Ngā Pou o Te Whare o Waipareira

The Whānau Centre Collective Impact Initiative – #tātou

Whānau Centre Health Needs Assesssment

May 2017

WHĀNAU CENTRE

Foreword from the Te Whānau o Waipareira CEO

The Whānau Centre has been supporting whānau who reside throughout West Auckland and other parts of Tāmaki Makaurau for almost 10 years. Whānau enrolled with the Whānau Centre have historically been under-valued, under-serviced and forced into the margins of society by 'mainstream' providers and the usual government agencies.

This health needs assessment was commissioned as part of the Ngā Pou o Te Whare o Waipareira Collective Impact Initiative-#Tātou that is currently being piloted through the Whānau Centre and was also aligned to the Waitemata District Health Board's Annual Planning and Māori Health Planning processes. This report has been a long time coming for Te Whānau o Waipareira and would not have occurred without the data-sharing agreement between Waipareira, Waitemata District Health Board and the Nirvana Health Group. With this we acknowledge all of the efforts of staff that have been part of this project, from the strategic leadership group to the frontline kaimahi.

This health needs assessment has emphasized the high and complex health needs of the whānau enrolled with the Whānau Centre. Digesting this health needs assessment has allowed us to more effectively synchronise our services to the needs of our whānau and the wider community. In essence this health needs assessment is a natural process within the Whānau Ora framework where services are developed based on the needs of whānau.

What we now know is that the health needs of our whānau are high and complex, but so is the desire and determination of our whānau to overcome these health needs.

These whānau represent the current and future leaders of our community and they are worth supporting and nurturing. Understanding their health needs and how to better service these whānau is thus of utmost importance in creating a flourishing and sustainable future for our whānau.

John Tamihere
Ngāti Porou ki Hauraki, Whakatōhea
Chief Executive Officer

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Executive summary

The Whānau Centre Health Needs Assessment report was developed as part of the Ngā Pou o Te Whare o Waipareira Collective Impact Initiative-#Tatou and represents a key outcome of the collaboration between Te Whānau o Waipareira (Waipareira), Waitemata District Health Board (DHB), and East Tamaki Healthcare (ETHC) (who are part of the Nirvana Group/Total Healthcare Primary Health Organisation (PHO)). Whānau Centre is a physical entity which co-locates Te Whānau o Waipareira services and other external service providers (such as ETHC's Wai Health general practice clinic and Waitemata DHB's diabetes and paediatrics clinic services, etc.) in Henderson, West Auckland.

Although this report is called a Health Needs Assessment (HNA) it is not a traditional HNA. The purpose of this report is to profile the health needs of clients enrolled at Whānau Centre (Waipareira Trust's Whānau Ora Centre) in the context of the Waitemata DHB and the West Auckland populations. This report covers a range of indicators of demography, the determinants of health, health status and health service use.

Key report findings

Demography

- The Whānau Centre population is based on enrolment in Waipareira services; that is clients are included on the Whānau Centre register when they are referred or receive a Waipareira delivered service. Whānau Centre client demographics therefore reflect the services provided, for example compared to the West Auckland population there are much higher proportions of the Whānau Centre population that are youth (10-14 and 15-19 year olds) due to the high volume school attendance services provided by Waipareira.
- There were 8,294 current[1] Whānau Centre clients included in the analysis; 4,330 (52%) of whom are Māori. This is higher than the proportion of Māori in Waitemata DHB overall (10%) and in West Auckland (12%).
- Wai Health, ETHC's general practice clinic located at Whānau Centre, has an enrolled population of 5,797; 3,312 (57%) are Māori. Whānau Centre clients make up 890 of the Wai Health enrolled population (11%).[2]

Determinants of health

- Whānau Centre clients reside predominantly in West Auckland (76%), with 55% living in the Henderson-Massey local board. West Auckland residents have lower average income, a higher proportion of people with no formal qualification, a higher unemployment rate and lower proportion of people with access to a car than Auckland residents overall.
- The proportion of 'at risk' children (according to the Treasury risk indicators) is slightly higher for West Auckland than nationally.
- The proportion of Whānau Centre clients living in the most-deprived census area units (quintile 5) is 38%; and highest for clients living in the Henderson-Massey local board (51%).

[1] Current for the purposes of this report refers to clients who had used at least one service in July 2015 – December 2016. Does not include the clients who are not in the Whānau Tahi database (smaller social service contracts yet to be migrated across to Whānau Tahi).
[2] There are 1,204 clients on both registers, but 205 accessed Smile Dental only and 109 had cervical screening support for which the screen is provided by Wai Health.

Health status

- Currently, self-reported information on Whānau Centre clients is incomplete for several health status or disease measures. This suggests substantial under-recording.
    - Only 11% of Whānau Centre clients are recorded as smokers (89% of clients do not have data recorded). It is noted that 15% of West Auckland residents are smokers (30% for Māori and 20% for Pacific West Aucklanders).
    - Cardiovascular disease (CVD) is recorded for 3.2% of Whānau Centre clients (a further 0.7% identified for those who were also Wai Health patients), however in the NZ health survey 4.2% of the WDHB population were identified with CVD, and this is higher for Māori.
    - Diabetes is recorded for 2.7% of Whānau Centre clients (a further 1.3% identified for those that were also Wai Health patients). The Virtual Diabetes Register picked up double this amount (a further 4.1%).
    - Cancer is recorded for 1.2% of Whānau Centre clients. A further 3.8% were identified from hospital records.
    - Chronic obstructive pulmonary disease (COPD) or asthma is recorded for 1.3% of Whānau Centre clients. A further 4.3% were identified for those that were also Wai Health patients.

Health services

- Waipareira services:
    - Of the 8,494 Whānau Centre clients, 21% used more than one Waipareira service (9% used three or more services).[3]
    - Over the 18 month data analysis period Waipareira made 1,527 referrals to internal services, 38% of which were made by the Kaiārahi/Navigator services, however this is likely an under-representation. One in three of the referrals made were to the mental health and addictions service, 13% to budgeting and 11% to positive parenting.
    - Smoking brief advice was only recorded for 8% of Whānau Centre clients.
- PHO enrolment: 86% of Whānau Centre clients were found to be enrolled with a PHO when matched to the PHO enrolment register, however Whānau Tahi data (self-reported) only indicated that 36% were enrolled with a GP.
- Well Child Tāmariki Ora: 54% of the eligible children were enrolled with the Whānau Centre Well Child Tāmariki Ora service.
- Oral health enrolment: 64% of pre-school Whānau Centre clients were found to be enrolled with oral health providers when matched to the dental enrolment database, this is the same rate for children enrolled in the Whānau Centre Tāmariki Ora service as those enrolled elsewhere.
- Immunisations: Although there are small numbers of eligible children in the cohort analysed, only 73% were immunised at 8 months, and the Whānau Centre records only recorded coverage of 63%. This indicates both under-reporting but also substantial opportunity to improve immunisation for Whānau Centre tāmariki.
- CVD Risk Assessment: Data for this indicator is incomplete,[4] however only 44% of potentially eligible clients had a CVD Risk Assessment status recorded in Whānau Tahi. For those Whānau Centre clients who were also Wai Health patients 90% had a CVD Risk Assessment recorded.
- Cancer screening: The data captured in the Whānau Tahi data is very low and likely to indicate incomplete recording. The only way to accurately report this data is to identifiably data matching with the relevant screening programmes (see below).
- Hospitalisations:
    - Ambulatory Sensitive Hospitalisations (ASH) rates were 1.6 times higher than the Waitemata DHB rates (although the volumes were low; 45 children).
    - Emergency Department attendances were 2.6 times higher, and the rates for acute admissions were 2.8 times higher, than the Waitemata DHB rates.
    - For the Whānau Centre children enrolled with the attendance services 35% had been in contact with hospital services (half of these in the emergency department).
- Outpatient services:
    - The number of Whānau Centre clients using mental health services was noted to be high (inpatient and outpatient services). There were 1,456 users identified; representing 18% of the 0-19 year old and 20% of the 20-64 year old age group Whānau Centre clients. This is six times the rate for both of these age groups compared to the Waitemata DHB rates. It is noted that 460 clients accessed Waipareira mental health services delivered at Whānau Centre.
    - The paediatric clinic located at Whānau Centre had Did Not Attend (DNA) rates (21%) similar to Waitakere Hospital.
    - The nurse-led and dietician diabetes clinics located at Whānau Centre had DNA rates of 18%, but the consultant clinics had similar rates to Waitakere Hospital clinics (36%) and the podiatry clinics also had high DNA rates (21%).

Data matching

Currently, identifying whether Whānau Centre clients have accessed some of these key services requires a data matching process, as Whānau Centre data is incomplete. Although this matching does require resources, it may be a useful approach to identify individuals who could benefit from additional support to access services for which they are entitled and can benefit. There is an argument that additional effort should be made to achieve higher rates for these populations due to poorer health status or high need. Matching to create identifiable lists of clients who could be offered services or support to access services would require further discussion with the Waitemata DHB Privacy and Security Governance Group (PSGG), which has indicated its support in principle for this type of approach.

Summary

Fifty-two percent of Whānau Centre clients are Māori, and the client population has high levels of deprivation and high health needs. The Whānau Centre model offers a Whānau Ora approach, and the co-benefit of on-site internal and external referrals to a range of health, social and other services. This report identifies important opportunities to improve the recording of key health status measures, to link clients to additional services from which they could benefit, and to improve enrolment and the uptake of preventative services.

[3] Referral patterns for the 12 co-located services were not able to be included in the analysis.
[4] This is self-reported risk assessment. This analysis was not able to match data with other PHO CVD RA data to investigate actual CVD status as has been done with Wai Health patients.

Introduction

The Whānau Centre Health Needs Assessment (HNA) report was developed as part of the Ngā Pou o Te Whare o Waipareira Collective Impact Initiative-#Tatou and represents a key outcome of the collaboration between Te Whānau o Waipareira (Waipareira), Waitemata District Health Board (DHB), and East Tamaki Healthcare (ETHC) (who are part of the Nirvana Group/Total Healthcare Primary Health Organisation (PHO)).

Whānau Centre

Whānau Centre is a physical entity which co-locates Te Whānau o Waipareira services and other external service providers in Henderson, West Auckland. Whānau Centre services are supported by the Whānau Tahi Navigator IT system, Kaiārahi (navigators) and the Wai Health general practice clinic (run by East Tamaki Health Care (ETHC) who are part of the Nirvana Group/Total Healthcare Primary Health Organisation (PHO)[5] located at Whānau Centre.

The Te Whānau o Waipareira Whānau Ora platform includes developing whānau capacity, supporting whānau growth, facilitating whānau leadership, and assisting whānau resilience. Te Whānau o Waipareira were early adopters of co-location as a model of delivering a Whānau Ora approach, and this report provides an opportunity to describe the populations served by Whānau Centre and to further examine and strengthen the model.

