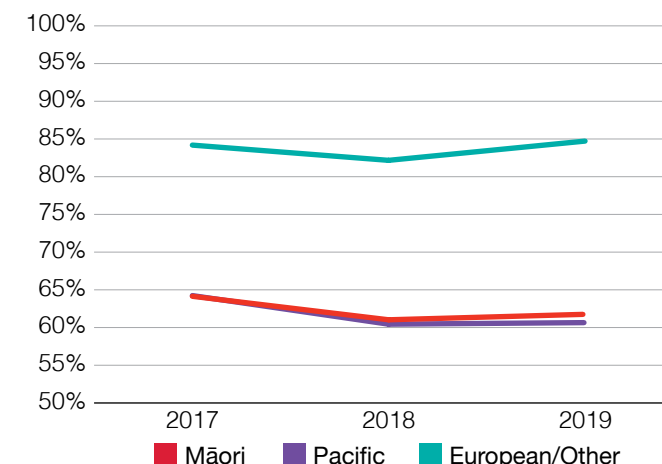


Figure 3: Percentage of women registered with a midwife in the first trimester of pregnancy

Source: National Maternity Collection, Ministry of Health

3 Measure 3

Tobacco smoking during pregnancy

Tobacco smoking during pregnancy has a range of adverse outcomes for women and babies. It results in higher risk of miscarriage and low birth weight. Complications related to low birth weight in babies may include infection, brain haemorrhage, heart problems and blindness. It is also a major risk factor for sudden unexplained death in infancy (SUDI). Smoking during pregnancy also increases risk later in childhood for illnesses such as ear infections and glue ear, asthma, and leukaemia.

Figure 4 shows:

- the number of Māori women recorded as current tobacco smokers at their first Lead Maternity Carer (LMC) registration has declined but remains much higher than for other groups
- an equity gap greater than 20% between Māori and European/Other women

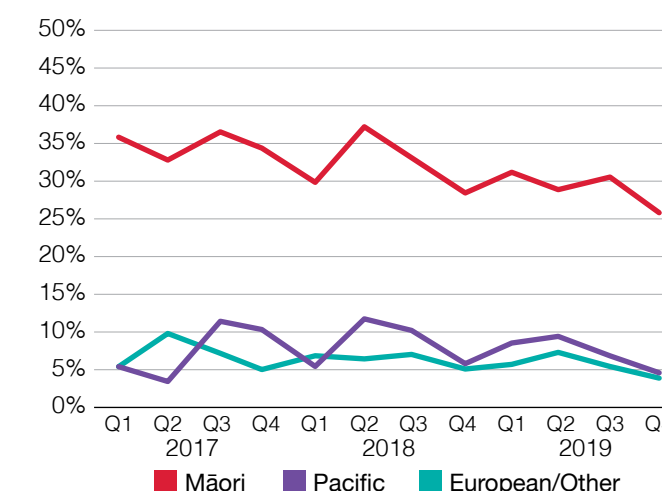


Figure 4: Percentage of women smoking at first LMC registration

Source: MOH National reporting (QlikSense); Numerator = no. of Mothers with Maternal Smoking Status = Yes at first LMC registration (incl. Prenatal and postnatal Smoking status); Denominator = Births

4 Measure 4 Breastfeeding

Breastfeeding (when possible) supports optimal health and wellbeing for babies. It is important that new mothers are well supported to enable successful breastfeeding. Health benefits of breastfeeding for babies include a lower risk of respiratory infections, allergies such as asthma, eczema and lactose intolerance, type 1 and 2 diabetes, atopic disease, gastroenteritis, coeliac disease, hypertension, obesity, high blood pressure and cholesterol, and SUDI⁵.

Figure 5 shows:

- European/Other women breastfeed at a higher rate than Māori and Pacific women

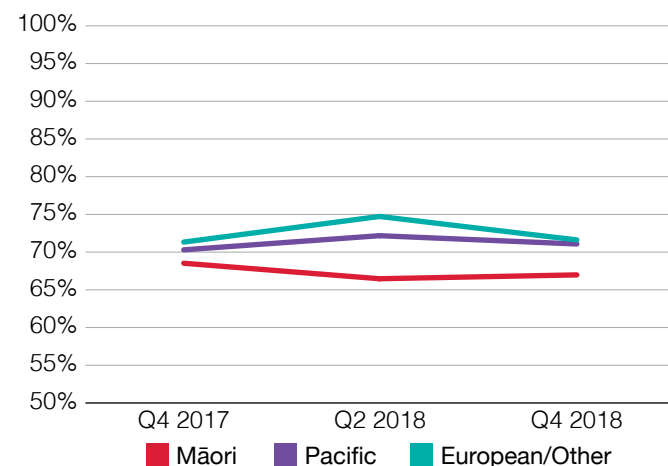


Figure 5: **Percentage of women breastfeeding at time of discharge by midwife**

Source: WCTO report by Indicator (Indicator 05)

5 Measure 5 Immunisation at eight months

Immunisations are an important preventive activity to support optimal health and wellbeing across the population. They help to reduce avoidable hospitalisations (see measure 6). In recent years there has been an emphasis on improving childhood immunisation rates and prioritising Māori and Pacific children to ensure equitable access, which has been effective. However, there is still a gap for Māori children.

To be fully immunised at eight months a child would have had the following vaccinations:

- Six weeks: rotavirus, diphtheria/ tetanus/ pertussis/ polio/ hepatitis B/ haemophilus influenza type b, pneumococcal
- Three months: rotavirus, diphtheria/ tetanus/ pertussis/polio/ hepatitis B/ haemophilus influenza type b, pneumococcal
- Five months: diphtheria/ tetanus/ pertussis/ polio/ hepatitis B/ haemophilus influenza type b, pneumococcal

Figure 6 shows:

- Māori babies are less likely to be fully immunised at eight months
- an equity gap of over 10% between Māori and European/Other babies

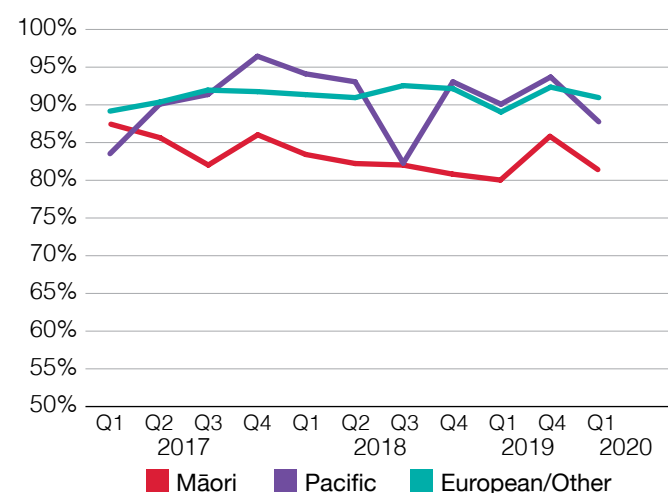


Figure 6: **immunisation (fully immunised) rates at eight months** Source: NIR standard monthly reports

6 Measure 6 Ambulatory Sensitive Hospitalisation (ASH)

Ambulatory Sensitive Hospitalisation (ASH) measures hospital stays that could have been avoided if earlier care was provided at home or in the community.

They are mostly acute admissions which are considered potentially reducible through treatment or interventions deliverable in a primary care setting.

There are a number of conditions where there is evidence that good primary care can influence infant hospitalisation rates such as management of asthma, skin infections or dental care.

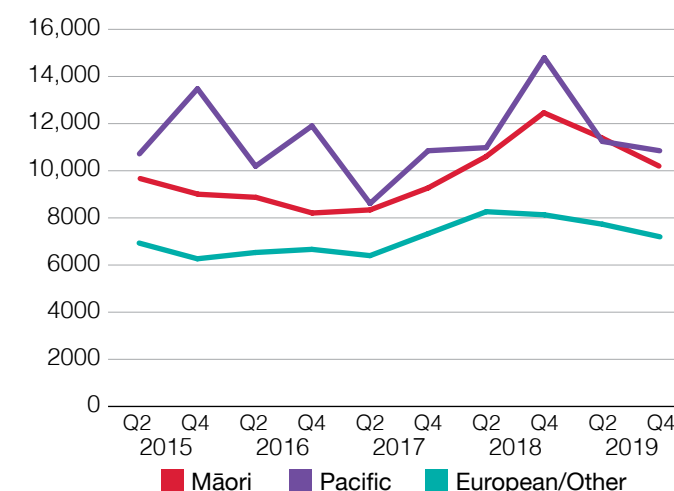


Figure 7: **Ambulatory Sensitive Hospitalisation rates per 100,000 in 0-4 year olds**

Source: Ministry of Health System Level Measure reports

Figure 7 shows:

- Māori and Pacific 0-4 year olds have a higher rate of avoidable hospitalisations (ASH) per 100,000 population. This indicates lower access to primary care

Figure 8 shows:

- the equity gap in respiratory condition ASH rates between European/Other and Māori children has remained consistent over the period reported

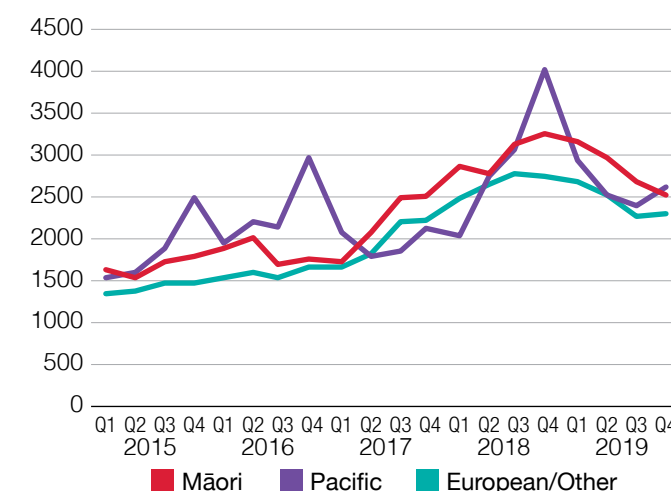


Figure 8: **Ambulatory Sensitive Hospitalisation rates for respiratory conditions in 0-4 year olds**

Source: Ministry of Health System Level Measure reports

⁵ www.babyfriendly.org.nz/resource/benefits-of-breastfeeding

7 Measure 7 Oral health

Good teeth throughout childhood is an important determinant of adult health. Early childhood caries (dental cavities, tooth decay) can indicate an increased likelihood for more widespread health issues such as diabetes and cardiovascular disease⁶.

Regular oral health checks from an early age help to support healthy teeth. Oral health provisions can prevent problems by providing special treatments such as fluoride varnish. Oral health checks also identify cavities early and can prevent them from getting worse. Research indicates there is a strong and consistent association between socioeconomic status and the prevalence and severity of oral diseases⁷ and this association exists from early childhood to older age.