Ngā Pou o Te Whare o Waipareira Collective Impact Initiative

The Whānau Centre collective impact initiative has been named #Tatou - meaning for all of us. The vision of #Tatou is that all whānau in West Auckland are healthy. The mission/aim of #Tatou is to support whānau in West Auckland to improve their health by increasing health literacy and integrating health service delivery in Whānau Centre (with a focus on the reduction and prevention of obesity). The common agenda and objectives of #Tatou were identified from several sources. These included a review of West Auckland population data, whānau surveys and common concerns and trends identified by partners. The Steering Committee refined the common agenda by deciding to focus on the health literacy challenges associated with one or more specific health conditions and identified obesity as a key driver of many other health conditions such as cardiovascular disease and diabetes. Obesity is at epidemic levels particularly for Maori and Pacific peoples and despite new government initiatives, not enough is being done to address this issue. Childhood obesity in particular is of grave concern with over 60% of parents of obese Maori children (nationally) not perceiving their child to be overweight. This Initiative begins to address childhood obesity through a whānau approach, by focusing on the adults within the whānau. It is expected that children will benefit as their whānau becomes more informed.

Aim of the HNA

To identify areas of health need and services gaps which may be served by community based services, and to identify opportunities to strengthen health service delivery at Whānau Centre.

Objectives of the HNA

- Describe the West Auckland population with a focus on Māori and health status.
- Describe the services delivered at Whānau Centre by Waipareira and associated providers (service profile).
- Describe whānau accessing services at Whānau Centre (client user profile).
- Describe the health status and outcomes of service users.
- Determine whether there are gaps and any agreed priorities.

[5] Nirvana Group/Total Healthcare PHO under ProCare PHO in the Waitemata DHB region.

Whānau ora approach

The term 'Whānau Ora approach' and 'whānau-centred approach' refer to a culturally grounded, holistic approach focused on improving the welling of whānau and addressing individual needs within a whānau context and from a strengths base (rather than deficit focused).

Government health and social services have not typically been designed to take a whānau-centred approach, focusing instead on individuals and single-issue problems. As a result, delivery of services to whānau has often been fragmented, lacking integration and coordination across agencies and social service providers, and unable to address complexities where several problems coexist.

Essentially Whānau Ora and whānau-centred approaches are about providing services that meet the needs of whānau and individuals. In many cases, this requires the provision of services and support from multiple agencies.

About Whānau Centre

Whānau Centre opened in 2010, to provide a wide range of services across sectors including health, education, social services, justice and employment. The overall goal is to provide seamless service delivery that is whānau-centred. Some Whānau Centre services are provided by Te Whānau o Waipareira, with multiple funding organisations (see Appendix). Whānau visiting Whānau Centre are greeted by kaumatua in order to make services more approachable, and assist with enquiries. Whānau are linked to a Kaiārahi who assists with service navigation and creating a whānau plan to assist them with achieving their goals. Information about whānau access to services are managed using the Whānau Tahi Navigator IT system.

At Whānau Centre there are 51 services or programmes, 21 of which (approximately 40%) are health related services.

Waipareira provides a number of health (non-general practice) services which include:

- A range of community, public, personal and mental health services, and support whānau to access the wider Whānau Ora platform of services. Services include free access to health, social/justice and education programmes (such as promotion, advocacy, and early intervention through to treatment).
- Support services assisting whānau to access early intervention and prevention education programmes. Such programmes include: community nutrition and physical activity, Tāmariki Ora immunisation, sudden unexplained death incidents, family violence and smoking cessation screening.
- Support services assisting whānau daily living skills on an intimate level. Specifically, registered nurses work closely with whānau to help them achieve and maintain daily tasks. Services within this category are mobile Māori nursing (management of long term conditions), cardiac rehabilitation and cancer navigation.
- Services aim to help whānau manage their mental health. This includes identifying when clinical support is required and advocating with WINZ, Housing NZ, general practitioners and Justice. This is the biggest cluster of the health division, consisting

of adult, child and rangatahi advocacy, mainstream, Iwi, Pacific, home-base support, Kaupapa Day programme and alcohol and drug counselling services.
- Child and family health. Working with hapu mothers from six months until their pēpē reach five years of age. This includes ante/postnatal care, general support, advocacy and navigating to midwives, general practitioners, early childhood centres, Kohanga Reo, education/ promotion of breastfeeding, oral health and immunisation.

Wai Health general practice (GP) clinic is part of the Nirvana Health Group which has been providing high quality low cost health services across Auckland for 40 years. Nirvana Health Group is the largest independent primary health care group in New Zealand serving 200,000 enrolled patients across 35 clinics and 20 pharmacies. Nirvana Health Group care is provided by networks across Auckland, employing 1000 staff including 300 doctors. Nirvana's Mission statements are as follows:

- Nirvana Purpose: Here to Serve.
- Nirvana Values: Caring, Trust, Professionalism, Access, Innovation, Quality.
- Nirvana Vision: To be the leading primary healthcare provider through affordable, accessible, culturally competent and high quality health care services to NZ communities.

The Wai Health clinic aims to provide quality healthcare for all patients with an emphasis on health education and preventative medicine. The clinic provides free care for accident treatment. Patients are seen on a walk-in basis as they arrive at the clinic – appointments are not necessary. Wai Health is cornerstone accredited by the Royal New Zealand College of GPs and has three highly experienced GPs.

Wai Health offers disease management programs to enrolees with the following conditions:

- Diabetes
- Cardio Vascular Disease
- Congestive Heart Failure
- Chronic Obstructive Pulmonary Disease
- Gout
- Asthma
- Depression
- Multiple Chronic conditions.

Wai Health can also provide access to one on one psychological services, offers one on one health coaching and a range of Self-Management Programmes and Mindfulness Programmes to help deal with stress and anxiety.

Waitemata DHB aims to provide timely access to services to enable people to live longer, healthier and more independent lives. Accessing the right care at the right time in the right location is critical to ensuring that patients achieve the best health outcomes possible. Waitemata aims to provide timely and accessible care closer to home in a range of alternate locations in the community; care that is well integrated across community, primary and hospital settings, is accessible and is culturally appropriate. Whānau Ora services such as Whānau Centre are an important means to achieving this aim. Waitemata DHB currently delivers secondary care services by leasing space at Whānau Centre. The He Kamaka Waiora team (Māori Health Waitemata and Auckland DHB Provider arm service) support these clinics. Services provided currently include:

- Diabetes services – Secondary care clinics provided in a community location, with a focus on nurse-led chronic care management.
- Paediatric services – Secondary care clinics provided in a community location, of which Whānau Centre is one.

Other services at Whānau Centre are provided by 12 co-located external partner organisations:

- Hapai Te Hauora
- Te Pou Matakana (Whānau Ora Commissioning Agency)
- Physio Absolute
- Smile Dental
- Mole Map Clinic
- Hearing Association (Auckland) Inc.
- Acupuncture Service (Origin Health Clinic)
- Work and Income New Zealand Community Link
- Inland Revenue Department
- Drake New Zealand
- Waitakere Community Law Service
- Unichem Pharmacy.

Methods

Qualitative and quantitative methods were used for this Health Needs Assessment.

Qualitative work included informal key informant interviews and small group discussions and discussions with specific providers. Document review was also undertaken.

Quantitative data included:

- Te Whānau o Waipareira register of clients who had used Waipareira services during the 18 months from July 2015 to December 2016 ('current clients').
- Wai Health practice data provided by ETHC.
- Hospitalisation and outpatient data.
- Service specific data e.g. Auckland Regional Dental Service (ARDS).
- Census population estimates and other census related data from previous published Te Pou Matakana locality report and DHB HNA reports.

Data are presented separately for different populations where appropriate, and where data is available, including Whānau Centre clients; the West Auckland population; and the Waitemata DHB population.

Ethnicity is Level 1, prioritised. Deprivation Index 2013 is utilised.

Cells in tables are suppressed where there are <5 people due to potential identifiability.

This analysis does not include services not captured by the Whānau Tahi information system (e.g. Work and Income New Zealand and legal services) or use of services by different whānau members. This is likely to mean that this report underestimates the proportion of whānau using multiple services at Whānau Centre.

Ethics, privacy and confidentiality

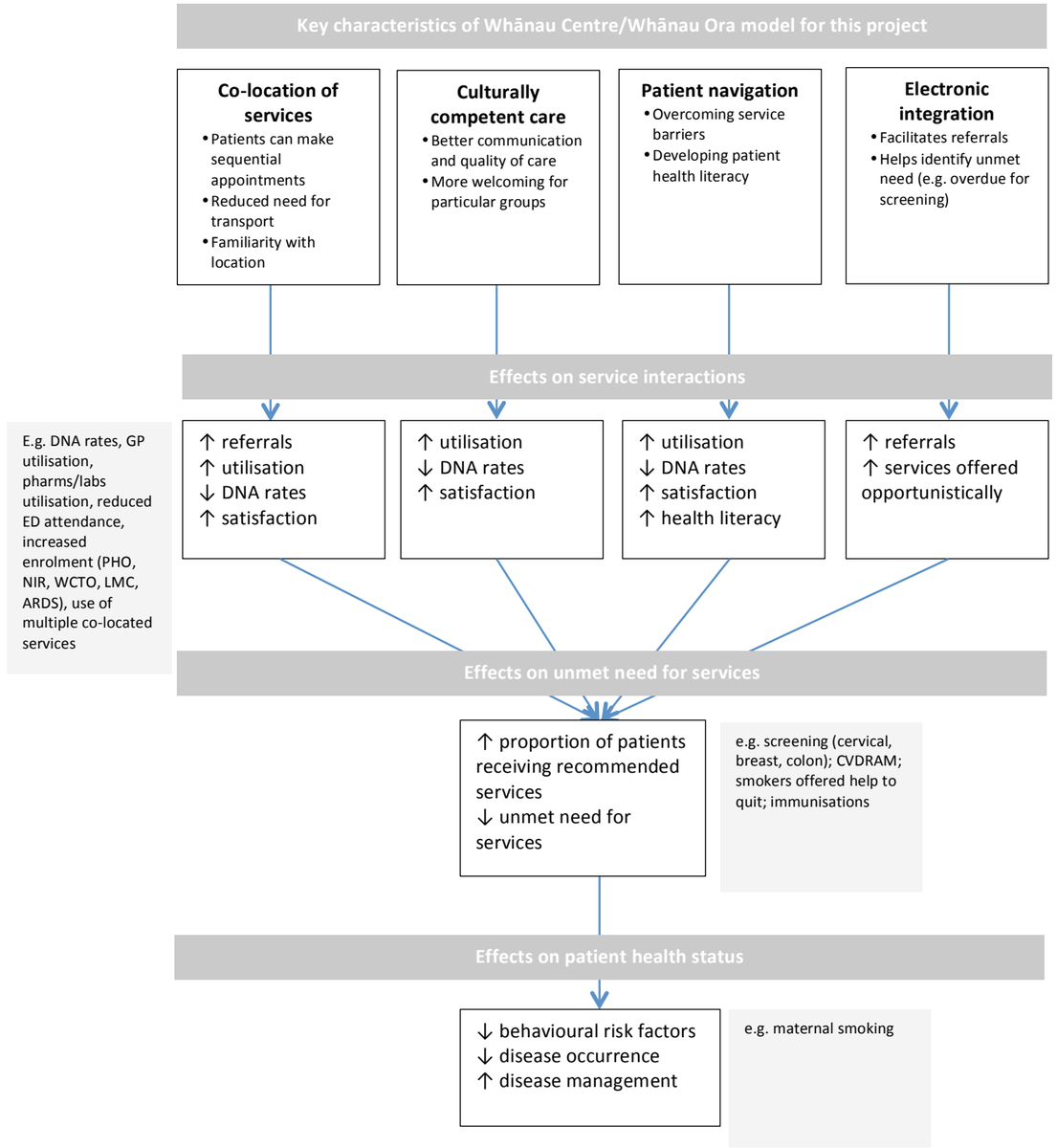
Formal Health and Disability Ethics Committee review was not required for the HNA. However, the advice of the Waitemata DHB Privacy and Security Governance Group (PSGG) was sought due to the data linking involved and data from three organisations. The PSGG recommended a Privacy Impact Assessment (PIA) be completed, and they approved this.