Figure 9 shows:

- Māori and Pacific children are much more likely to have tooth cavities before their fifth birthday than European/Other children
- an equity gap of approximately 30% between Māori children and European/Other children
- an equity gap of approximately 20% between Pacific children and European/Other children

Figure 10 shows:

- Māori and Pacific children are less likely to have oral health checks than European/Other children
- an equity gap of approximately 18% between Māori and European/Other children
- an equity gap of approximately 8% between Pacific and European/Other children

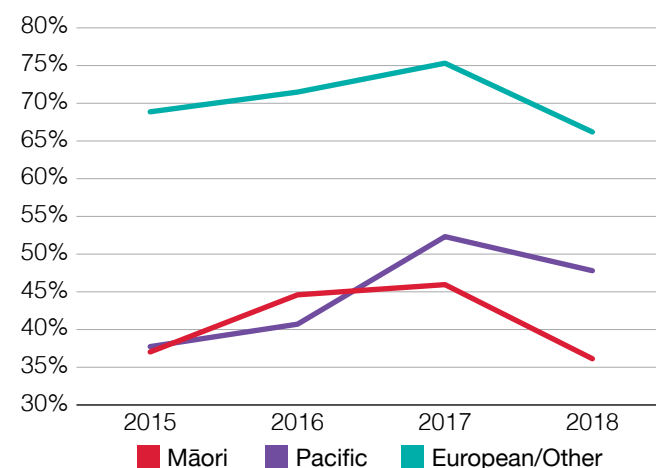


Figure 9: **Percentage of 5 year olds free of tooth cavities**

Source: Ministry of Health, Oral Health Data and Statistics 2015-2018

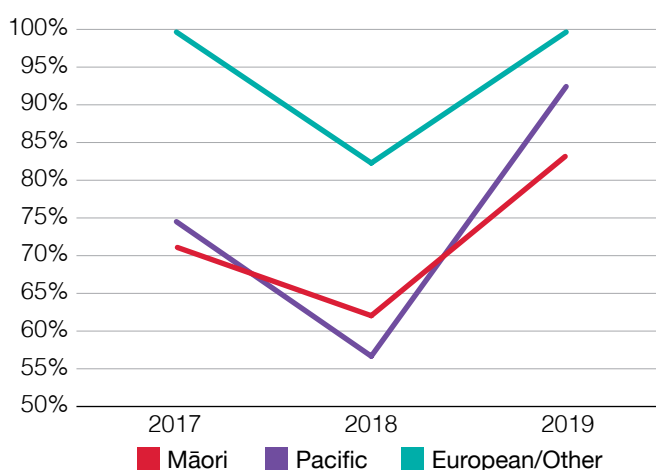


Figure 10: **Percentage of oral health checks in school aged children**

Source: Community Oral Health Annual Reporting, Waikato DHB

8 Measure 8 Rheumatic fever

Rheumatic fever is a serious and preventable illness which usually affects children living in conditions of poverty. New Zealand has the unenviable record of having the highest rates of rheumatic fever in the OECD.

It starts with a sore throat that is infected by the group A streptococcus (GAS) bacteria. If the sore throat is untreated it can lead to acute rheumatic fever which has lifelong consequences that are likely to include hospitalisation, follow-up requirements, monthly antibiotics, complications in pregnancy, heart complications, and the potential need for surgery. Almost all cases are in Māori and Pacific children.

A rheumatic fever prevention campaign to identify and treat streptococcal sore throats has been operating for a number of years.

Figure 11 shows:

- cases of rheumatic fever in Māori and Pacific children are trending down but remain well above European/Other children

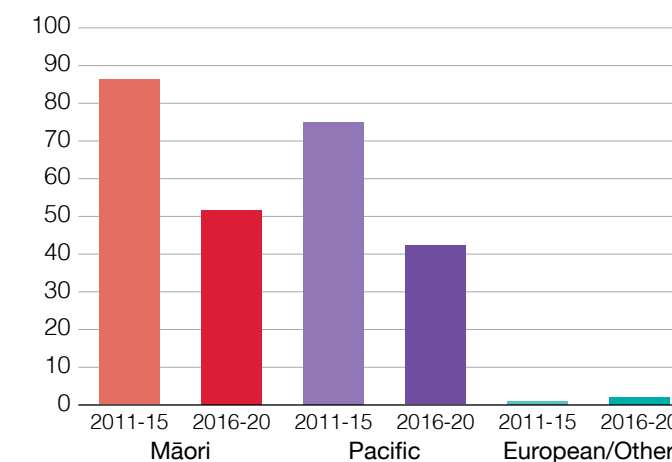


Figure 11: **Prevalence of rheumatic fever initial attacks per 100,000**

Source: EpiSurv Custom Extract – 'Rheumatic Fever', ESR. Age and sex by ethnic group for census usually resident population counts, 2006, 2013 and 2018 Census (RC, TA, SA2, DHB), Stats NZ. Note: Māori and Pacific populations are grouped as total responses, which means that the population sizes are larger as people select more than one ethnicity; the calculated prevalence is slightly lower than if prioritised ethnicity data was used



⁶ Satur JG, Gussy MG, Morgan MV, Calache H, Wright C. Review of the evidence for oral health promotion effectiveness. Health Education Journal. 2010;69(3):257-266.

⁷ Peres MA, Macpherson LMD, Weyant RJ, Daly B, Venturelli R, Mathur MR, Listl S, Celeste RK, Guarnizo-Herreño CC, Kearns C, Benzian H, Allison P, Watt RG. Oral diseases: a global public health challenge. Lancet. 2019 Jul 20;394(10194):249-260. doi: 10.1016/S0140-6736(19)31146-8. Erratum in: Lancet. 2019 Sep 21;394(10203):1010. PMID: 31327369.



Mō ngā rangatahi Youth

Waikato rangatahi are ethnically diverse and many identify with more than one ethnic group. The 15-24 age group are generally low users of healthcare services. The most common causes of death in this group are accident and self-inflicted injury (death by suicide). This is particularly true for young males. Mental health and general wellbeing issues may disrupt educational achievement and employment opportunities. An estimated 10% of 15-19 year olds and 14% of 20-24 year olds in the Waikato were not in employment, education, or training (NEET) in 2018. The overall NEET rates for all 15-24 year old rangatahi Māori was 19%, Pacific 16%, and 10% for European/Other⁸.

The measures presented in this section as an indication of how well life's journey is progressing for Waikato rangatahi are:

- outpatient Did Not Attend (DNA) rate
- Mental health

⁸ Youth Wellbeing Profile (2019). Waikato DHB

9 Measure 9 Outpatient Did Not Attend (DNA) rate

An indicator for equity in health service accessibility is the number of rangatahi Māori who do not attend outpatient appointments, referred to in the health system as DNAs.

Figure 12 shows:

- Māori and Pacific youth consistently report higher hospital outpatient clinic DNA rates than European/Other youth

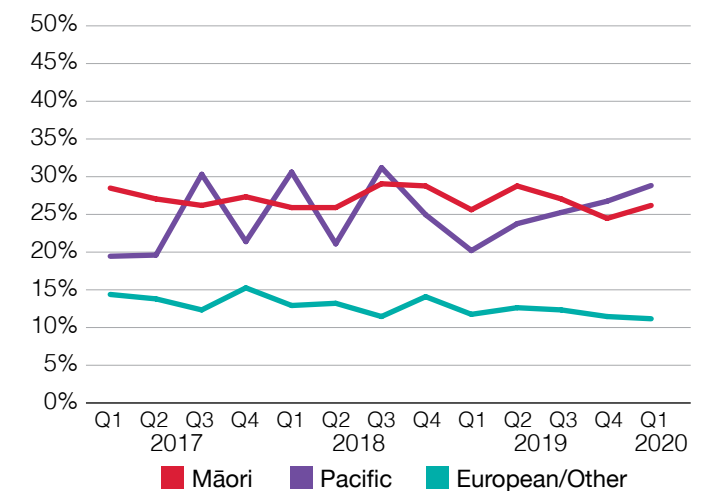


Figure 12: Outpatient DNA rate in 15-24 age group
Source: Waikato DHB patient management system, iPM, via Costpro database
Population data – Ministry of Health Projections – Summary File (2018 Update)

10 Measure 10 Mental health

Mental health issues are of concern in this age group. Many long-term mental health conditions will first present in adolescence and if not identified and managed may lead to long-term problems.

Risk factors, discussed more fully in measure 17, such as poverty, financial hardship and debt, along with high levels of comorbid physical health conditions are associated with severe mental illness.

Rangatahi Māori are more likely to be diagnosed with psychosis and if admitted to hospital experience higher rates of seclusion.

Figure 13 shows:

- rangatahi Māori are more likely to have a psychosis diagnosis than European/Other rangatahi
- there is a variable rate of diagnosis over the three years reported for Māori and this is likely to be due to low numbers in the rangatahi Māori population

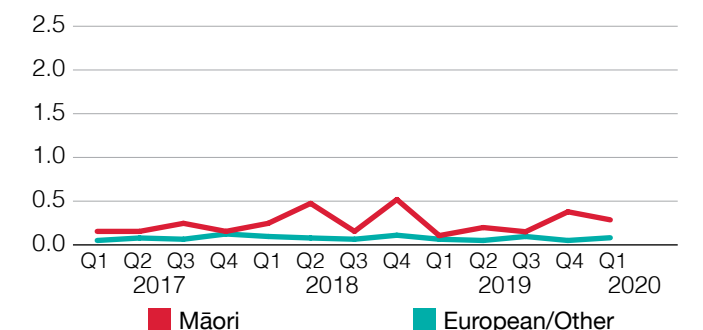


Figure 13: Rate of patients with a psychosis diagnosis per 1000 population in 15-24 age group
Source: Waikato DHB patient management system, iPM, via Costpro database;
Population data – Ministry of Health Projections – Summary File (2018 Update).
Note Pacific data not available

Figure 14 shows:

- rangatahi Māori, when hospitalised with mental health issues, are more likely to be held in seclusion than European/Other youth

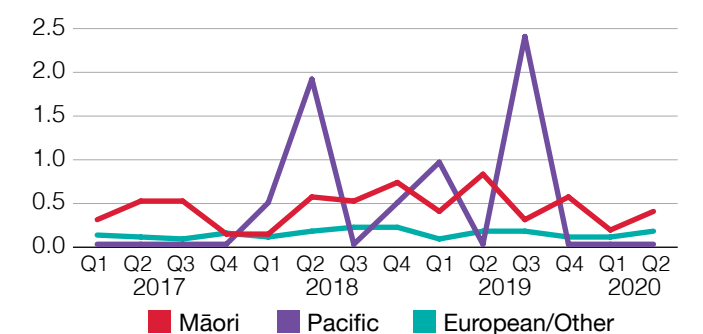


Figure 14: Rate of mental health adult seclusion events per 1000 population in 15-24 age group
Source: Waikato DHB mental health data warehouse Population data – Ministry of Health Projections – Summary File (2018 Update)

Mō ngā pakeke

Adults

Non-communicable diseases such as diabetes, hypertension, cardiovascular disease, cancer, and respiratory disease are often experienced as chronic conditions in the 24-64 age group. It is not unusual for people to have comorbidities (more than one disease at a time) and this is more likely to be experienced by people over the age of 50.

Māori men have an average life expectancy of 72 years, in contrast to 80 years for European/Other, and the later decades of life often involve chronic ill health, with high rates of cardiovascular disease (CVD), diabetes, respiratory disease and cancer.

The measures presented in this section as an indication of how well life is progressing for pakeke are:

- tobacco smoking
- obesity
- cardiovascular disease
- cancer
- breast screening
- diabetes
- renal disease
- mental health



11 Measure 11

Tobacco smoking

Identifying and addressing risk factors, such as tobacco smoking, is important in preventing ill health in this age group. Smoking rates for Māori are much higher than for other groups and of the roughly seven-year gap in life expectancy between Māori and European/Other, two years of this gap has been attributed directly to tobacco smoking⁹.

Figure 15 shows:

- tobacco smoking rates for Māori (40%) are more than three times higher than the rate for European/Others (13%), and nearly twice the rate for Pacific peoples (22%)

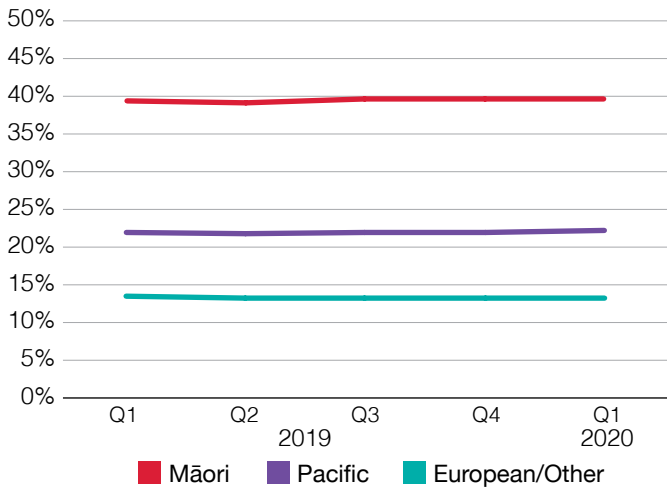


Figure 15: **Percentage of people tobacco smoking in 25-64 age group** Source: NZ Cancer Registry; Population data – Ministry of Health Projections – Summary File (2018 Update)

12 Measure 12

Obesity

Pakeke who are considered to be in the healthy weight range are likely to have better outcomes if they experience a non-communicable disease than those who are determined to be obese. Obesity is generally measured by the body mass index (BMI). BMI is a person’s weight in kilograms divided by the square of height in meters.