The PSGG also recommended a formal data sharing Memorandum of Understanding (MoU) which was also agreed between the three organisations. The project was registered with Awhina Research and Knowledge Centre as part of localities authorisation. All data was de-identified for analysis and reporting.

The 11 co-located services at Whānau Centre were invited to participate in the HNA, to look specifically at referral patterns and rates. Although there are appropriate exemptions for data sharing of this nature (de-identified and presented in aggregate format only) under the Privacy Act (and confirmed with the Privacy Commissioners office) the externals agencies still declined to participate. This does limit the ability of the HNA to determine the extent of benefit associated with co-location.

Logic model

The choice of indicators to be analysed in this report was largely determined by the data that were available. However, where appropriate, data analysis and interpretation were guided by this logic model, which attempts to describe the particular features of Whānau Centre that have the potential to improve care.



Notes: ARDS: Auckland Regional Dental Service; CVDRAM: cardiovascular risk assessment and management; DNA: did not attend; ED: emergency department; GP: general practice; HNA: health needs assessment; LMC: lead maternity carer; NIR: national immunisation register; PHO: primary health organisation; WCTO: Well Child/Tamariki Ora. Note that pathways may reduce inequalities, especially for Māori, but may also improve care for all.

1. Demography

Age

There were 8,294 Whānau Centre clients included in this analysis (Table 1). Most Whānau Centre clients (55%) are aged under 25, a higher proportion than the West Auckland population (36%) (Table 2). There are particularly large numbers in the 10-19 year band, likely to be related to the large number of clients involved in school attendance services.

This makes the Whānau Centre client population younger than the West Auckland population, even though the West Auckland population itself is relatively young, compared to Waitemata DHB (Figure 1).

Table 1: Numbers of Whānau Centre clients by age and ethnicity

Age	Māori	Pacific	Asian	Other	Total
<1	60	<5	<5	11	**76**
01-04	328	36	11	67	**442**
05-09	363	157	31	183	**734**
10-14	619	278	51	401	**1,349**
15-19	670	189	29	404	**1,292**
20-24	331	96	23	107	**557**
25-44	1,152	319	229	492	**2,192**
45-64	637	195	95	232	**1,159**
65-74	97	25	15	48	**185**
75+	64	11	<5	26	**105**
Unknown	9	<5	<5	190	**203**
Total	**4,330**	**1,313**	**490**	**2,161**	**8,294**

Table 2: Proportion of population in each age group, Whānau Centre clients compared with West Auckland

Age group	Whānau Centre clients	West Auckland population
0-4	6%	8%
5-9	9%	7%
10-14	17%	7%
15-19	16%	7%
20-24	7%	7%
25-44	27%	29%
45-64	14%	24%
65-74	2%	6%
75+	1%	5%

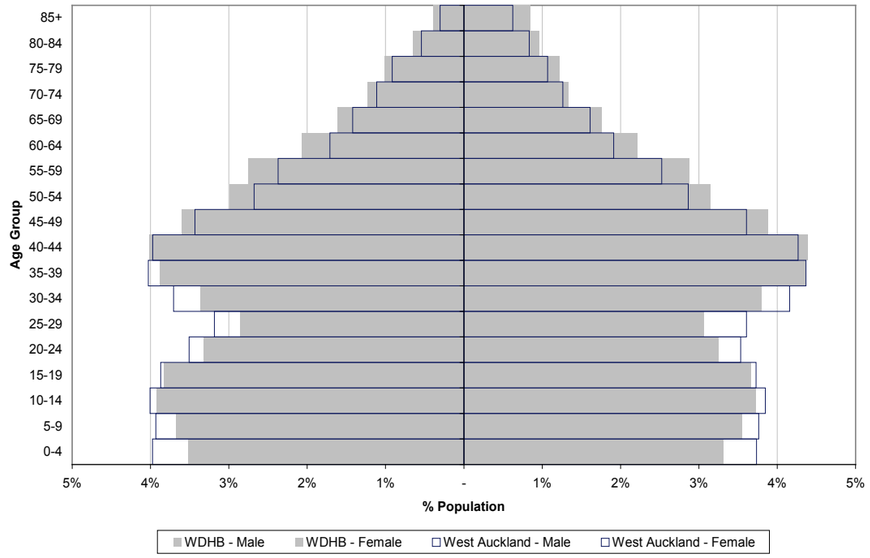


Figure 1: Age structure of West Auckland and Waitemata DHB populations, by gender

Figure source: Martin and Zhou, 2012, p5[6].

Ethnicity

Whānau Centre clients include a much higher proportion of Māori compared with the West Auckland population, and much lower proportions of people in Asian and Other ethnic groups. The proportion of the population with Pacific ethnicity is similar between the two groups (Table 3).

The West Auckland population, in turn, contains slightly higher proportions of people of Māori and Asian ethnicity, and a much higher proportion of people of Pacific ethnicity, compared with Waitemata DHB as a whole (Figure 2). The proportion of people in the 'Other' ethnic group is lower in West Auckland.

The West Auckland area, especially near Henderson where the Whānau Centre facility is located, has a relatively high proportion of Māori residents compared to the rest of the Auckland region (Figure 3).

Table 3: Ethnicity for Whānau Centre clients and West Auckland population

	Māori	Pacific	Asian	Other
Whānau Centre clients	52%	16%	6%	26%
West Auckland population	12%	14%	21%	53%

[6] Martin, S., Zhou, L. West Auckland integrated care project: locality and cluster level analysis. Auckland: Waitemata District Health Board, 2012.

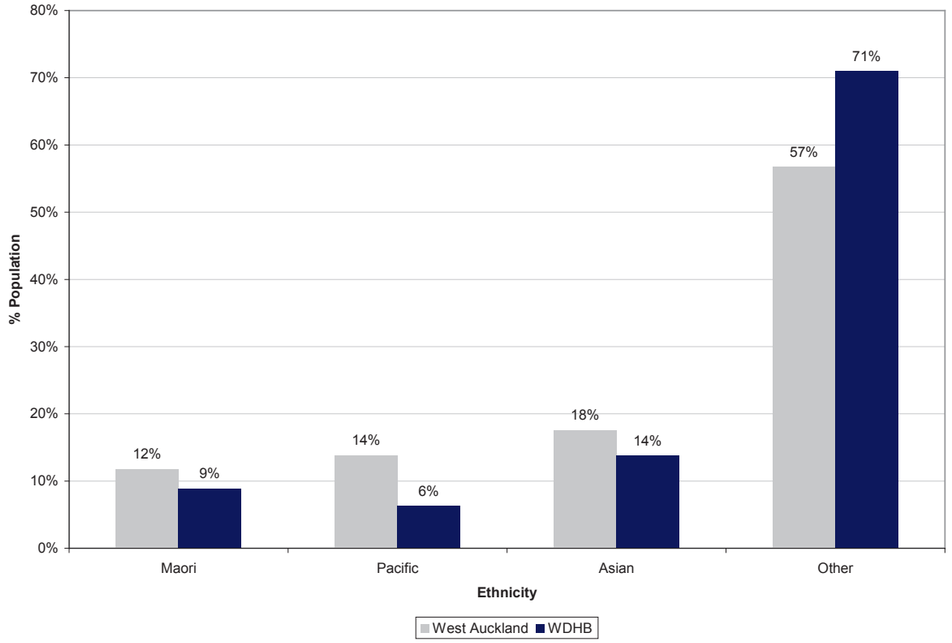


Figure 2: Ethnicity in West Auckland and Waitemata DHB

Figure source: Martin and Zhou, 2012, p6.

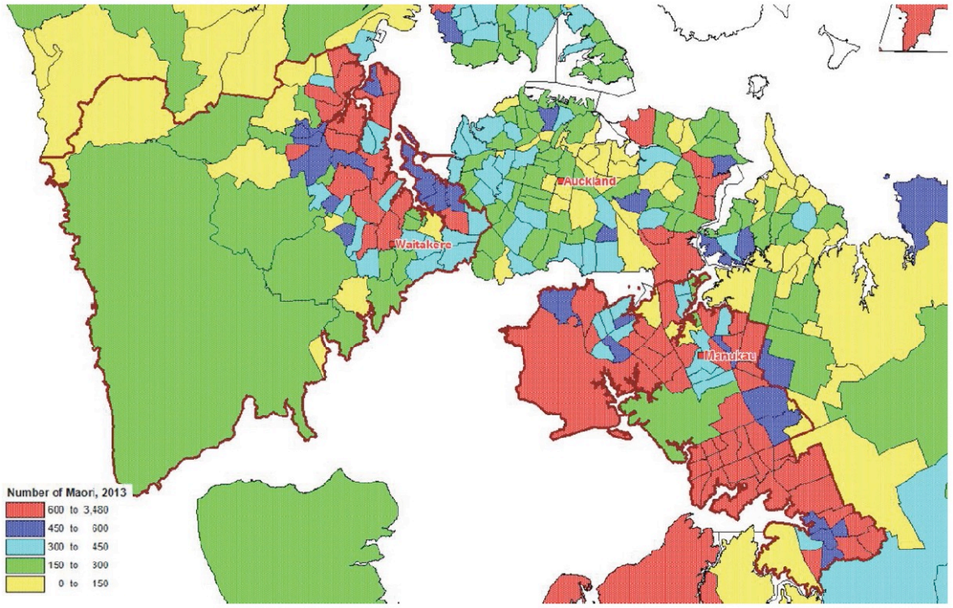
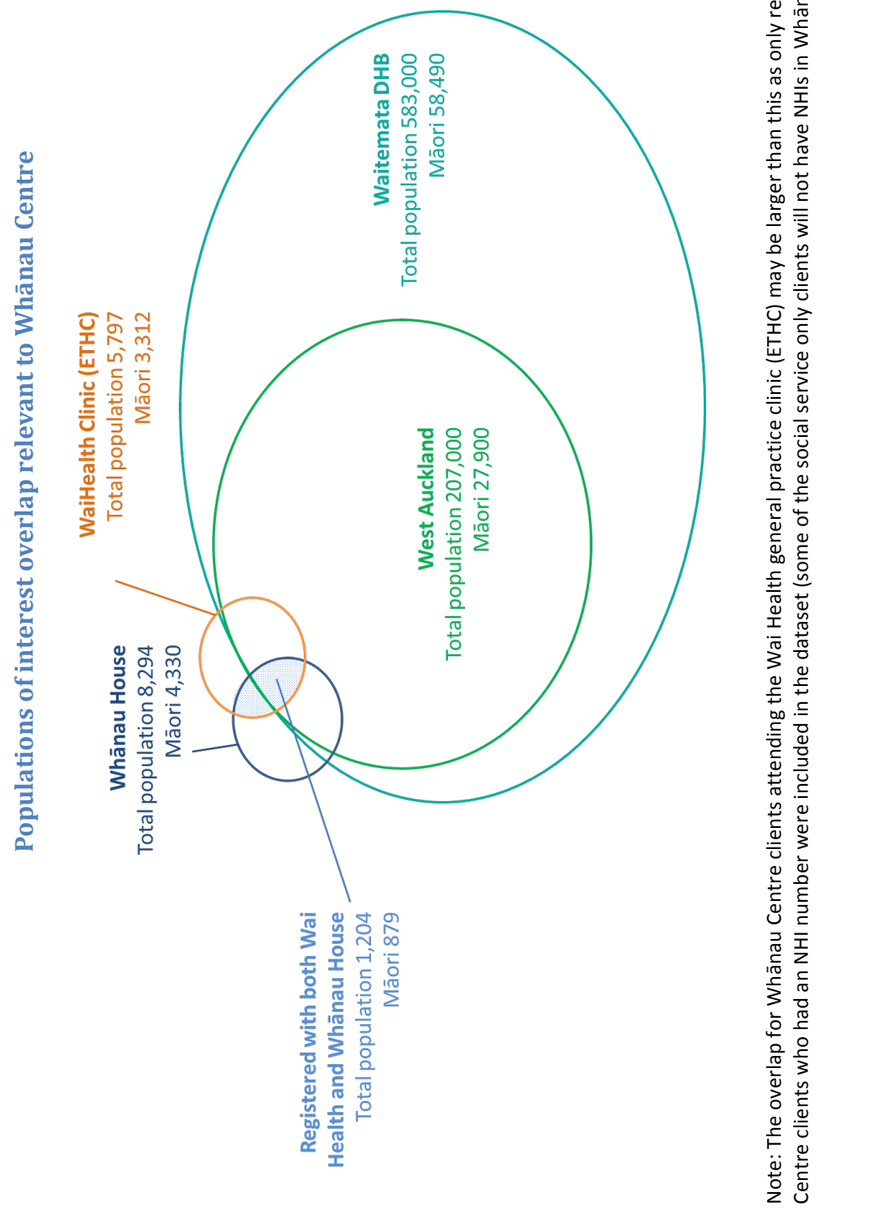


Figure 3: Geographical distribution of Māori population in the Auckland region

Figure source: Huakau 2014, p11[7]*.*

[7] Huakau J. Locality Population Snapshot West Auckland. Auckland: Te Pou Matakana, 2014.



Note: The overlap for Whānau Centre clients attending the Wai Health general practice clinic (ETHC) may be larger than this as only recently active Whānau Centre clients who had an NHI number were included in the dataset (some of the social service only clients will not have NHIs in Whānau Tahi).

Population projections

Although population projections are not available for the Whānau Centre client list,[8] the West Auckland population has historically grown faster than the total Waitemata DHB population, and is projected to continue to do so in the future (Figure 4).

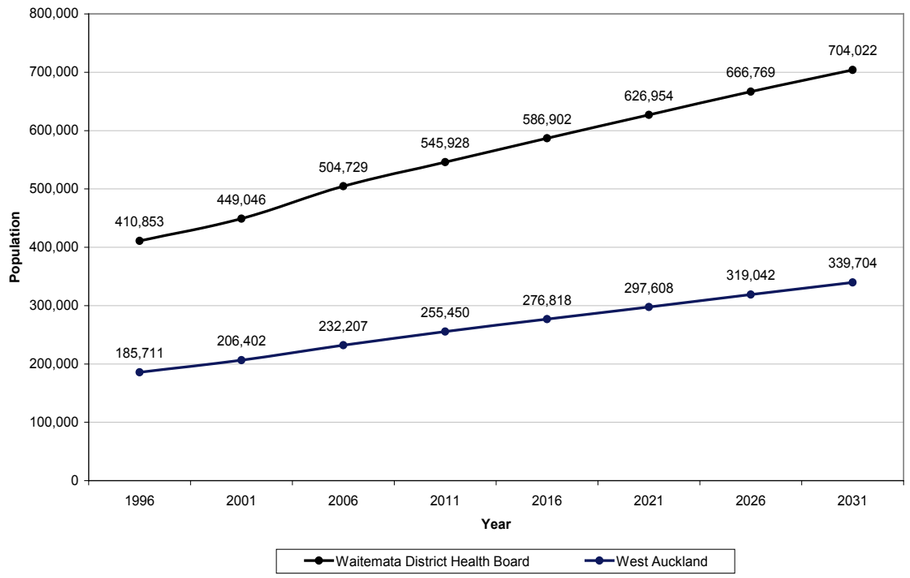


Figure 4: Population trends and projections, West Auckland and Waitemata DHB

Figure source: Martin and Zhou, 2012, p9.

Area of residence

Whānau Centre clients predominantly live in the Henderson-Massey local board area, with smaller numbers living in Waitakere Ranges and Whau. About a quarter of clients live in a range of other local board areas (Table 4).

Table 4: Local board area of residence for Whānau Centre clients

Local board area	% of clients
Henderson-Massey	55%
Waitakere Ranges	12%
Whau	9%
Other	24%

[8] And it is noted that the Whānau Centre register is based on receipt of service (e.g. the provision of a new service dramatically increased the Whānau Centre 'population' rather than being directly related to the local population trends.

2. Determinants of health

Deprivation

The Henderson-Massey local board, the area in which most Whānau Centre clients live, has the highest deprivation level of any local board in the Waitemata district. The next most deprived local board area is Whau, another West Auckland local board (Table 5). Table 5 also demonstrates in the comparison between Waitemata DHB and Whānau Centre (far right) high deprivation populations (Quintile 4-5); Waitemata DHB 24%, Whānau Centre 73%.
The proportion of Whānau Centre clients living in the most-deprived census area units (quintile 5) is 38%, and is highest for clients living in the Henderson-Massey local board area (51%) (Table 6). In all three local boards, Whānau Centre clients live in more deprived neighbourhoods than the average for that local board (Figure 5).

Table 5: Deprivation profile of Waitemata DHB local board areas

NZDep 13 Quintile	Devonport -Takapuna	Henderson -Massey	Hibiscus and Bays	Kaipatiki	Rodney	Upper Harbour	Waitakere Ranges	Whau	WDHB
Q1	39%	4%	43%	20%	24%	47%	35%	8%	**26%**
Q2	33%	14%	34%	33%	35%	32%	19%	13%	**27%**
Q3	23%	23%	14%	35%	25%	16%	17%	22%	**22%**
Q4	4%	36%	9%	8%	10%	5%	19%	40%	**16%**
Q5	1%	23%	1%	4%	5%	0%	10%	17%	**8%**

Note: deprivation analysed at meshblock level.

Table 6: Deprivation profile of Whānau Centre clients by local board area

NZDep13 Quintile	Local board			All Whānau Centre clients
	Henderson-Massey	Waitakere	Whau	
Q1	0%	13%	0%	**5%**
Q2	1%	24%	7%	**9%**
Q3	13%	8%	0%	**13%**
Q4	35%	49%	69%	**35%**
Q5	51%	3%	24%	**38%**

Note: deprivation analysed at census area unit level.

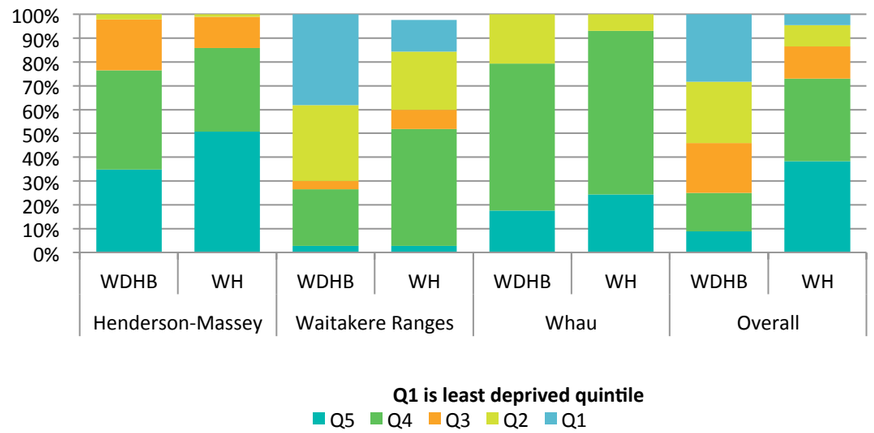


Figure 5: Percentage of population living in each deprivation quintile by local board, Waitemata DHB and Whānau Centre clients

WDHB: Waitemata DHB; WH: Whānau House/Centre. Note: deprivation analysed at census area unit level.

Income

Data for income, education and several other indicators are not available specifically for Whānau Centre clients. However, West Auckland is known to have a slightly lower average income than Auckland as a whole, with incomes for European/Other groups in West Auckland lower than the Auckland-wide average for those groups. However, the lowest proportion of people with personal income ≥ $30,000 is among Pacific, Asian and Māori (Figure 5).

Table 7: Percentage of population with personal income ≥ $30,000, by ethnicity

Ethnicity	West Auckland	Auckland
Māori	43%	43%
Pacific	39%	36%
Asian	39%	39%
European	52%	56%
Other	44%	48%
Total	**47%**	**50%**

Table source: Huakau 2014, p18.

Education

The percentage of the West Auckland population with no formal qualification (18.7%) is slightly higher than the percentage in Auckland as a whole (15.9%), largely due to higher rates among West Aucklanders of European or Other ethnicity (Table 8: Percentage of population with no formal qualification, by ethnicity).

Table 8: Percentage of population with no formal qualification, by ethnicity

Ethnicity	West Auckland	Auckland
Māori	28%	29%
Pacific	26%	27%
Asian	12%	11%
European	19%	14%
Other	14%	11%
Total	**19%**	**16%**

Table source: Huakau 2014, p17.

Employment

Compared with Auckland as a whole, West Auckland has a slightly higher unemployment rate. This is mainly due to higher unemployment among European and Other groups (Table 9).

Table 9: Percentage of population unemployed, by ethnicity

Ethnicity	West Auckland	Auckland
Māori	11.1%	10.8%
Pacific	10.0%	10.2%
Asian	6.2%	6.0%
European	4.6%	3.9%
Other	8.7%	6.9%
Total	**6.0%**	**5.4%**

Table source: Huakau 2014, p18.

Living in rental housing

The percentage of the population living in rental housing in West Auckland is similar to the percentage in Auckland as a whole. However, this percentage was lower among Pacific and Asian groups in West Auckland, but higher among the 'Other' ethnic group (Table 10).

Table 10: Percentage of population living in rental housing, by ethnicity

Ethnicity	West Auckland	Auckland
Māori	56%	56%
Pacific	60%	64%
Asian	33%	39%
European	29%	30%
Other	50%	43%
Total	**37%**	**36%**

Table source: Huakau 2014, p20.

Access to a car

The percentage of households with no motor vehicle is slightly lower among West Auckland residents, compared with Auckland as a whole. This pattern is seen particularly among people from Pacific, Asian and Other ethnic groups (Table 11).

Table 11: Percentage of households with no motor vehicle, by ethnicity

Ethnicity	West Auckland	Auckland
Māori	8.3%	9.8%
Pacific	5.7%	7.4%
Asian	2.6%	4.6%
European	3.9%	3.6%
Other	3.7%	5.6%
Total	**4.2%**	**4.8%**

Table source: Huakau 2014, p21.