Pakeke with a BMI of more than 30 are considered obese.

Figure 16 shows:

- European/Other have lower rates of obesity than Māori and Pacific peoples
- an equity gap of 37% between Pacific peoples and European/Other
- an equity gap of 18% between Māori and European/Other

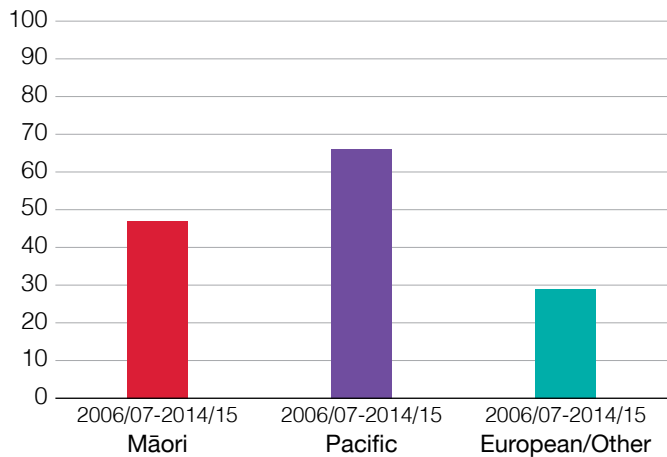


Figure 16: **Percentage of people with BMI >=30** Source: Pacific Health Profiles – Waikato 2017 Adult is defined as 15 and over

⁹ Walsh M, Wright K Ethnic inequities in life expectancy attributable to smoking. N Z Med J. 2020 Feb 7;133(1509):28-38

13 Measure 13 Cardiovascular disease (CVD) and assessment

The most common cause of death for New Zealanders is cardiovascular disease which can lead to a heart attack or stroke.

Ischaemic heart disease (the most common form of heart disease), can be prevented through strategies such as following healthy living, eating and physical activity guidelines, treating hypertension and high lipid levels in the blood, and a smokefree lifestyle.

Figure 17 shows:

- the rate of ischaemic heart disease for Māori is higher than for European/Other
- rates for Pacific peoples are varied – and this is likely due to small numbers – however, overall rates appear to be declining for this group

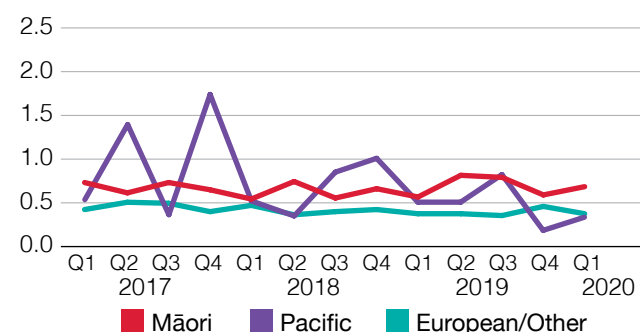


Figure 17: **Rate of ischaemic heart disease per 1000 population 25-64 age group** Source: Waikato DHB patient management system, iPM, via Costpro database; Population data – Ministry of Health Projections – Summary File (2018 Update)

Figure 18 shows:

- Māori and Pacific peoples are less likely than European/Other to receive a CVD risk assessment despite the higher rate of ischaemic heart disease (figure 19)

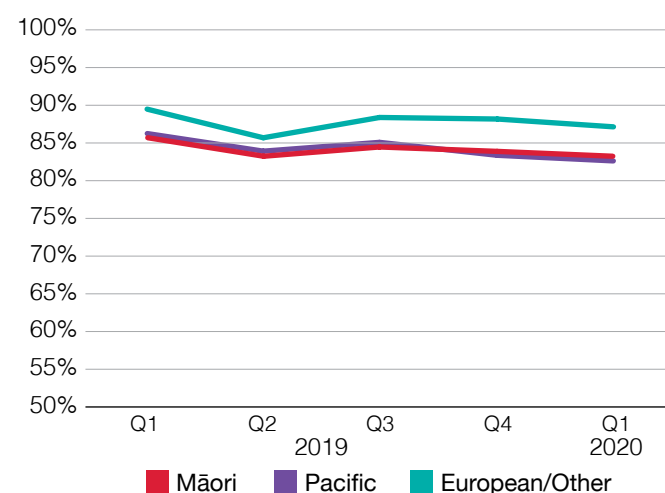


Figure 18: **Percent of eligible patients receiving CVD risk assessment** Source: Ministry of Health Clinical Performance Reports for Primary Care

14 Measure 14 Breast screening

The health system provides services to prevent cancer, detect it early, and extend life or cure where possible. An example of an early detection service is screening for breast cancer (mammograms).

Māori women are nearly twice as likely to die from breast cancer as European/Other. Breast screening appears to be less accessible for Māori and Pacific women therefore they are more likely to be diagnosed at a later stage of the disease. This can lead to delays in accessing, commencing and/or continuing on appropriate treatment options. These differences lead to a significant disparity in survival rates.

The importance of breast screening is highlighted by the fact that Māori and Pacific women diagnosed through this programme do as well as European/Other women¹⁰.

Figure 19 shows:

- a persistent equity gap of 10% for Māori and Pacific women over the years reported, compared to European/Other

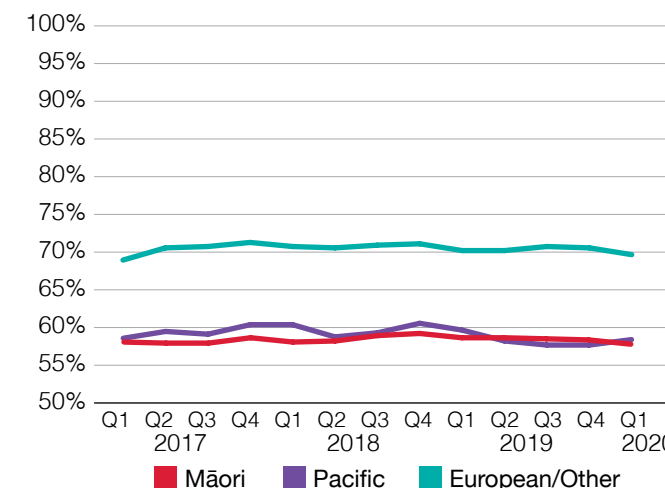


Figure 19: **Breast screening rates of women in 50-69 age group** Source: BreastScreen Aotearoa New Zealand All DHB Coverage Report for the period ending 31 March 2020

15 Measure 15 Cancer

Cancer is the next most common cause of death and avoidable death after cardiovascular disease. Māori have a higher likelihood of getting cancer and lower chance of surviving cancer.

Figure 20 shows:

- Māori and Pacific peoples are more likely to develop cancer than European/Other
- the equity gap has become larger for Pacific peoples in recent times
- the equity gap for Māori is consistent for the years reported

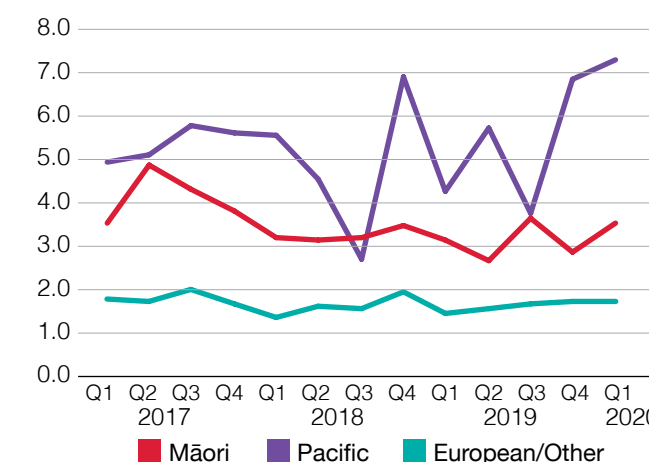


Figure 20: **Rate of cancer per 1000 population in 25-64 age group** Source: NZ Cancer Registry; Population data – Ministry of Health Projections – Summary File (2018 Update)



¹⁰ Lawrenson, R., Blackmore, T., Campbell, I., and Scott, N. (July 2018). How to improve outcomes for women with breast cancer in New Zealand. University of Waikato: Hamilton NZ

16 Measure 16 Diabetes and renal disease

Māori and Pacific peoples are more likely to develop diabetes and experience increased risk of chronic kidney disease. Diabetes and high blood pressure cause end-stage kidney disease. Waikato DHB renal (kidney) dialysis service data shows that 60% of patients receiving dialysis are Māori and the majority of these patients also have diabetes.

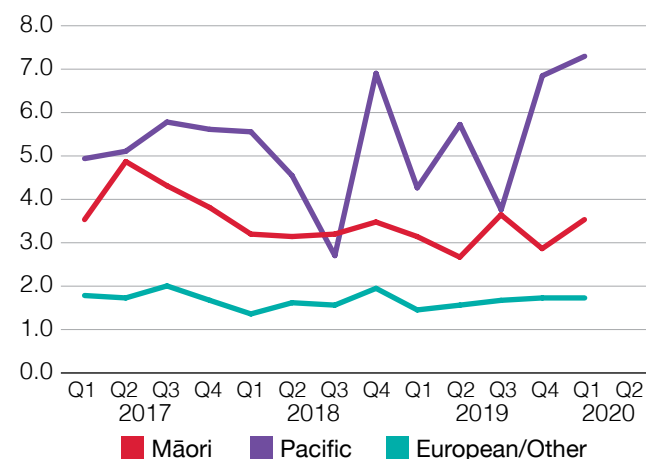


Figure 21: **Rate of diabetes hospital discharges per 1000 population in 25-64 age group** Source: Waikato DHB patient management system, iPM, via Costpro database; Population data – Ministry of Health Projections – Summary File (2018 Update)

Figure 21 shows:

- a persistent equity gap over the years reported for Māori and Pacific peoples
- Māori have a two times greater rate of diabetes than European/Other
- Pacific peoples have a 2-4 times greater rate of diabetes than European/Other

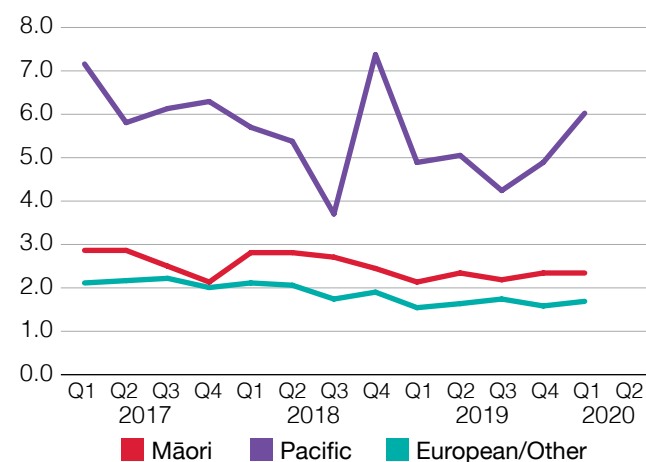


Figure 22: **Rate of kidney disease per 1000 population 25 - 64 age group** Source: Waikato DHB patient management system, iPM, via Costpro database; Population data – Ministry of Health Projections – Summary File (2018 Update)

Figure 22 shows:

- Māori and Pacific peoples are more likely to have kidney disease than European/Other
- the rate is significantly higher for Pacific peoples

Haemodialysis, a life-extending medical treatment for renal disease, takes a lot of time to administer and requires frequent and lengthy visits to hospital. This limits a person's ability to work and has an impact on their social and psychological wellbeing.

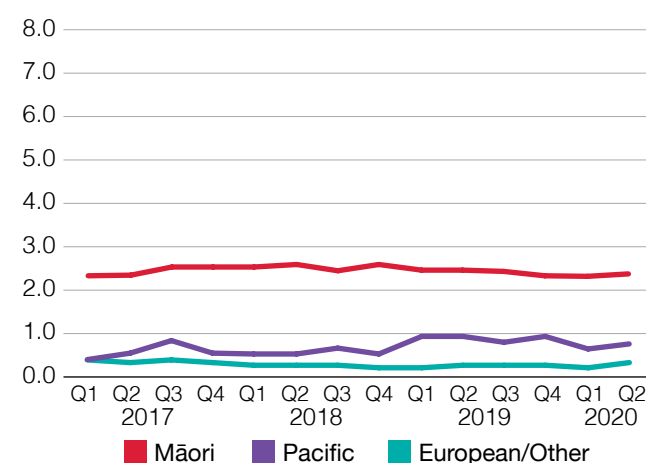
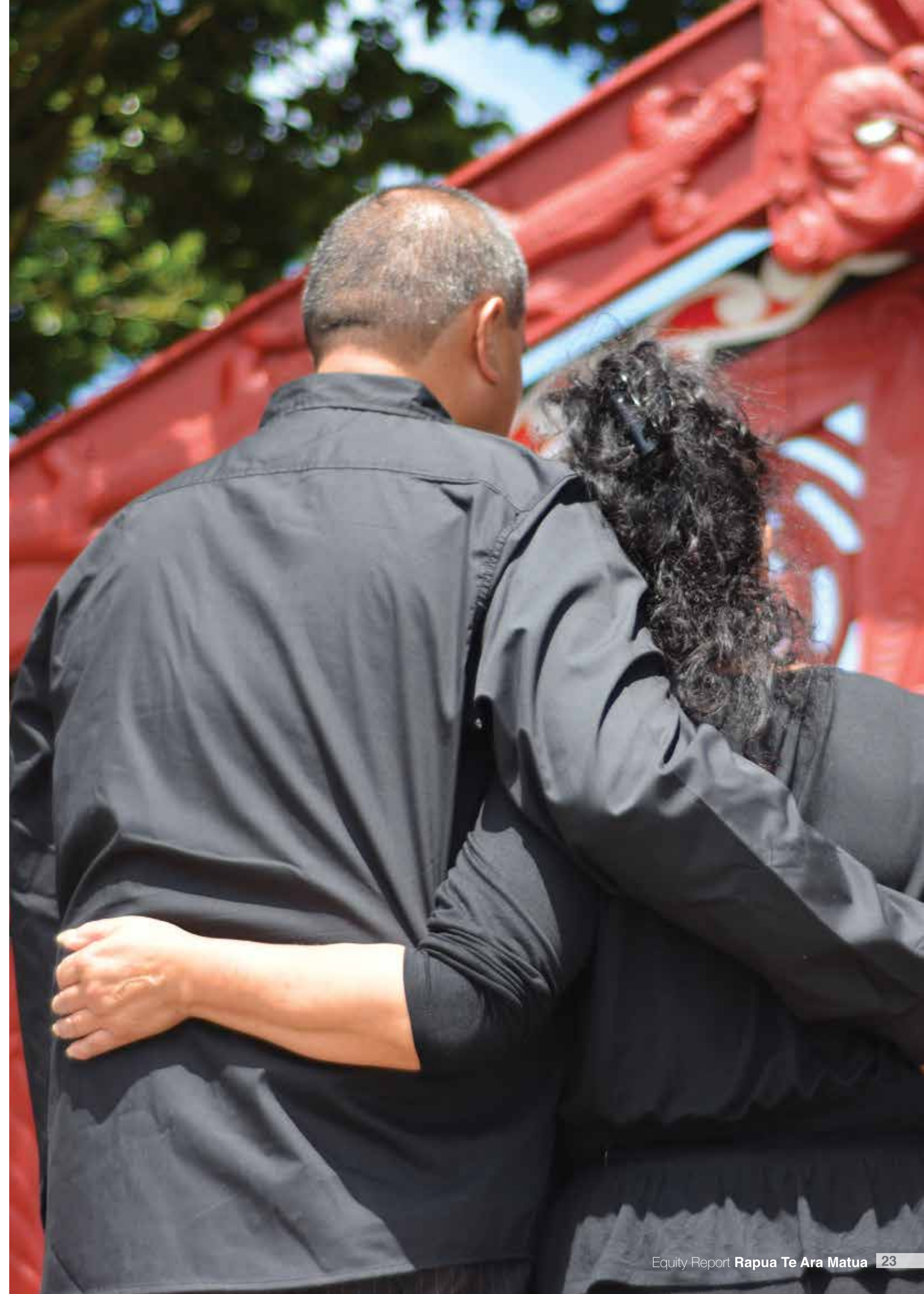


Figure 23: **Rate of haemodialysis per 1000 population 25 - 64 age group** Source: Waikato DHB patient management system, iPM, via Costpro database; Population data – Ministry of Health Projections – Summary File (2018 Update)

Figure 23 shows:

- Māori and Pacific peoples are more likely to require haemodialysis than European/Others in the community



17 Measure 17 Mental health

“Mental illness is both contributed to, and a contributing factor for, poor physical health and reduced productivity in terms of employment, education and participation in whānau, communities and society. There is an important gradient between social deprivation, disadvantage, and the prevalence of mental illness, both in New Zealand and internationally; and in New Zealand important inequities in mental health occur – particularly for Māori and Pacific communities, and those who identify as a gender or sexual minority” (NIDEA, 2017, p.36)¹¹.

Mental health problems and alcohol and drug addictions are commonly experienced by people through all phases of life, however the statistics for severe mental illness, harm from alcohol and drugs, and suicide show an overrepresentation of Māori¹².

As previously described, risk factors such as poverty, financial hardship and debt, along with high levels of comorbid physical health conditions are associated with severe mental illness.

Many Māori have more serious mental health problems by the time they engage with mental health services and are often considered to be at a higher risk of harming themselves or others.

This equity gap is shown in the rate of community treatment orders which are made to ensure that patients accept treatment in the community, under Section 29 of the Mental Health (Compulsory Treatment and Assessment) Act 1992.

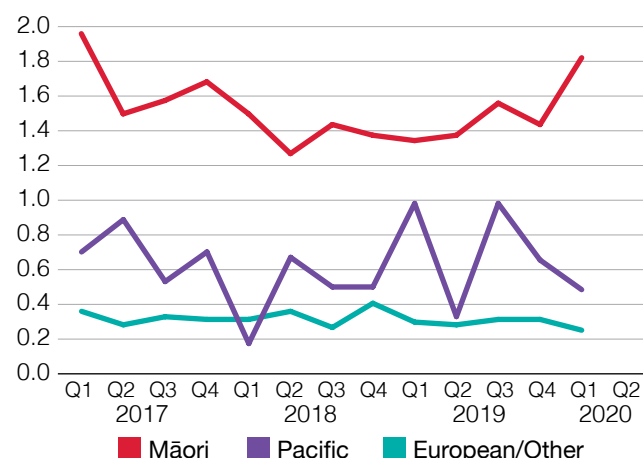


Figure 24: Rate of use of Mental Health section 29 per 1000 population in 25-65 age group Source: Waikato DHB Mental health data warehouse; Population data – Ministry of Health Projections – Summary File (2018 Update)

Figure 24 shows:

- Māori are more likely to be given a community treatment order through the use of a section 29 compared to NZ European/Others in the community

Patient-centred care is the preferred model of care for mental health patients, which includes a focus on working with patients and whānau in advance to identify and plan for situations that may arise.

Seclusion is used as a last resort intervention in situations where patients are behaving in ways that put themselves or others at risk. Its use is increased when there are limited options for providing safe spaces in which to provide care without seclusion.

To meet the goal set by the Health Quality and Safety Commission, Waikato DHB aims to eliminate the use of seclusion¹³.

Waikato DHB is also working towards the key performance indicator set by the Ministry of Health to reduce the number of Māori placed in the mental health system under section 29 of the Act¹⁴.

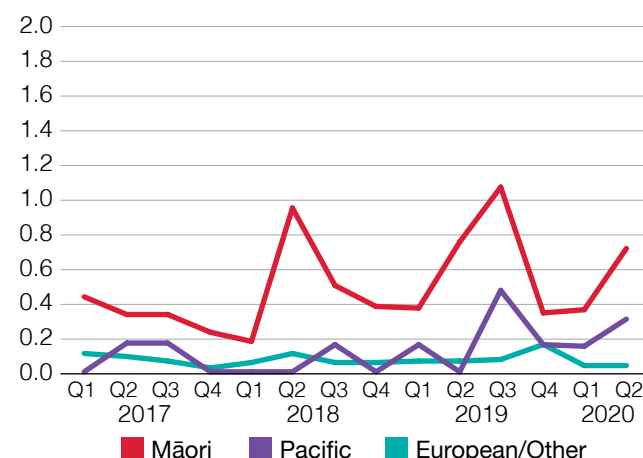
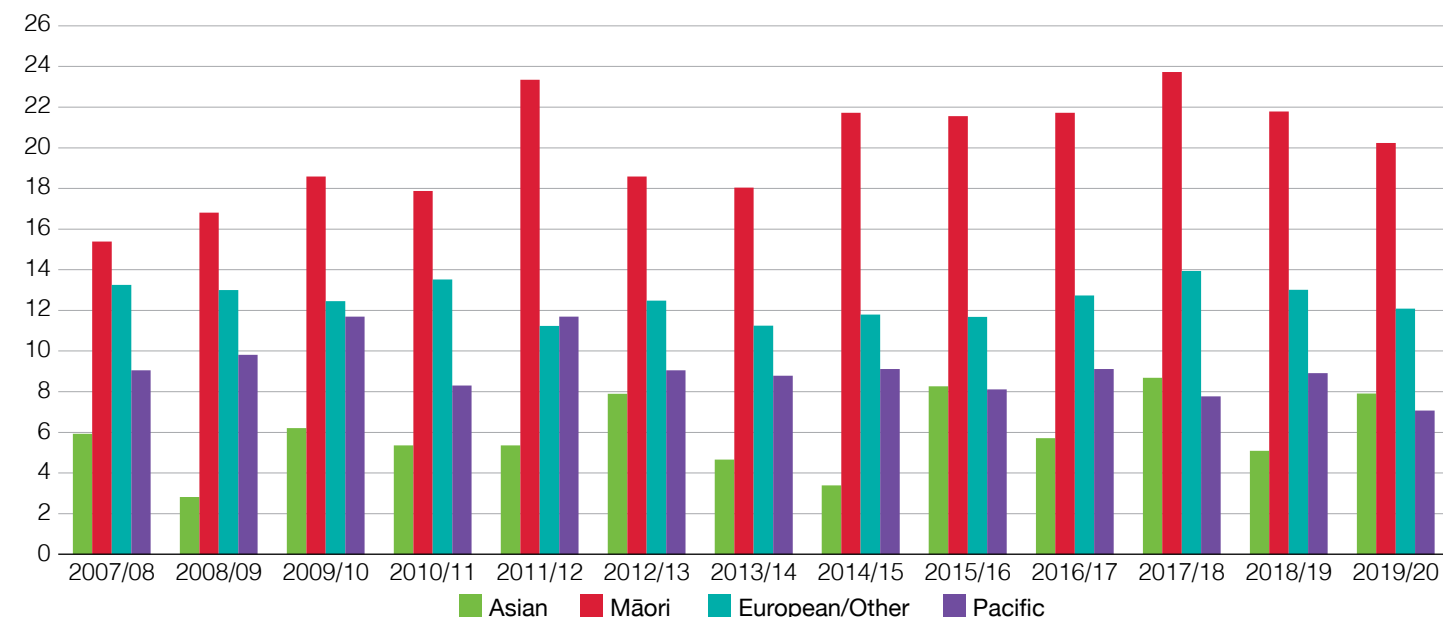


Figure 25: Rate of mental health adult seclusion event per 1000 in 25-64 age group Source: Waikato DHB Mental health data warehouse; Population data – Ministry of Health Projections – Summary File (2018 Update)

Figure 25 shows:

- Māori are consistently more likely to be held in seclusion than Pacific peoples and European/ Others



Notes:

1. Ethnicity count is based on information reported to the Coroner and may differ from that held by other agencies, such as the Ministry of Health.
2. The 2018/2019 rates differ from those previously published as they have been updated to reflect 2018 census data, which was not available when the 2018/2019 rates were first published.
3. The per 100,000 population rates have been calculated using Stats NZ's population information as published in the 2006, 2013 and 2018 censuses. 2006, 2013 and 2018 census information is available at archive.stats.govt.nz/Census.aspx
4. The per 100,000 population rates have been calculated using each ethnic group's population respectively.
5. 'European and other' includes, but is not limited to: New Zealand European, European, Middle Eastern, Latin American, African and 'not elsewhere defined'.
6. The small numbers for Asian and Pacific peoples mean data may be more susceptible to fluctuation.