Children at risk

The government (Treasury) has developed indicators for children and youth at higher risk of poor outcomes as part of the Social Investment Approach. These are developed from the Statistics New Zealand Integrated Data Infrastructure (IDI) and include characteristics of young people aged 15 to 24 which are most predictive of poor long-term outcomes. The four risk factors highlighted in this work include a Child, Youth and Family finding of abuse/neglect, being supported by benefits since birth, having a parent with a prison sentence, maternal education.[9] It is noted that these risk factors are strongly related to locality. The proportion of children 'at risk' is slightly higher in the Henderson-Massey local board, compared with the rest of NZ, whereas the proportion in Waitakere and Whau local boards is lower than the rest of NZ (Table 12).

Table 12: Percentage of at-risk children with two or more risk factors by local board and age group

	0-5 years			6-14 years		
	At Risk	**Percent**	**Total**	**At Risk**	**Percent**	**Total**
Henderson-Massey	1,824	15%	11,880	2,385	17%	14,181
Waitakere Ranges	438	9.8%	4,464	561	9.2%	6,102
Whau	720	10%	7,170	939	12%	8,196
Auckland Region	15,198	12%	125,622	20,046	12%	170,949
Rest of NZ	50,406	15%	341,157	65,394	13%	487,872

Source: https://shinyapps.stats.govt.nz/sii/.

[9] See: http://www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf .

3. Health status

Smoking status

Smoking rates in West Auckland are slightly higher than for Auckland as a whole, due mainly to higher smoking rates among Europeans. Smoking rates in other ethnic groups are similar in the two areas (Table 13).

Data on Whānau Centre clients shows that only 11% are smokers and have this recorded (Table 14), with 89% not recorded. This suggests that, currently, smoking status is not being accurately recorded among Whānau Centre clients.

Table 13: Regular smoking, by ethnicity, 2013 Census

Ethnicity	West Auckland	Auckland
Māori	30%	29%
Pacific	20%	21%
Asian	7.4%	7.1%
European	15%	12%
Other	12%	10%
Total	**15%**	**13%**

Table source: Huakau 2014, p31.

Table 14: Smoking status, by ethnicity, Whānau Centre clients

Ethnicity	Smoker	Not recorded
Māori	17%	83%
Pacific	6%	94%
Asian	2%	98%
Other	6%	94%
Total	**11%**	**89%**

Life expectancy

Life expectancy is the average length of life in a population. Life expectancy is not available for Whānau Centre clients. However, West Auckland life expectancy in 2007-09 was slightly lower (81 years) than life expectancy for Waitemata DHB as a whole (83 years). Life expectancy was lower for Māori and Pacific (at 76-77 years) than other groups, in both West Auckland and Waitemata DHB (Figure 6).

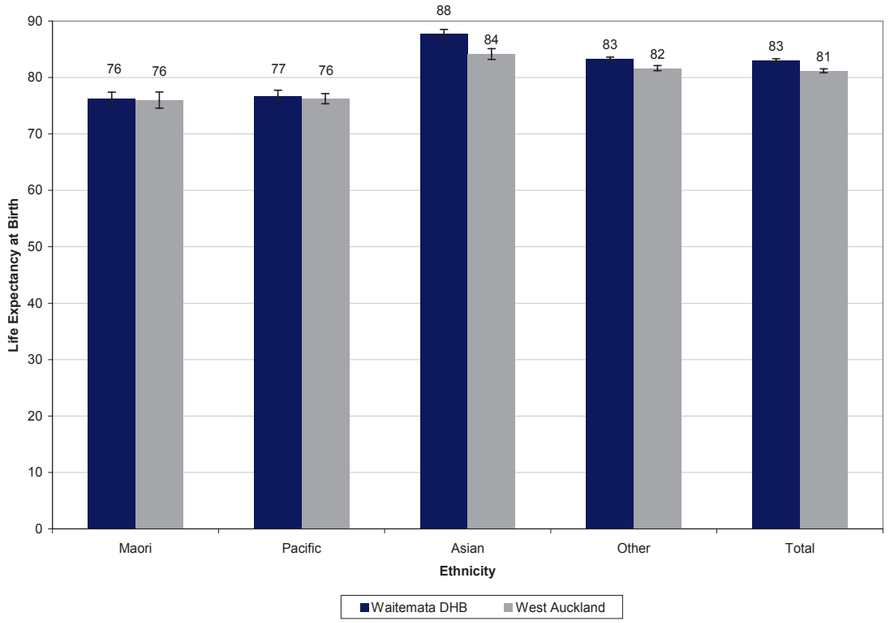
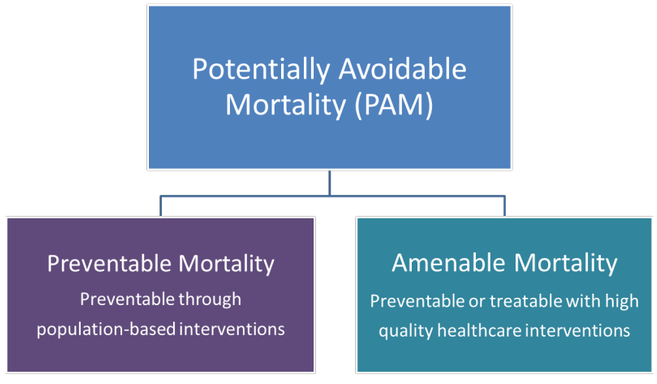


Figure 6: Life expectancy in Waitemata DHB and West Auckland, by ethnicity, 2007-09

Figure source: Martin and Zhou, 2012, p16.

Avoidable mortality



Potentially avoidable mortality (PAM) includes deaths for specific conditions <75 years old considered to be preventable or treatable through population based interventions or high quality healthcare. PAM is not available for Whānau Centre clients, but was higher for West Auckland than Waitemata DHB as a whole in 2007-09 (Figure 7). The leading conditions responsible for potentially avoidable mortality in West Auckland were coronary disease, breast cancer, suicide and cerebrovascular diseases. Diabetes was the condition for which West Auckland mortality exceeded Waitemata DHB mortality by the largest amount (Figure 8).

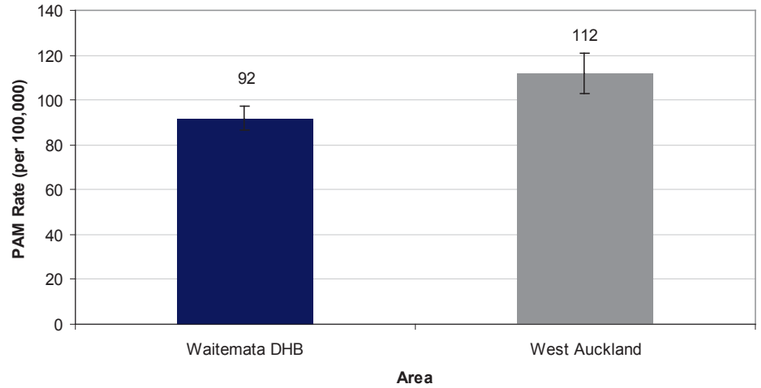


Figure 7: Age-standardised potentially avoidable mortality rate per 100,000, adults 15-74 years, Waitemata DHB and West Auckland, 2007-09

Figure source: Martin and Zhou, 2012, p17.

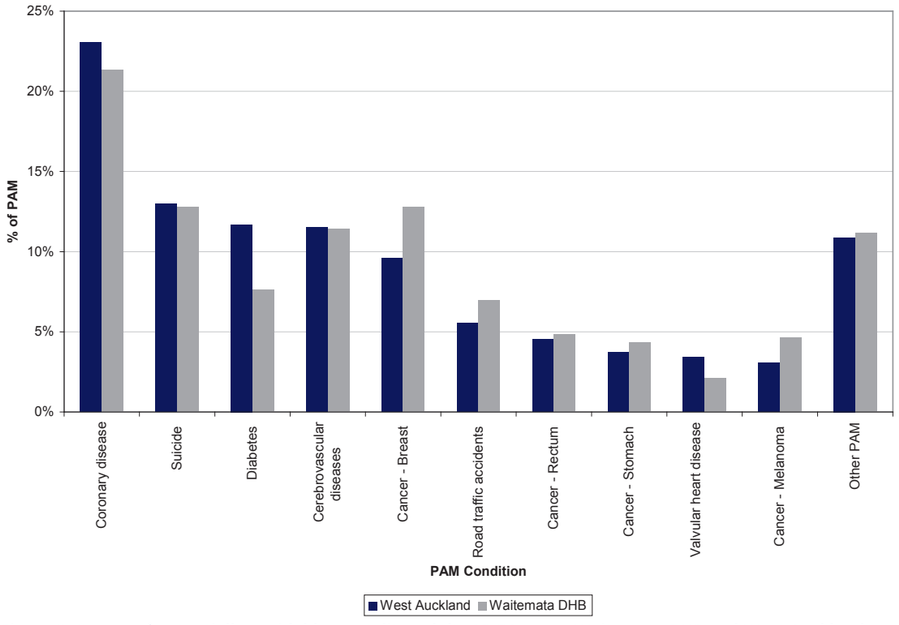


Figure 8: Causes of potentially avoidable mortality, adults 15-74 years, Waitemata DHB and West Auckland, 2007-09

Figure source: Martin and Zhou, 2012, p19.

Cardiovascular disease

Of the 263 (3.2%; Table 15) patients recorded by Whānau Centre as having cardiovascular disease (CVD), 61 (23%) were recorded as using statins. This is a lower rate of statin use than would be expected among patients with cardiovascular disease, and suggests incomplete recording or issues with CVD management.

In Waitemata DHB, the prevalence of cardiovascular disease in the NZ Health Survey in 2011-14 was 4.2%, and it is known to be higher for Māori. This suggests that not all cardiovascular disease is recorded by Whānau Centre or by ETHC and that there are opportunities in the CVD risk assessment and management space.

Table 15: Cardiovascular disease recorded, Whānau Centre and East Tamaki Health Care

Group	Number of people	Percent
CVD identified by Whānau Centre	263	3.2%
CVD identified by ETHC but not by Whānau Centre	61	0.7%
Total patients identified as having CVD	324	3.9%
All patients	**8294**	**100%**

CVD: cardiovascular disease. ETHC: East Tamaki Health Care.

Diabetes

The Whānau Centre client list was matched with the ETHC Wai Health practice register and with the Virtual Diabetes Register (VDR). This match showed that 4.0% of patients were identified by either Whānau Centre or ETHC, but an additional 342 patients (4.1%) were identified by the VDR, suggesting that about half of people with diabetes are recorded as having diabetes in the Whānau Centre client list.[10] However, within Whānau Centre, only the Mobile Māori Nursing service actively records the diabetic status of clients.

Table 16: Recording of diabetes status, Whānau Centre and East Tamaki Health Care, compared with Virtual Diabetes Register

Diabetes status	Number of people	Percent
Identified by Whānau Centre	224	2.7%
Identified by ETHC, not by Whānau Centre	104	1.3%
Identified either by Whānau Centre or ETHC	**328**	**4.0%**
Identified by VDR, not by Whānau Centre or ETHC	342	4.1%
Total rate including Whānau Centre , ETHC and VDR	**670**	**8.1%**

ETHC: East Tamaki Health Care; VDR: virtual diabetes register.

For those included on the VDR, 89% had had an HbA1c test in calendar year 2015, which was the same as the overall rate for everyone on the VDR.