Figure 26: Provisional New Zealand suicide rates by ethnicity per 100,000 population between July 2007 and June 2020 Source: Annual provisional suicide statistics for deaths reported to the Coroner between 1 July 2007 and 30 June 2020

Figure 26 shows:

- the rate of suicide for Māori across all 13 years was significantly higher than for all other ethnicities reported
- an equity gap is evident between Māori and all other groups with the gap increasing in recent years

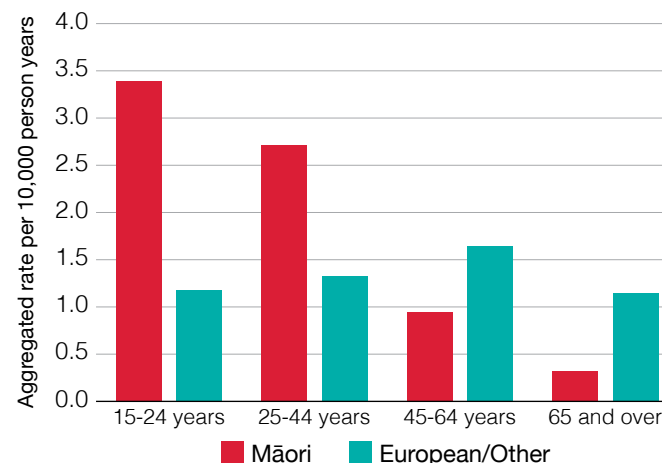


Figure 27: Waikato DHB suicide incidence rate by age and ethnicity for the years 2010-2016

Source: Health, Quality and Safety Commission: Ministry of Health

Figure 27 shows:

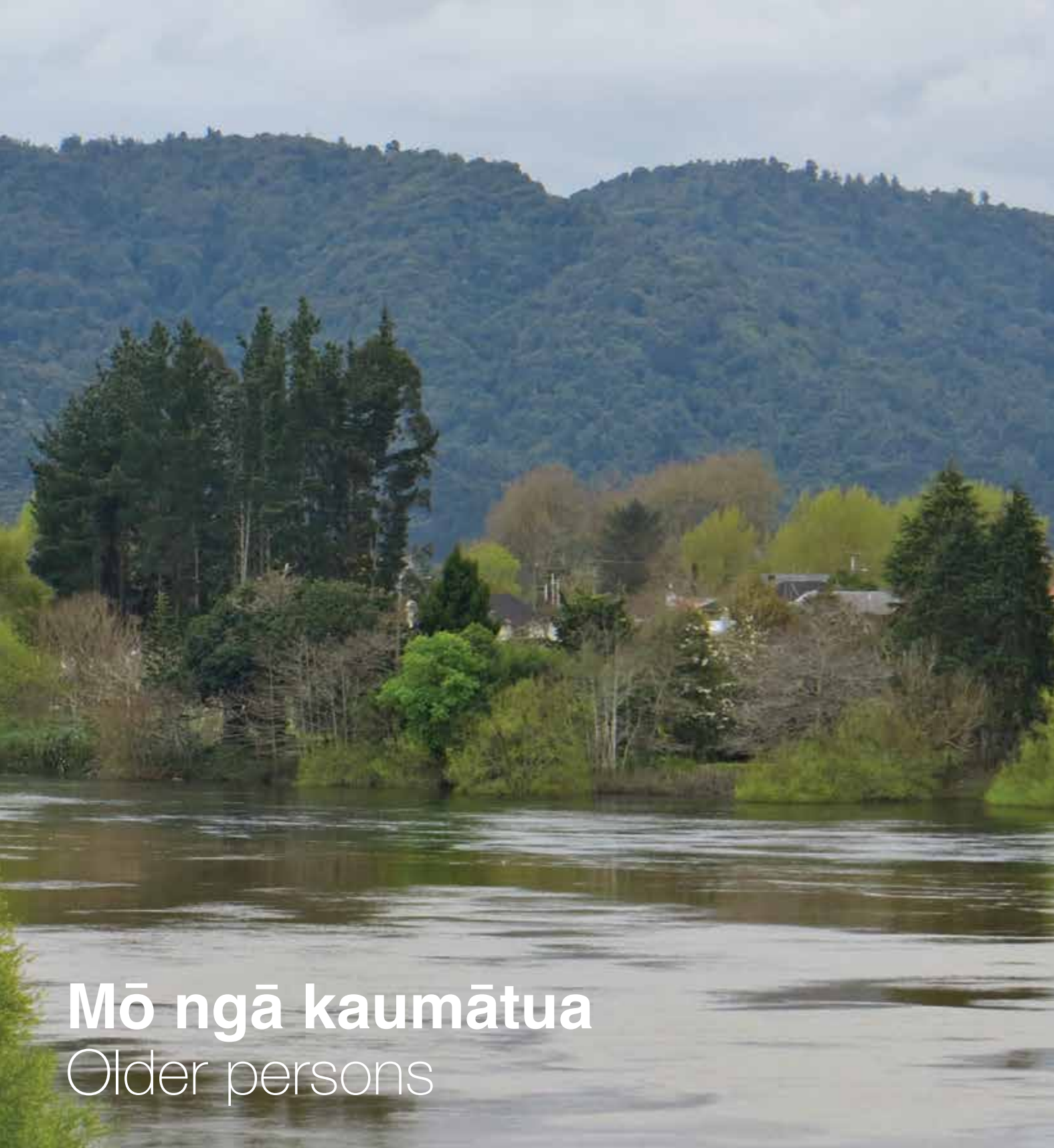
- for the age group 15-24 years, Māori suicide rates were 2.9 times higher than European/Other; a statistically significant difference
- for the age group 25-44 years, Māori suicide rates were two times higher than European/Other
- for the age groups 45-64 years and 65 and over the suicide rates for Māori were lower than European/ Other; the difference is not considered statistically significant

¹¹ LNIDEA (2017). Health Needs Assessment – Mental Health and Addiction Service Utilisation. National Institute of Demographic and Economic Analysis. University of Waikato. Hamilton.

¹² Ministry of Health.2019. Office of the Director of Mental Health and Addiction Services: Annual Report 2017. Wellington: Ministry of Health.

¹³ www.hqsc.govt.nz/assets/Mental-Health-Addiction/Resources/ZeroSeclusionCaseStudies_Nov20_Final.pdf

¹⁴ www.midlandmentalhealthnetwork.co.nz/midland-newsletter/winter-issue-2-june-2017/section-29



Mō ngā kaumātua Older persons

At this bend in the river we see the cumulative effect of inequitable access to the determinants of health in previous life stages. Fewer Māori and Pacific peoples reach the age of 65 years and older which means proportionately there are fewer in this age group. In 2013 only 5% of Māori and 2% of Pacific peoples living in the Waikato were over the age 65, compared to 17% of European/Other¹⁵.

The measures presented in this section as an indication of how well life's journey has progressed are:

- ASH rates
- avoidable deaths
- life expectancy

¹⁵ Statistics New Zealand 2013 Census

18 Measure 18 Ambulatory Sensitive Hospitalisation (ASH)

As noted previously, ASH rates measure mostly acute admissions which are considered potentially reducible through primary care services.

There are several conditions in this age group for which there is evidence that good primary care can influence hospitalisation rates.

Figure 28 shows:

- European/Other have a much lower rate of avoidable hospitalisations (ASH) per 100,000 population than Māori and Pacific peoples in this age group
- when compared with ASH rates for those aged 0-4 (figure 11) the equity gap is more pronounced

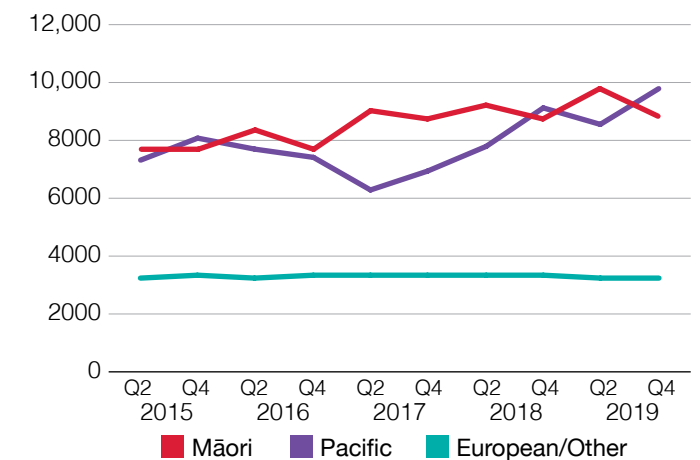


Figure 28: **ASH rates for people aged 65-74 years**
Source: Ministry of Health System Level Measure reports



19 Measure 19

Avoidable deaths

Avoidable death refers to people dying before the age of 75 from causes that could have potentially been avoided by disease prevention and timely access to quality and appropriate healthcare.

Avoidable deaths include amenable deaths, attributed to a lack of timely access to healthcare, and preventable deaths, attributed to people living in conditions of high deprivation with limited access to adequate resources such as good housing and income.

The number of amenable deaths per 100,000 population for Waikato Māori is 214.9 which is more than double the rate for non-Māori/non-Pacific (European/Other) (82.1 deaths per 100,000)¹⁶. This substantial equity gap indicates large numbers of Māori lives could be saved or extended through improvements to health services.

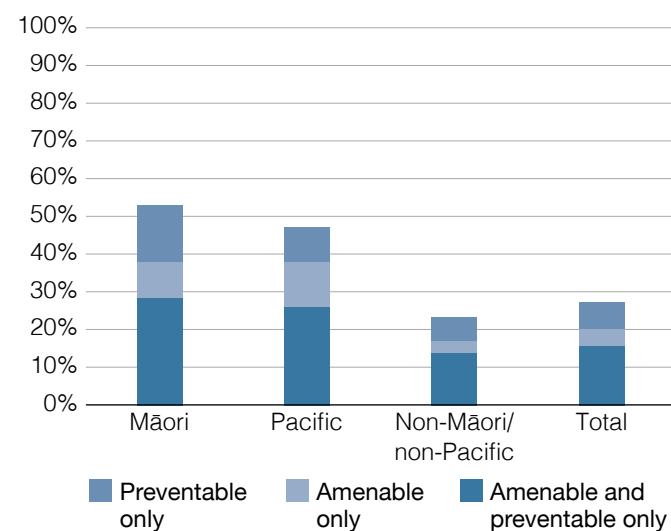


Figure 29: **Percentage of deaths that were potentially avoidable by ethnicity and total** Source: Walsh and Grey 2019

Figure 29 shows:

- in Aotearoa New Zealand, over half of deaths occurring for Māori (53%) are attributed to potentially avoidable causes. This is largely consistent with Pacific peoples (47.3%) and more than twice the level experienced by the non-Māori/non-Pacific population (23.2%)¹⁷

An example is inequities in the death rate from ischaemic heart disease between Māori and non-Māori.

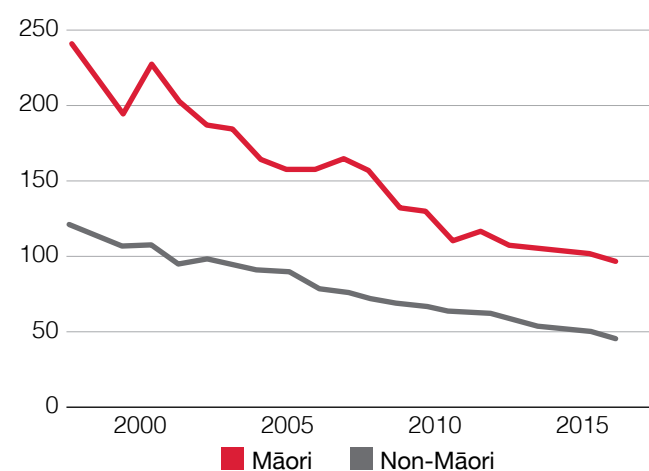


Figure 30: **Death rate per 100,000 from Ischaemic heart disease 1996-2016**

Source: minhealthnz.shinyapps.io/historical-mortality¹⁸

Figure 30 shows:

- death rates from ischaemic heart disease are declining for all, but the gap persists with double the rate for Māori, compared to non-Māori

The two most common causes of death for New Zealanders are cardiovascular disease and cancer.