There were 50 people identified by ETHC or Waipareira who were not on the VDR. After checking a sample, it appears that some of these had gestational diabetes or were mental health service users and may have had diabetes triggered by their medications. The VDR is not 100% accurate at patient level. It includes small numbers of patients who are not diabetic and omits a small number who are diabetic. By including all patients on the VDR and all patients identified by Waipareira and ETHC, we may be slightly overestimating the diabetes rate because the VDR may include a few patients who are not diabetic, but we have probably picked up those that the VDR is missing, by using the ETHC and Whānau Centre data.

[10] It is noted from other reports that the VDR may overcount diabetes by approximately 10%, discussed overleaf in relation to this specific data.

Cancer

On the Whānau Centre client register, 98 patients were recorded as having cancer (1.2% of the client register; Table 17). Examination of hospital data found 317 (3.8%) in contact with cancer services over the 21 month period July 2014 to March 2016, there is therefore incomplete recording of cancer status.

Table 17: Whānau Centre clients recorded as having cancer

Recorded as having cancer?	Māori	Pacific	Asian	Other	Grand Total
Y	85	<5	<5	10	98
Not recorded	4245	1311	489	2151	8196
Grand Total	**4330**	**1313**	**490**	**2161**	**8294**

Respiratory disease

Of the 8,294 clients on the Whānau Centre register, 109 were identified as having chronic obstructive pulmonary disease (COPD) or asthma. An additional 360 clients were listed in ETHC Wai Health clinic records as having COPD or asthma, suggesting that many patients with COPD/asthma are not listed as such on the Whānau Centre register.

A range of Waipareira services record COPD/asthma status, including Mobile Māori Nursing, Family/Whānau Support Services, Cardiac Rehabilitation Manual Based Education, Community Health Navigator, Whānau Ora (Child and Youth), and Tāmariki Ora.

Table 18: Recording of COPD/asthma status, Waipareira and East Tamaki Health Care

COPD/asthma	Number of people	Percent
Identified by Whānau Centre	109	1.3%
Identified by ETHC, not by Whānau Centre	360	4.3%
Identified either by Whānau Centre or ETHC	**469**	**5.7%**
Total patients on Whānau Centre register	**8294**	**100%**

COPD: chronic obstructive pulmonary disease; ETHC: East Tamaki Health Care.

4. Health services

Use of Whānau Centre services

A total of 8,294 people contacted Waipareira Whānau Centre services during the analysis period. Of these, about 6,500 (79%) used only a single Whānau Centre service, and 21% used more than one service (and 9% of clients used three or more services (Table 19)).

It should be noted that this analysis does not include the 11 co-located services (see Appendix) provided by external agencies, so does not comment on the potential full benefit of co-location in terms of access and referral rates.

The most commonly used services, by some distance were attendance services and family violence screening. Some services were particularly likely to be used in conjunction with other services (rather than people using only that service). These included smoking cessation, Kaupapa Māori Mental Health Services (Day Programmes), Whānau Ora Rangatahi services and Budgeting Services (Table 20 and Table 22).

Few children aged under 10 years used more than one service (3.5% of children). Of children who did use more than one service, the services most often used were Whānau Care (Child and Youth) (59%), Tāmariki Ora (59%) and Engaging Priority Families (30%).

Among youth aged 10-24, 15% used more than one service. The service most often used in this age group was attendance services (47%), followed by Breakaway Holiday (18%), Whānau Ora Rangatahi Services (16%) and Advocacy & Peer Support - Child, Adolescent and Youth (15%).

Some services were particularly likely to be accessed multiple times by the same person. These included attendance services, family violence screening, Whānau Care (Child and Youth) and the Breakaway Holiday service (Table 21).

Table 19: Use of multiple Waipareira Whānau Centre services

Number of Whānau Centre services accessed	Number of people	%
1	6,522	79%
2	1,030	12%
3	391	5%
4	179	2%
5	98	1%
6	42	1%
7	21	0%
8	7	0%
9	<5	0%
12	<5	0%
Grand Total	**8,294**	**100%**

Table 20: Client use of individual and multiple services

Service name	Individuals using service: Number of people	Individuals using service: % of all Whānau Centre clients using this service	Used only this service: Number of people	Used only this service: % of users who used only this service
Attendance Services	2,145	26%	1,918	89%
Family Violence Screening	1,725	21%	760	44%
Whānau Care (Child and Youth)	481	6%	414	86%
Oral Health Services	751	9%	529	70%
Cervical Screening[11]	657	8%	546	83%
Breakaway holiday	280	3%	188	67%
Kaupapa Māori Alcohol & Drug Services (Non-Clinical)	430	5%	180	42%
Mobile Māori Nursing	342	4%	100	29%
Positive Parenting Programme	382	5%	143	37%
Parents As First Teachers	366	4%	183	50%
Smoking Cessation Screening	327	4%	13	4%
Budgeting Services	269	3%	58	22%
Tamariki Ora	273	3%	245	90%
Family/Whānau Support Services	209	3%	24	11%
BreakThru Community Youth Worker / ICM	204	2%	160	78%
Iwi Support Work Service	204	2%	40	20%
Advocacy & Peer Support - Adult	171	2%	17	10%
Family Support Services	165	2%	28	17%
Community Support Work - Mainstream	155	2%	48	31%
Smoking Cessation Programme	141	2%	11	8%
Wraparound Services Programme in Counties	141	2%	132	94%
Cardiac Rehabilitation Manual Based Education	137	2%	36	26%
Te Kete Aronui	129	2%	101	78%
Community Nutrition, Physical Activity and CVD Prevention	133	2%	94	71%
Advocacy & Peer Support - Child,	122	1%	35	29%

[11] It is unclear what the 657 women with cervical screening service is referring to. Waipareira is an Independent Service Provider (ISP) providing support to service (outreach) to support women to be screened or to attend colposcopy. Waipareira work with Wai Health to assist in inviting women to be screened.

Service name	Individuals using service		Used only this service	
	Number of people	% of all Whānau Centre clients using this service	Number of people	% of users who used only this service
Adolescent and Youth				
Incredible Years	96	1%	86	90%
Rongoa Māori Traditional Healing	107	1%	20	19%
Taitamariki Substance Misuse Prevention Service	103	1%	44	43%
Kaupapa Māori Mental Health Services - Day Programmes	91	1%	6	7%
Strengthening Families	93	1%	82	88%
Community Health Navigator	93	1%	63	68%
Whānau Ora Rangatahi Services	82	1%	6	7%
Wraparound Services Programme in Waitakere	75	1%	22	29%
Engaging Priority Families	80	1%	68	85%
Rangatahi Mentoring Service	53	1%	41	77%
Home Based Recovery Support Service	51	1%	12	24%
Community Support Work - Pacific	48	1%	16	33%
Te Tipu Pa Harakeke (Poipoia te Mokopuna)	45	1%	5	11%
Youth At Risk	38	0%	27	71%
Alternative Education	26	0%	3	12%
Bowel Screening	23	0%	17	74%
Family Violence Prevention	<5	0%	1	33%

Table 21: Services with multiple contacts from clients

Service	Number of contacts				
	1	2	3	4	5+
Attendance Services	1,706	330	89	18	2
Family Violence Screening	1,344	273	68	29	11
Oral Health Services	727	21	3		
Cervical Screening	644	12	1		
Whānau Care (Child and Youth)	422	24	2		33
Kaupapa Māori Alcohol & Drug Services (Non-Clinical)	395	32	3		
Positive Parenting Programme	342	34	5	1	
Parents As First Teachers	365	1			
Mobile Māori Nursing	223	115	4		
Smoking Cessation Screening	293	29	4	1	
Breakaway Holiday Programme	142	14	41	50	33
Tamariki Ora	273				
Budgeting Services	248	19	<5		
Family/Whānau Support Services	195	13	<5		
Iwi Support Work Service	201	<5			
BreakThru Community Youth Worker / ICM	188	16			
Advocacy & Peer Support - Adult	156	15			
Family Support Services	161	<5			
Community Support Work - Mainstream	153	<5			
Wraparound Services Programme in Counties	135	6			
Smoking Cessation Programme	135	6			
Cardiac Rehabilitation Manual Based Education	130	7			
Community Nutrition, Physical Activity and CVD Prevention	133				
Te Kete Aronui	124	<5			
Advocacy & Peer Support - Child, Adolescent and Youth	115	7			
Rongoa Māori Traditional Healing	107				
Taitamariki Substance Misuse Prevention Service	102	<5			
Incredible Years	85	11			
Strengthening Families	91	<5			
Community Health Navigator	93				
Kaupapa Māori Mental Health Services - Day Programmes	83	7	<5		
Whānau Ora Rangatahi Services	77	<5			
Engaging Priority Families	80				
Wraparound Services Programme in Waitakere	67	8			
Rangatahi Mentoring Service	53				
Home Based Recovery Support Service	50	<5			
Community Support Work - Pacific	47	<5			
Te Tipu Pa Harakeke (Poipoia te Mokopuna)	45				
Youth At Risk	38				
Alternative Education	26				
Bowel Screening	23				
Family Violence Prevention	3				
Total	**10,020**	**1,024**	**224**	**99**	**79**

Excluding family violence screening (which had a very high number of clients who also accessed another Whānau Centre service as it is a standard assessment for clients; see Table 20), the services that had the largest number of people who also accessed another Whānau

Centre service was Smoking Cessation Screening, followed by Budgeting Services and Kaupapa Māori Alcohol & Drug Services (Non-Clinical) (Table 22).

Table 22: Services accessed by clients who also accessed at least one other service (family violence screening excluded)

Service	Number of clients
Smoking Cessation Screening	230
Budgeting Services	173
Kaupapa Māori Alcohol & Drug Services (Non-Clinical)	161
Positive Parenting Programme	159
Attendance Services	158
Oral Health Services	157
Iwi Support Work Service	143
Mobile Māori Nursing	138
Family/Whānau Support Services	131
Advocacy & Peer Support - Adult	118
Family Support Services	108

Wai Health general practice clinic (East Tamaki Healthcare) enrolled patients

Among patients registered with Wai Health, 21% were also on the list of Whānau Centre clients. However, of the 1,204 Wai Health patients on both lists, 205 had accessed Smile Dental (and no other Whānau Centre services), and 109 had accessed only cervical screening (the screening for which is carried out by Wai Health, and the actual screening status of these women is not recorded (whether they were screened)). Removing these groups leaves 890 on both registers, which is 15% of Wai Health clients, and 11% of Whānau Centre clients.

Table 23: Co-registration with Waipareira and Wai Health

	Whānau Centre client?			% of Wai Health patients registered with Waipareira
	Yes	No	Total	
European	115	667	782	15%
Māori	879	2,433	3,312	27%
Pacific	129	766	895	14%
Asian	66	577	643	10%
Other	15	150	165	9%
Total	**1,204**	**4,593**	**5,797**	**21%**

Attendance services clients

There were 2,145 children and adolescents enrolled with attendance services, and at least 227 (11%) of these were also enrolled in at least one other service (Table 24). This is likely to be an underestimate of the numbers receiving multiple services, because 600 had no NHI and so it was not always possible to identify that an individual was also enrolled with another service. The other services most commonly accessed were Whānau Ora Rangatahi Services and the Wraparound Services Programme in Waitakere.

Table 24: Use of other services by attendance services clients

Service	Number
Attendance Services	2,145
Whānau Ora Rangatahi Services	75
Wraparound Services Programme in Waitakere	46
Breakaway Holiday Programme	31
Advocacy & Peer Support - Child, Adolescent and Youth	27
Whānau Care (Child and Youth)	26
BreakThru Community Youth Worker / ICM	26
Taitamariki Substance Misuse Prevention Service	25
Alternative Education	22
Smoking Cessation Screening	8
Rangatahi Mentoring Service	8
Youth At Risk	<5
Kaupapa Māori Alcohol & Drug Services (Non-Clinical)	<5
Wraparound Services Programme in Counties	<5
Smoking Cessation Programme	<5
Te Kete Aronui	<5
Strengthening Families	<5
Parents As First Teachers	<5
Family/Whānau Support Services	<5
Engaging Priority Families	<5
Positive Parenting Programme	<5
Family Support Services	<5
Kaupapa Māori Mental Health Services - Day Programmes	<5

We examined hospital contacts for clients of the attendance service, to investigate whether poor health was having an impact on school attendance for this cohort. This only gives part of the picture, as we can't see contacts with GPs and it excludes the 7% of attendance service clients without an NHI recorded.

Of 1,829 children for whom we could find data, 634 (35%) had been in contact with hospital services (emergency department (ED), inpatient or outpatient services) during 2014/15, although half of these had had an ED attendance only.

The attendance services clients had double the rate of admission to hospital in 2014/15 as the average for this age group in the total Waitemata DHB population (17.4 vs 8.3 per 100), or 165 more admissions than would be expected for an average population. This is in line with the findings on admission rates for Whānau Centre clients of all ages.

107 (5.9%) had three or more outpatient clinic appointments in the period (not necessarily all on separate days) at Auckland DHB or Waitemata DHB services. 80 saw more than one service. Seven were seeing diabetes services, a diabetes rate of 0.4% compared with 0.2% for the under-20 population of Waitemata DHB.

Referrals between services in Waipareira Trust

Over the 18-month period from July 2014 to December 2015, services in Waipareira made 1,527 referrals to other internal services. The largest number of referrals was made by the Kaiārahi/Navigator Services (573) which was 38% of the total internal referrals. For 9% of referrals, the referring service was not recorded (Table 25).

Table 25 Top Waipareira services referring clients to other services

Referring Provider	Total
Kaiārahi/Navigator Services	573
Not Recorded	138
Advocacy & Peer Support - Adult	106
Parents As First Teachers	80
Iwi Support Work Service	67
Whānau & School Support Services (Attendance Services)	64
Advocacy & Peer Support - Child, Adolescent and Youth	56
Family/Whānau Support - Mama and Pepe	41
Tamariki Ora	35
Incredible Years Parent Programme	31
Te Tipu Pa Harakeke (Poipoia te Mokopuna)	28
Kaupapa Māori Alcohol & Drug Services (Non-Clinical)	26
Kaitoko Whānau Programme	25

This information understates multiple service use. For example, Attendance Services recorded 64 referrals, but we know that 75 of their clients also used Whānau Ora Rangatahi Services.

The main recipients of internal referrals are shown in the table below, grouped to broad types of service. One in three of these referrals were to mental health and addictions services delivered by Waipareira. Nine percent of referrals were to other health services, including smoking cessation. The Budgeting service received 13% of internal referrals, and Positive Parenting received a further 11%.

Service	Referrals to service
Mental Health and Addictions services	510
Budgeting Services	203
Positive Parenting Programme	175
Family/Whānau Support Services	140
Health services	139
Child and youth social services	127
Family Support Services	101
Rongoa Māori Traditional Healing	66
Early education	59

Referrals to external services

The Tamariki Ora services recorded 261 referrals to outside agencies, of which 65% were to health services, including dental, mobile ear clinic (MEC), GP and secondary services. The Whānau Care (Child and Youth) service made 49 referrals, of which 42 were to dental and MEC services, and 7 were to GPs. Other services recorded a small number of referrals to external services. Apart from health services, the most common external service for referrals was Parents as First Teachers (23 referrals). There were also 11 referrals to women's support services.

Enrolment rates

PHO enrolment

The list of Whānau Centre clients was matched with the PHO enrolment database to determine enrolment status. The overall enrolment rate was 86%, which is lower than the enrolment rate for the whole of Waitemata DHB, which is 93%. Enrolment rates were similar for all ethnic groups (Table 26).

A much lower proportion of Whānau Centre clients had PHO enrolment noted on their record. Waipareira data showed 36% of Whānau Centre clients being enrolled with a PHO, and an additional 7% of patients were enrolled with a local ETHC practice, according to ETHC records. Recorded PHO enrolment was particularly low in Whānau Centre data for the Other ethnic group (22%) (Table 27).

Table 26: PHO enrolment rates for Whānau Centre clients

Ethnicity	% enrolled	WDHB
Māori	85%	81%
Pacific	89%	101%
Asian	86%	98%
Other	86%	98%
Total	**86%**	**93%**

Table 27: PHO enrolment for Whānau Centre clients as recorded by Waipareira and ETHC

Ethnicity	GP enrolment recorded by Whānau Centre	Additional clients registered with an ETHC practice	No PHO enrolment registered
Māori	41%	10%	49%
Pacific	37%	6%	57%
Asian	46%	5%	49%
Other	22%	3%	75%
Total	**36%**	**7%**	**57%**

Dental

We checked the Whānau Centre register for children aged under 5 and resident in Auckland, Waitemata or Counties DHBs (484 children). This was matched to the enrolment and treatment data from the Titanium dental system used by Auckland Regional Dental Service (ARDS) and held in the Waitemata DHB data warehouse. We found that 64% of Māori children were registered with the service, similar to the rate for Waitemata DHB Māori, but

lower than the rate for the Waitemata DHB total population (Table 28). Māori children made up 77% of the matched children.

It seemed possible that there would be higher enrolment in dental services for children who were enrolled in the Tamariki Ora service at Whānau Centre (54% of the total are aged under 5) but when we checked, this was not the case. However, the enrolment rate was higher for the 206 children registered with the Whānau Care (child and youth) service: 71% for Māori children and 77% overall.

The DHB is running a project to carry out multi-enrolment of newborns (with GP, Immunisation register and oral health providers), and also runs an Immunisation Reference Group for Māori children missing the 6-month immunisation milestone at Whānau Centre which includes dental representation.

Table 28: Child oral health service enrolment rates (<5 years), Whānau Centre clients and Waitemata DHB

Ethnicity	Whānau Centre clients	Waitemata DHB
Māori	64%	68%
Pacific	78%	75%
European/Asian/Other	79%	88%
Total	**67%**	**83%**

Delivery of preventive services

Immunisations

Immunisation was recorded for 63% of babies < 1 year old that were registered with Whānau Centre (Table 29). Matching to Waitemata DHB records showed a higher proportion immunised, with 73% of these children being immunised at 8 months. This indicates under-recording of immunisation status in the records of Whānau Centre clients, but also opportunities to increase the proportion of these children who are immunised, to closer to the Waitemata DHB rate, which is currently 93% coverage at 8 months.

Table 29: Recording of immunisation in Waipareira data, Whānau Centre clients aged < 1 year

Ethnicity	Immunisation recorded	Number of children	% immunisation recorded
Māori	37	60	62%
Pacific	<5	<5	80%
Asian	<5	<5	n/a
Other	7	11	64%
Total	**48**	**76**	**63%**

Smoking screening and cessation

Smoking status was recorded for 11% of Whānau Centre clients (Table 30). This is likely to reflect under-recording of smoking status, rather than actual smoking prevalence. Smoking status was recorded more often for Māori (17%). Smoking brief advice was recorded for 8% of all Whānau Centre clients, but 12% of Māori clients (Table 31).

Table 30: Smoking status for Whānau Centre clients, from Waipareira records

Ethnicity	Smoking status recorded	Smoking status blank
Māori	17%	83%
Pacific	6%	94%
Asian	2%	98%
Other	6%	94%
Total	**11%**	**89%**

Table 31: Smoking brief advice rates

Ethnicity	Recorded whether brief advice given/declined	Not recorded
Māori	12%	88%
Pacific	5%	95%
Asian	2%	98%
Other	4%	96%
Total	**8%**	**92%**

CVD screening

Among Whānau Centre clients who were registered with ETHC, a high proportion of the eligible population (about 90%) had a CVD risk assessment recorded. This is a slightly higher rate than the overall rate for WDHB of 86% for Māori and 88% for Pacific peoples.

However, overall only 44% of Māori and Pacific Whānau Centre clients aged over 45 years had a CVD risk assessment recorded, either by Whānau Centre or by ETHC. This indicates opportunities to increase recording of CVD risk assessment status. Although Waipareira does not deliver CVD risk assessment itself, it may be able to play an important role in supporting patient access to this preventive service.

Cancer screening

Similarly, rates of breast and cervical screening recorded by Whānau Centre were very low (Table 33). But cervical screening data provided by ETHC for their clients at Whānau Centre showed coverage rates similar to the DHB average for Māori, Pacific and Asian women. It is noted that this may not reflect actual screening status (which is held on the National Cervical Screening Programme Register, and was not available in the time taken to complete this report). The low rate Other ethnicity suggests incomplete data. Breast screening data was also not available for matching in the time taken to undertake this analysis.

Table 32: Percentage of women with breast screening recorded as being up to date among Whānau Centre clients

Ethnicity	45-69 age group	50-69 age group
Māori	9%	11%
Pacific	3%	4%
Asian	1%	0%
Other	5%	6%
Total	**6%**	**8%**

Table 33: Percentage of women aged 25-69 with cervical screening recorded as being up-to-date among Whānau Centre clients who are also registered with ETHC (not limited to Wai Health Clinic)

Ethnicity	Recorded as up to date, All Whānau Centre clients	ETHC registered Whānau Centre clients
Māori	24%	36%
Pacific	51%	79%
Asian	45%	76%
Other	6%	11%
Total	**27%**	**48%**

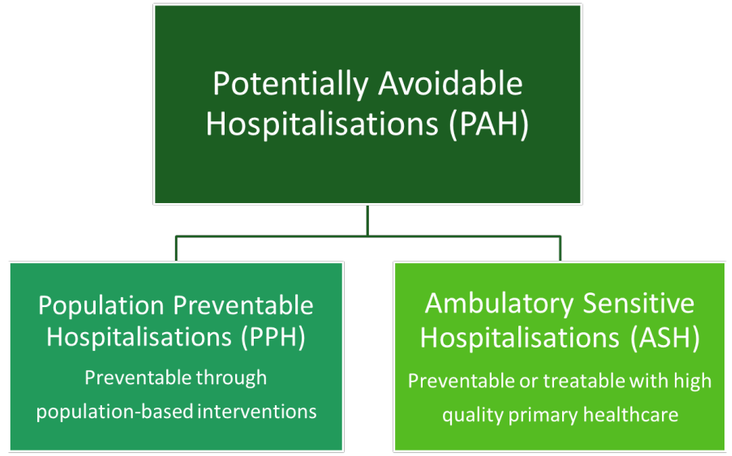
Participation in the bowel screening programme was lower than the Waitemata DHB average both for clients of Whānau Centre and for all Wai Health clinic clients. Māori participation for Whānau Centre clients was lifted 7% (from 27% to 34%), by Waipareira supporting 23 clients to participate in bowel screening (Table 34)

Table 34: Percentage of population aged 50-74 and resident in Waitemata DHB participating in bowel screening, Round 2

Ethnicity	Whānau Centre clients	ETHC Wai Health Clinic	Waitemata DHB
Māori	34%	37%	49%
Pacific	42%	39%	37%
Asian	43%	65%	50%
Other	40%	43%	58%
Total	**37%** (N = 551)	**42%**	**55%**

Hospitalisations

Ambulatory-sensitive hospitalisations (ASH)



Similar to PAM as an indicator, Potentially Avoidable Hospitalisations (PAH) include hospitalisation for a set of specific diseases considered to be preventable or treatable by population-based interventions or high quality primary healthcare. Ambulatory Sensitive Hospitalisations (ASH) refers to the subset generally considered reflective of access, timeliness and quality of general practice care. However, it is also reflective of the social determinants of health and the arrangement of hospital services. In areas with populations with high needs improved access to primary care can paradoxically increase ASH as it addresses unmet need.