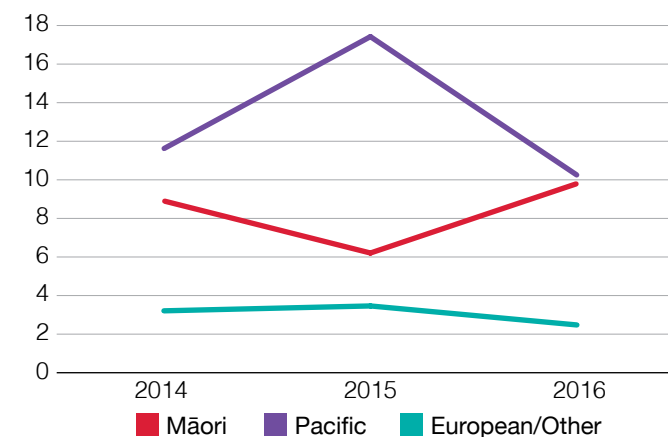


Figure 31: **Death rate from cardiovascular disease per 1000 population in 65-74 age group**

Source: Circulatory system disease includes ischaemic heart disease, CVD and other circulatory system diseases; data is annual and latest data received is 2016 due to coroner cases not being closed off in 2017

Figure 31 shows:

- a significant equity gap for Māori and Pacific peoples over the three years reported

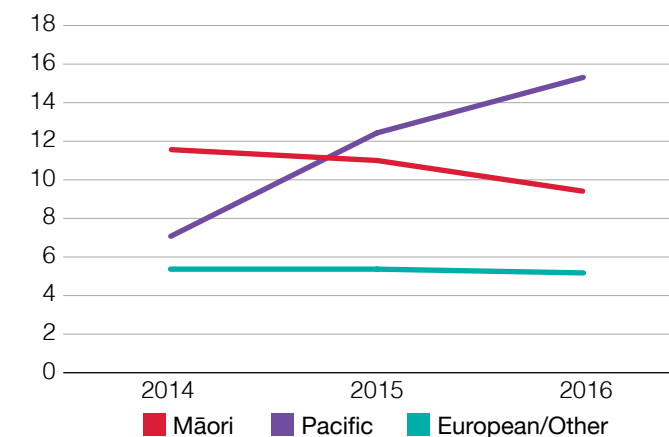


Figure 32: **Death rate from cancer per 1000 population**

Source: Cancer includes lung, colorectal, prostate, breast and all others; Data is annual and latest data received is 2016 due to coroner cases not being closed off in 2017

Figure 32 shows:

- an upward trend for Pacific peoples and a downward trend for Māori
- a death rate 1.5–3 times higher for Māori and Pacific peoples



¹⁶ nsf.health.govt.nz/dhb-planning-package/system-level-measures-framework/data-support-system-level-measures/amenable-mortality_2016_dhb-ethnicity_rates_Summary_201907

¹⁷ Walsh, M. & Grey, C. (2019). The contribution of avoidable mortality to the life expectancy gap in Māori and Pacific populations in New Zealand – a decomposition analysis. NZMJ Vol 132 No.1492, pp 46 – 60.

¹⁸ This site can be used to source Māori and non-Māori mortality rates for a range of avoidable deaths

20 Measure 20

Life expectancy

The stark difference in life expectancy illustrates the gap in health equity. Contrasts in life expectancy between ethnic groups in the same country reflect the uneven and unfair distribution of multiple determinants of health such as access to quality information, healthcare, employment, income, housing and healthy environments over the course of life.

In 2012–2014, life expectancy at birth for Māori in the Waikato DHB was 76.5 years for females (7.5 years lower than for non-Māori females) and 72.2 years for males (8.1 years lower than for non-Māori).

The discrepancy in life expectancy at birth in the Waikato DHB region is shown in figure 34. Life expectancy has been steadily increasing in all countries worldwide and has only dropped in cases of substantial political unrest and war.

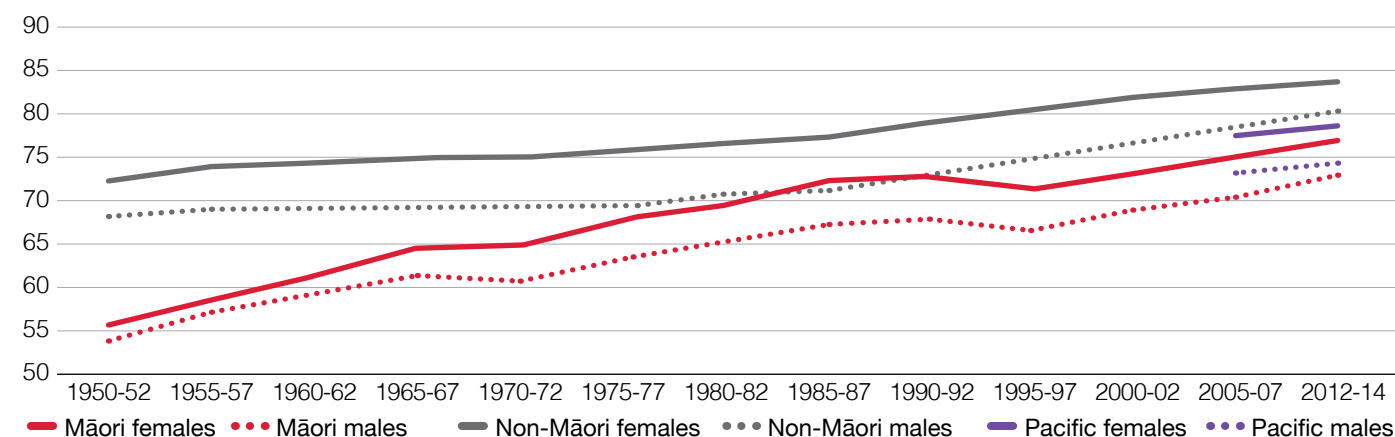


Figure 33: Life expectancy in New Zealand at Birth (years); Māori, Pacific, non-Māori by gender

Source: Blakely et al (2005). Widening ethnic mortality disparities in NZ 1981-99. Soc. Sci. Med. 61(10): 2233-51

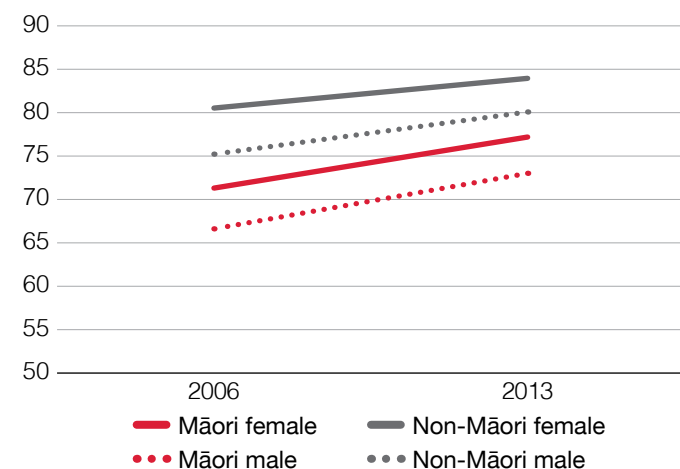


Figure 34: Life expectancy at Birth (years); Waikato Māori and non-Māori 1996-2013 by gender

Source: Te hauora o ngā iwi Māori o Waikato: Māori health profiles – Waikato 2016

Figure 33 shows:

- non-Māori live significantly longer than Māori and Pacific peoples
- from the 1950s through to early 1990s the gap between Māori and non-Māori narrowed. However, the gap doubled after the neo-liberal political reforms introduced in New Zealand in mid 1980s led to high rates of unemployment for Māori, and health system restructures which resulted in reduced access to healthcare. This resulted in a drop in life expectancy for Māori, while at the same time life expectancy for non-Māori steadily improved¹⁹
- although life expectancy is increasing for all, the gap between Māori and non-Māori has not diminished

Figure 34 shows:

- while life expectancy is increasing for both Māori and European/Other the equity gap of approximately seven years persists between the groups

As we have seen in this section, life's journey is not the same for all. Equity gaps persist throughout the life stages, at every bend in the river. Death occurring at a younger age has a significant impact on generations of Māori and Pacific whānau. The intergenerational and cultural impacts include the loss of wisdom, matuaranga Māori, and te reo Māori skills. Early death takes from kaumātua and whānau opportunities to enjoy good health, wealth, and relationships across generations which support the care of children and young people, and building healthy adult interactions.

¹⁹Blakely et al (2005). Widening ethnic mortality disparities in NZ 1981-99. Soc. Sci. Med. 61(10): 2233-51

He waka eke noa

The canoe which we are all in without exception

This section illustrates how the design and management of our health systems over time has preferentially advantaged some groups over others. Systems and structural changes are needed to address the resulting gaps in health equity.

He waka eke noa translates as: *The canoe which we are all in without exception.*

It refers to acting as a collective, working in unity and leaving no one behind. It is this type of approach that is needed to eliminate equity gaps – the type of approach that is needed to support those struggling in the eddies and the whirlpools back to Te Ara Matua.

We know equity gaps in health can be reduced and eliminated because there are examples in the Waikato region that have been successful in:

- eliminating equity gaps between Māori and non-Māori access to cancer treatment services for women with screen detected breast or cervical cancer
- achieving equitable access to heart health screening
- achieving equity across the Waikato region for COVID-19 testing through extensive collaboration with iwi, Māori health providers and primary care
- achieving a 100% referral rate of women who smoke to “Once and For All” cessation services
- doubling access for Māori patients to the eye health service (ophthalmology) at Waikato Hospital has, in effect, reduced the equity gap
- reducing the overall levels of tobacco smoking by women, with a greater drop showing for Māori women through the smoke-free women’s wards at Waikato Hospital

Waikato DHB is committed to tackling the equity gaps in our healthcare system and is open to new and innovative approaches.

Each of the above examples has commonalities which can be replicated:

- community/consumer voice and advocacy
- Māori leadership across all levels
- effective collaboration and relationships
- systemic analysis
- culturally effective follow-up

These commonalities, and how they led to success, are evident when examining how equity of access was achieved in Waikato DHB’s 2020 COVID-19 response.

An important aspect to the COVID-19 response was listening to the voice of Māori when considering appropriate action. Māori drew on memories of the 1918 flu pandemic, which saw a death rate for Māori more than eight times greater than for non-Māori²⁰, and recognised how devastating COVID-19 could be. This recognition led to ensuring Māori health equity was prioritised through:

- specific processes developed to ensure Māori and Pacific cases were prioritised and allocated for follow up appropriately
- the creation of a Māori-specific dashboard with live access provided to iwi authorities
- messages developed by iwi authorities from Ministry of Health guidelines with the support of Waikato DHB resources to convey them
- all Māori cases and contacts offered connection with affiliated iwi for targeted support
- daily Māori case review

During the response to COVID-19 a robust and genuine relationship was developed between Waikato DHB and iwi Māori. This occurred through multiple levels of leadership throughout the COVID-19 response. Iwi leaders, Māori health providers, Civil Defence leaders, and Waikato DHB Māori leadership engaged in decision-making forums related to the COVID-19 response, within the DHB and at community levels.

Leadership at all levels enabled the dissemination of shared data to iwi and Māori health providers resulting in targeted response and planning for Māori.

Early collaboration with Māori communities supported a swift and pointed approach to information gathering, testing and follow up to any positive tests. With Māori leadership insistence ethnicity, iwi affiliation, and rohe of every patient, where possible, was recorded. This data was a vital piece of information for Māori communities as the spread of the virus, by area and ethnicity, could be identified and resources allocated to ensure that testing was carried out where needed.

Ethnicity data enabled Waikato DHB and iwi to monitor the number of Māori being tested in the community to enable the development of targeted testing strategies. To improve access and engagement, health services went to communities. Mobile testing stations went out to remote rural areas and those known to have a high Māori population.

Healthcare staff at some testing stations delivered additional care services such as prescriptions, flu vaccinations, and addressed general health concerns that may impact a patient’s health outcomes if they contracted the virus. Further initiatives such as follow-up health checks were implemented for kuia and kaumatua, the most at risk within Māori communities.

The targeted response for Māori continued, even as community cases decreased, with extended testing in high Māori population areas and a continued campaign for flu vaccinations. These established relationships and targeted processes from the first wave allowed for instant action when the second wave of COVID-19 occurred.

²⁰ nzhistory.govt.nz/culture/the-1918-flu-pandemic-further-information, (Ministry for Culture and Heritage), updated 22-Apr-2020

Social determinants of health

A key component of tackling the health equity gaps is understanding the underlying factors that influence health and wellbeing – the social determinants of health.

There are many global and local factors that influence the way societies are organised which mean individual people do not always have control over how and where they live, or the health outcomes they experience. The social determinants of health indicators briefly discussed below are:

- deprivation
- home ownership
- achievements when leaving school
- people in work and what they earn
- environmental factors

Deprivation

Deprivation²¹ is a strong determinant of health. It is well established that poverty is a risk factor for poor health and exposure to poverty in childhood can have lifelong negative impacts on mental health²², and general health and wellbeing outcomes.

Deprivation shows the percentage of population groups who live in areas of wealth (low deprivation – level 1) to areas of increased poverty (high deprivation – level 10).

In areas of high deprivation:

- houses are more likely to be rented and of low quality
- households generally have low levels of income, more people living in them, and less internet/telephone access

- households are more likely to experience poverty and material hardship including financial debt, low levels of employment or unemployment, housing insecurity and homelessness
- environmental factors such as clusters of off-licence alcohol outlets, gambling venues, and higher numbers of businesses selling food that is high in calories with low nutritional value (e.g. fast food outlets and dairies) have a significant impact on health and wellbeing outcomes

Figure 35 shows the proportion of Māori, Pacific and European/Other in the Waikato region who live in each deprivation decile. There are greater proportions of Waikato Māori and Pacific peoples living in higher deprivation areas.

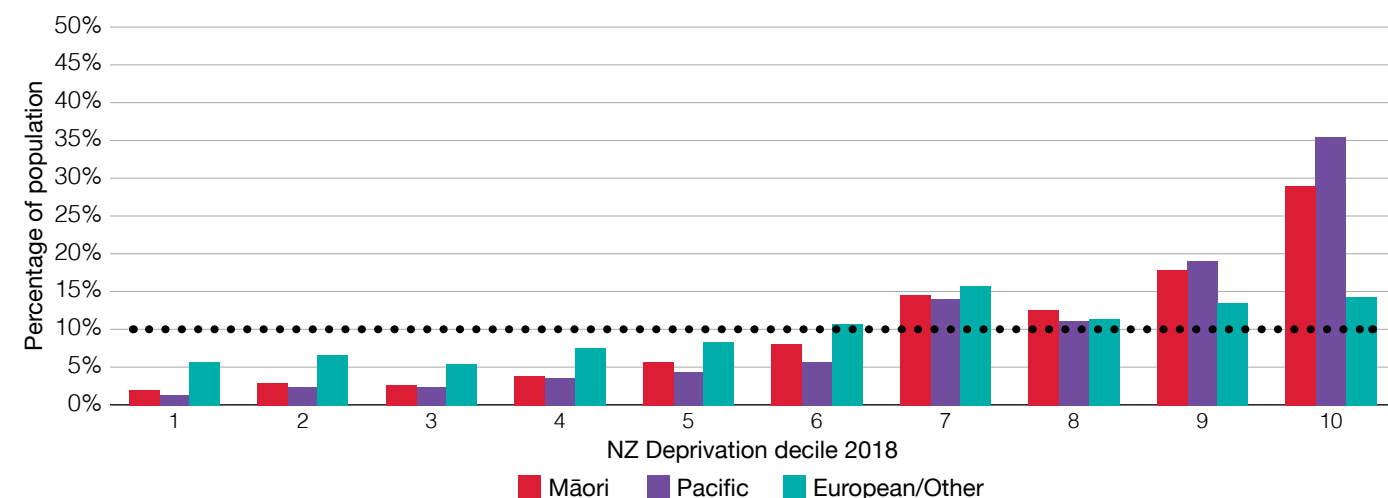


Figure 35: **Waikato population distribution across NZ Deprivation decile** (equity = 10% of each ethnicity population in each decile 1-10) Source: NZDep2018, Department of Public Health, University of Otago

²¹ See appendix 1 for detail about how deprivation is measured

²² NIDEA (2017). Health Needs Assessment – Mental Health and Addiction Service Utilisation. National Institute of Demographic and Economic Analysis. University of Waikato. Hamilton.

Living in a more deprived area where household incomes and living conditions are poorer shows a strong association with higher death rates. However, it is evident that Māori death rates, particularly for Māori men, compared to non-Māori are higher across all levels of deprivation with rates increasing markedly in high deprivation areas.

As shown in Figure 36:

- the risk of dying earlier is much higher for those living in the highest deprivation areas compared to those living in the lowest deprivation areas. This shows that deprivation is a powerful determinant of health
- Māori risk of death is higher than non-Māori at every level of deprivation
- It is notable that the mortality rate of non-Māori females living in deprivation 10 areas is lower than Māori females living in deprivation 1 areas.

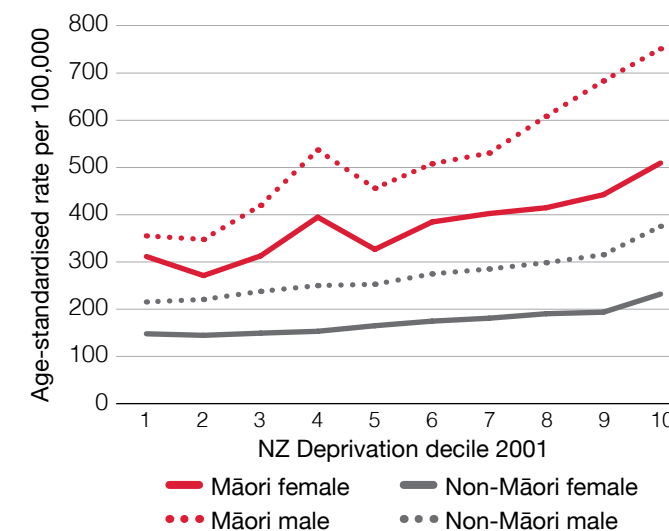


Figure 36: **Māori and non-Māori deaths by gender and area deprivation, 2000-2004 (New Zealand)**

Source: Robson B, & Purdie G (2007). Chapter 4 Mortality in B. Robson, & R. Harris (eds). 2007. Hauora: Māori Standards of Health IV. A study of the years 2000-2005. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare pg 38

Home ownership

Home ownership is one of the ways deprivation is determined and figure 37 shows that while there is a drop in rate for all groups in the Waikato, there is also a persistent large gap in European/Other ownership rates (41%-30%) compared to both Māori (17%-12%) and Pacific peoples (11%-9%).

For a more comprehensive look at the housing situation across the Waikato region the Waikato Plan's Regional Housing Initiative 2018 housing stocktake provides a useful summary of Waikato housing-related data and information linked to supply, demand, affordability, quality, demographics/disability and housing types/descriptors²³.

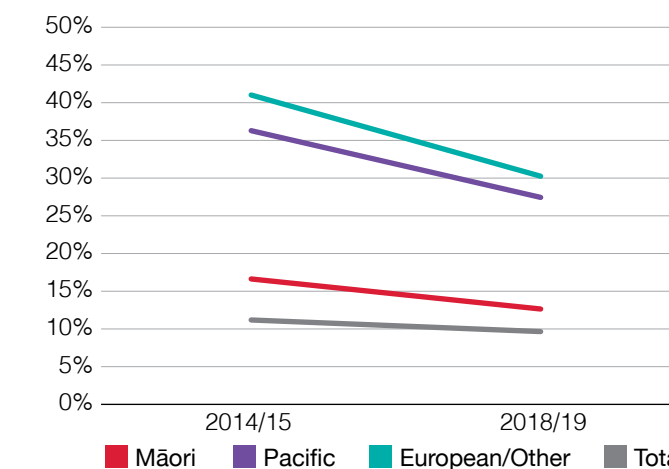


Figure 37: **Tenure holders who own usual residence, 2014-2019 (all New Zealand, Waikato Māori, Pacific, European/Other)** Source: Statistics NZ census data. Housing.

Individual home ownership and ethnic group (grouped total responses) by age group and sex, for the usually resident population count aged 15 years and over, 2013, and 2018 Censuses (RC, TA, SA2, DHB)

²³ www.waikatoplan.co.nz/projects/regional-housing-initiative

Achievements when leaving school

Students leaving secondary school with NCEA Level 3 and above have greater opportunities for entering tertiary education or the workforce, which in turn has an impact on their ability to live healthy lives. In 2019, the proportion of Pacific students who left school having achieved NCEA Level 3 or above qualifications increased by 10% compared with 2014. For Māori there was a 4% increase and European/Other declined 1%, but remained higher than other groups.

Mental health and general wellbeing issues may disrupt educational achievement and employment opportunities. An estimated 10% of 15-19 year olds and 14% of 20-24 year olds in the Waikato were not in employment, education, or training (NEET) in 2018. These NEET percentages across the population group (15-24 year olds) are much higher for Māori at 19%, Pacific at 16%, than the 10% of non-Māori-non-Pacific rangatahi.

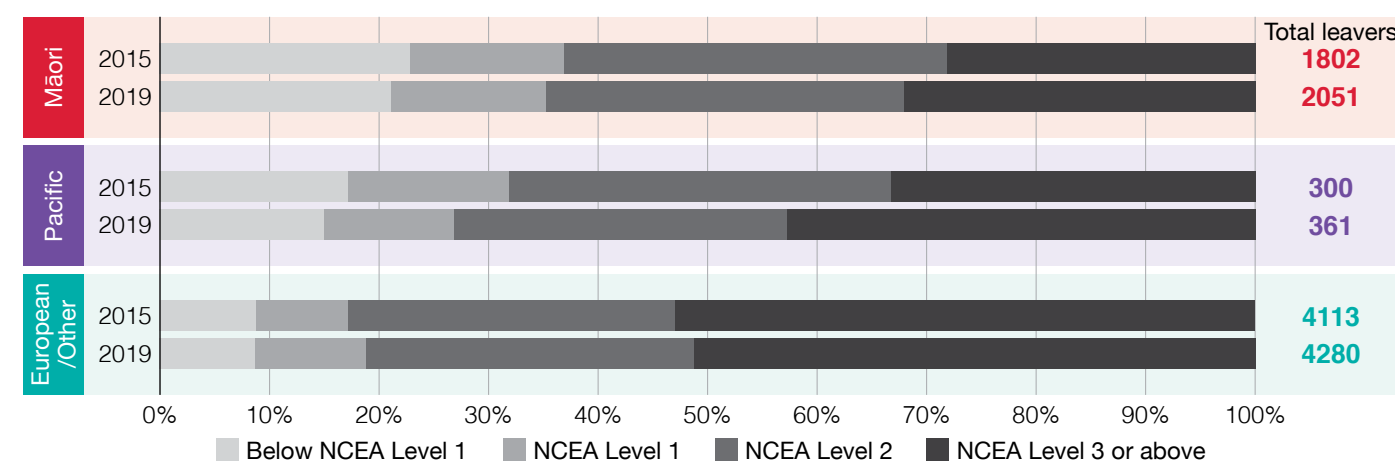


Figure 38: **School leavers aged 13-18 years by National Certificate of Educational Achievement (NCEA) highest qualification** Source: Education Counts, Waikato Region NCEA Level School qualifications, 2015 and 2019

People in work and what they earn

Employment and income are strongly associated with deprivation/social position²⁴.

Being in work and earning enough to cover basic living expenses can make a difference to the health and wellbeing of whānau.

Figures 39 and 40 show there are variations when ethnic groups are compared. People in the European/Other group are slightly more likely to be in employment, however their weekly earnings are on average significantly higher (approximately \$100 per week) than Māori across the Waikato region.

The variations in data for Pacific peoples are likely due to small reporting numbers.

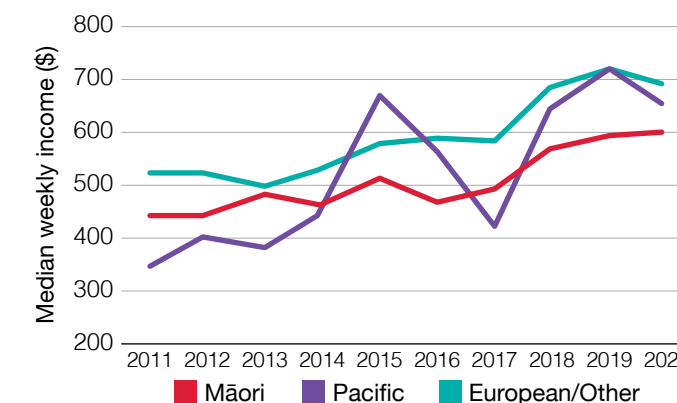


Figure 40: **Median weekly income** Source: Income by region, sex, age groups and ethnic groups, Labour Force Survey, Statistic New Zealand, 2020

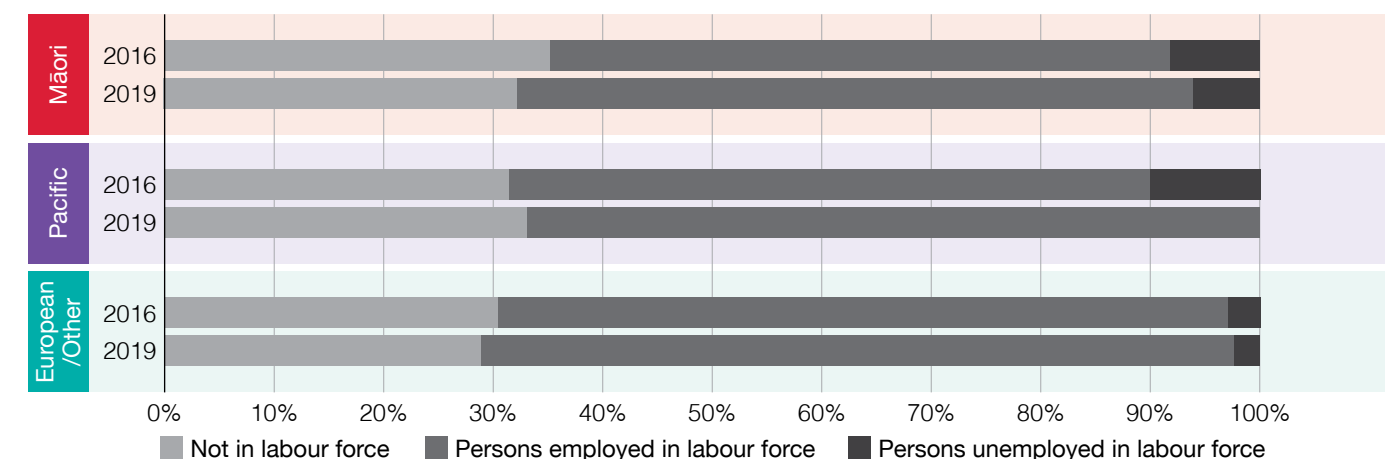


Figure 39: **Labour force status by ethnic group by Waikato Regional Council (Annual-Dec)** Source: Statistics NZ, Household Labour Force Survey

Environmental factors

There are many environmental factors that have an effect on living standards such as transport which provides access to goods and services, the prevalence of crime in a neighbourhood and the availability of quality food. There are also greater numbers of gambling and alcohol outlets in higher deprivation areas.

As an example, exposure to Class 4 gambling venues (gaming machines in pubs and clubs) varies greatly depending on where a person lives.

In a low deprivation (level 1) area there is on average one pokie machine for every 465 people. In a high deprivation area (level 9) it is one pokie machine for every 75 people.

This means a child growing up in a highly deprived socioeconomic area (level 8-10) will have six times more pokie machines in their community or neighbourhood and greater exposure to gambling harm than the same child growing up in a less deprived area²⁵.

²⁴ McMillan, R. and Exeter, D. (2018). Socioeconomic Deprivation in the Waikato Region. Using the Index of Multiple Deprivation to understand drivers of deprivation. Waikato Plan Discussion Paper, Waikato Plan, Hamilton

²⁵ Ministry of Health. 2006. Problem Gambling Geography of New Zealand 2005. Wellington: Ministry of Health

Whakarāpopototanga

Summary

We can see from this report that our health systems over time have advantaged some groups over others. Systems and structural changes are needed to address the resulting gaps in health equity. The challenge is to design a health system which prioritises the healthcare needs of those who have the least access to adequate income, healthy secure housing, and other determinants of health.

Health and wellbeing is a resource for everyday life that includes social, personal, physical and environmental capacities (Ottawa Charter for Health Promotion, 1988). The fundamental conditions and resources for health are: peace; shelter; education; food; income; a stable ecosystem; sustainable resources; social justice; and equity. Improvement in health requires a secure foundation in these basic prerequisites.

Te Tiriti o Waitangi and UN Declaration on the Rights of Indigenous Peoples (UNDRIP) are strongly aligned and mutually consistent agreements to guide an equity approach to health systems. Health and wellbeing is a minimum standard set out in UNDRIP for the survival, dignity, wellbeing and rights of the world's indigenous peoples. Together these declarations support indigenous-led and resourced ways to address equity gaps that are experienced throughout colonised nations.

This report shows that there are equity gaps in access to health services and failures to reach the minimum standards of health for individuals²⁶.

To effectively address equity gaps the following factors must be considered:

- Māori-led approach
- Intersectoral engagement
- Long-term funding/resources/evaluation

It is essential that any initiative to successfully address the equity gap is Māori-led. There are examples within Waikato DHB and across other large organisations where a successful integrated tāngata whenua-based service for Māori has been achieved.

Effective change also requires intersectoral engagement and partnership with iwi Māori, community, government, local government, non-government organisations (NGOs), and others, working together towards the same goals set in a Te Tiriti o Waitangi framework.

To enable effective change to the health and wellbeing of Māori and others in high deprivation communities any equity initiatives will require a commitment to multi-agency long-term funding and resource provision. This commitment will be over a period of at least four years. A commitment to ongoing evaluation research is needed to determine areas of success and areas for further improvement.

As noted in the social determinants of health section, Waikato DHB acknowledges that there are many contributing factors to inequities.

Waikato DHB is committed to a partnership model that includes a Māori-led intersectoral approach, to effectively identify and address equity gaps. Areas of focus to develop this working approach include:

- **housing** – ensure that whānau are living in warm, dry homes with adequate space for all whānau members. A commitment to this means a likely reduction in respiratory disorders, rheumatic fever, and a general improvement of overall health
- **education** – ensure that tamariki and rangatahi are provided education that will lead to opportunities for further training and employment. Employment, and the security of an income, will likely lead to the ability to fund a healthier lifestyle including the purchase of healthy food, the ability to pay for medical care, and aid individual and whānau mental health and wellbeing
- **justice** – ensure that the justice system and Police operate in a fair and just way so that Māori are less likely to be criminalised. Further, that people who are held in this system receive opportunities to engage in rehabilitation and reintegration programmes. These programmes will improve the general health and wellbeing outcomes, and higher engagement in society, as those released from justice system facilities reintegrate into the community

- **social development** – ensure that whānau ora is protected and enhanced through the provision of appropriate welfare and employment support. Wrap-around care and support is an essential strategy for the health and wellbeing of whānau
- **environment and sustainability** – ensure that the planning and development functions of local government include an environmental sustainability and health wellbeing focus. Partnerships led by iwi with health and local government organisations to ensure kaitiakitanga taiao including ways to look after the health of te whenua/land, ngā wai/ waterways, te hau/airways, and tāngata whenua to improve health equity

The equity gap in health outcomes will not be eradicated by health services operating on their own. Waikato DHB is calling for a whole-of-system approach to improve health and wellbeing outcomes for Māori and Pacific peoples. Equally the DHB is committed to directly addressing those areas for which we hold oversight and accountability and supporting our partners to do the same.

Waikato DHB invites our communities and partners to join with us in supporting those wanting to move from the whirlpools and eddies to Te Ara Matua.

²⁶ As outlined in the Ottawa Charter for Health Promotion 1988, Te Tiriti o Waitangi and UN Declaration on the Rights of Indigenous Peoples (UNDRIP)



Mahi āmua

Next steps

Waikato DHB, guided by the commissioners and Iwi Māori Council, is committed to addressing the health inequities in our community²⁷ and recognises that to be successful, we need to work together with our intersectoral partners and iwi at all levels of our community. We need:

Engagement

Waikato DHB is committed to Pae ora, healthy futures for Māori and recognises that a multi-agency approach is required to improve the health outcomes for Māori across the region.

Waikato DHB will engage with iwi organisations and Māori Health providers and be guided by their aspirations for the achievement of Māori health equity.

Further engagement will occur with government, local government and NGOs, to agree a shared plan and approach to address the impacts of the social determinants of health so that as a community we work together to improve equity and health outcomes for whānau.

Action

Waikato DHB will complete an equity action plan within the 2020/21 year. This will focus on actions specific to addressing measures and contributing issues highlighted in this report. It will also agree on a robust framework for its equity approach, to ensure a connected, system-wide approach to equity as a DHB.

Accountability

Waikato DHB will report against the equity action plan on a quarterly basis. Waikato DHB, as part of engagement with key stakeholders, will make available the quarterly equity action plan and monitoring reports.

²⁷ He Korowai Waiora Waikato Health System Plan (August 2019) outlines a series of goals and actions to support addressing equity gaps

Appendix 1

Deprivation indices

In New Zealand two measures of deprivation are used:

1. The New Zealand Index of Deprivation (NZDep) developed after 1991 Census for the purposes of resource allocation, community advocacy and research to measure area-based social circumstances
2. The index of Multiple Deprivation (IMD), developed in 2017, provides a depth of understanding of the drivers of deprivation.

Domain of deprivation	NZ Deprivation Index indicators	IMD description of variable (in order of decreasing weight in the index)
Employment	People aged 18-64 unemployed	No. of working-age people receiving the Unemployment Benefit No. of working-age people receiving the Sickness Benefit
Income	People aged 18-64 receiving a means tested benefit People living in equivalised* households with income below an income threshold	Weekly Working for Families payments (\$ per 1000 population) Weekly payments (\$ per 1000 population) in the form of income-related benefits
Health	*	Standardised Mortality Ratio Hospitalisations related to selected infectious diseases Hospitalisations related to selected respiratory diseases Emergency admissions to hospital People registered as having selected cancers
Education	People aged 18-64 without any qualifications	School leavers <17 years old School leavers without NCEA Level 2 School leavers not enrolling into tertiary studies Working-age people without qualifications Youth not in Education Employment or Training
Housing	People living in equivalised households below a bedroom occupancy threshold People not living in own home	No. of persons in households that are rented No. of persons in households that are overcrowded
Crime	*	Victimisation rates for: <ul style="list-style-type: none">• Homicide and Related Offences• Assault• Sexual Assault• Abduction and Kidnapping• Robbery, Extortion and Related Offences• Unlawful Entry with Intent/Burglary, Break and Entre• Theft and Related Offences
Access	People with no access to a car People aged <65 with no access to the Internet at home	Distance to 3 nearest: <ul style="list-style-type: none">• GPs or Accident and Medical• Supermarkets• Service stations• Primary or intermediate Schools• Early childhood education centres
Support	People aged <65 living in a single parent family	*

* The New Zealand Index of Deprivation does not contain indicators that cover health and crime categories. The Index of Multiple Deprivation does not contain indicators that cover the support category.

Table 1: **Comparison of New Zealand Deprivation Index 2013 and the Index of Multiple Deprivation 2013**
Source: McMillan, R. and Exeter, D. (2018). Socioeconomic Deprivation in the Waikato Region. Using the Index of Multiple Deprivation to understand drivers of deprivation. Waikato Plan Discussion Paper, Waikato Plan, Hamilton.



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