Rates of ASH were high among Whānau Centre clients. ASH rates for 0-4 year olds were 8,494 per 100,000, compared with 5,273 per 100,000 for Waitemata DHB as a whole. For adults aged 45-64, ASH rates were even higher at 18,464 per 100,000, compared to the Waitemata DHB overall rate of 4,227 (Table 35; which also compares Henderson-Massey local board ASH rates).

There were 45 child ASH admissions (0-4 years) among Whānau Centre clients, with the most common reasons for admission being pneumonia, asthma/wheeze, cellulitis and dental admissions. There were also 214 adult ASH admissions (45-64 years). The most common causes were angina/chest pain, myocardial infarction, congestive heart failure, asthma, COPD, lower respiratory tract infections and cellulitis. For both age groups these conditions are also the commonest conditions for overall ASH.

Table 35: ASH rate per 100,000 population

Age Group	Waipareira clients	Henderson-Massey residents	Waitemata DHB residents
0-4 yrs	8,494	7,026	5,273
45-64 yrs	18,464	6,992	4,227

Emergency department, inpatient and outpatient attendances

The age-standardised emergency department attendance rate for Whānau Centre clients was 50,699 per 100,000, which is 2.6 times the attendance rate for Waitemata DHB as a whole (Table 36). The difference between Whānau Centre and Waitemata rates was greatest at around 20-24 and at 50-59 years of age, but the rate was higher for Whānau Centre for all ages under 85 years.

Table 36: ED attendance Age Standardised Rate (ASR) per 100,000

Age Group	Waipareira clients	Waitemata DHB	Waitemata DHB Māori
0-4	5,176	3,278	2,869
05-09	2,424	1,349	1,328
10-14	2,761	1,118	1,210
15-19	2,125	1,393	1,780
20-24	5,379	1,667	2,188
25-29	3,965	1,449	2,018
30-34	3,347	1,275	1,666
35-39	2,753	1,072	1,417
40-44	2,894	947	1,157
45-49	3,130	927	1,115
50-54	3,247	853	1,148
55-59	3,733	779	1,180
60-64	2,620	709	946
65-69	1,887	670	816
70-74	2,549	654	888
75-79	1,380	614	665
80-84	1,175	499	493
85-89	154	471	373
Total	**50,699**	**19,723**	**23,257**

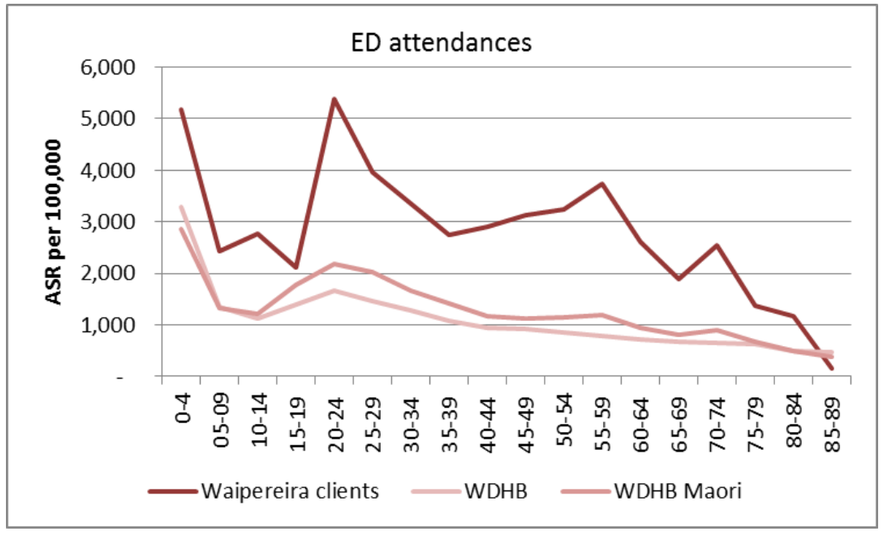


Figure 9: Age distribution of ED attendances for Waipareira clients compared with WDHB overall and WDHB Māori

The rate of acute admissions for Whānau Centre clients is 2.8 times the overall Waitemata DHB population rate (33,858 vs 12,124 ASR per 100,000 population) and 2.2 times the Waitemata DHB Māori rate (15,647 ASR per 100,000 population). The elective admission rate is also higher, but by 1.4 and 1.5 times compared with all of Waitemata DHB and with Waitemata DHB Māori, respectively. Admissions of Whānau Centre clients are 83% acute, compared with 72% for Waitemata DHB as a whole, and 78% for Waitemata DHB Māori (Table 37).

Table 37: Acute and elective admission ASR per 100,000 population

	Acute inpatient admission rate				Elective inpatient admission rate		
Age Group	Whānau Centre clients	WDHB	WDHB Māori		Whānau Centre clients	WDHB	WDHB Māori
0-4	1,864	1,319	1,192		550	332	302
05-09	736	485	512		495	258	317
10-14	1,071	427	478		244	147	132
15-19	1,235	685	981		115	113	112
20-24	2,448	891	1,224		208	132	121
25-29	2,191	902	1,253		235	172	218
30-34	2,405	867	1,132		344	219	245
35-39	2,045	719	1,015		257	227	238
40-44	1,699	626	845		345	243	256
45-49	2,366	620	829		367	257	279

	Acute inpatient admission rate				Elective inpatient admission rate		
Age Group	Whānau Centre clients	WDHB	WDHB Māori		Whānau Centre clients	WDHB	WDHB Māori
50-54	2,349	628	951		503	330	328
55-59	2,860	606	969		576	339	366
60-64	2,795	585	910		719	363	383
65-69	2,172	593	837		625	401	406
70-74	2,740	601	849		589	398	326
75-79	1,551	591	722		217	319	201
80-84	1,138	485	582		177	222	102
85-89	191	493	366		127	151	41
Total ASR per 100,000	33,858	12,124	15,647		6,695	4,622	4,372

Notes: 1) Arranged Admissions are excluded as these are predominantly maternity admissions and babies born in hospital. 2) Admissions to Auckland and Waitemata DHB facilities only. 3) Standardised to WHO population.

The ten most commonly used specialties by Whānau Centre clients, for inpatient and outpatient contacts, are shown in Table 38.

Table 38: Ten most commonly used specialties among Whānau Centre clients

Specialty	Number of inpatient and outpatient users
Emergency Medicine	2,315
Mental Health and Addictions	1,373
General/Paediatric Medical	792
Obstetrics	616
Gynaecology	514
General and Vascular surgery	479
ENT and Audiology	374
Orthopaedics	371
Cardiac	340
Diabetes, Endocrine, Nutrition	268

As the number using mental health services was so high, an analysis was done that compared use of mental health services by Whānau Centre clients with the Waitemata DHB population. This found that use of mental health services was almost six times as high among Whānau Centre clients compared with Waitemata DHB for the 0-19 and 20-64 age groups, and over three times higher for the 65+ age group (Table 39).

There are several possible reasons for the high use of mental health services. One is simply high health need. Another is that mental health services offered by Whānau Centre may mean that the population of 'Whānau Centre clients' has a particularly large number of people who access mental health services (and is not representative of the general population), and therefore use of non-Whānau Centre mental health services is also higher.

Table 39: Percentage of Whānau Centre and Waitemata DHB populations using mental health services, inpatient and outpatient

Age group	Number of Whānau Centre clients using service	Total population of Whānau Centre clients	% of Whānau Centre clients using service	% of Waitemata DHB population using service	% of Waitemata DHB Māori population using service
0-19	643	3524	18.2%	3.1%	4.4%
20-64	792	3894	20.3%	3.5%	7.7%
65+	21	289	7.3%	2.1%	2.2%

Whānau Centre offers several services related to mental health (Table 40). However, of the 1,456 users of mental health services among Whānau Centre clients, only 460 also accessed mental health services delivered at Whānau Centre. This suggests that there may be a particularly high need for mental health services in this population.

Table 40: Mental health services offered at Whānau Centre

Advocacy & Peer Support - Adult
Advocacy & Peer Support - Child, Adolescent and Youth
Community Support Work - Mainstream
Community Support Work - Pacific
Home Based Recovery Support Service
Iwi Support Work Service
Kaupapa Māori Mental Health Services - Day Programmes
Kaupapa Māori Alcohol & Drug Services (Non-Clinical)

Outpatient clinics

The primary indicator used to assess Whānau Centre's ability to improve access to outpatient services in this section is Did Not Attend (DNA) rates. However, it is acknowledged that DNA rates are not the only measure of quality or access for outpatient clinics and do not capture potential patient experience benefits.

It should be noted that the DHB measure of DNA rates applies only to Consultant First Specialist (FSA) and Follow Up appointments. The DHB does measure DNAs at other clinic types (nurse clinics, allied health, and procedural clinics) and notes that overall these are consistently lower, however more nurse-led or other clinic types and low DNAs in these clinics may not contribute to the overall clinic DHB DNA rate.

Paediatric clinics

Table 41 shows the types of paediatric clinics held at Whānau Centre (including first specialist assessment, and follow-up), and the DNA rates for those clinics in comparison to other Waitemata DHB clinics.

The DNA rates for Whānau Centre are generally similar to those at Waitakere Hospital (Rangatira Unit). North Shore Hospital achieves low DNA rates, but serves a relatively low-deprivation population. New Lynn (Totara Health) has a relatively high-deprivation population (though not quite as high as Whānau Centre), yet achieves very low DNA rates. It

would be useful to further investigate the factors responsible for the success of the Totara Health clinic. For example, the proportion of Māori in the Totara Health population (14%) is only marginally lower than the Whānau Centre proportion (17%).

Table 43 shows DNA rates for clinics at Whānau Centre, compared with other clinics, and for Whānau Centre clients, compared with other clients. DNA rates are higher among Whānau Centre clients at all sites, and Whānau Centre clients have higher DNA rates than non-Whānau Centre clients at all sites.

Only three percent of paediatric clinic appointments held at Whānau Centre are for Whānau Centre clients, but 30% of appointments for Whānau Centre clients are held at Whānau Centre (Figure 10).

Table 41: West Auckland paediatric clinics and attendances

Paed Clinic attendances 11 months of 2016				
	Whanau Ora House	Level 2 Totara Health Building	Paediatric Outpatient Clinic (NSH)	Rangatira Unit OP Clinic (WTK)
Average per day - booked	8.2	8.3	12.1	7.0
Average per day - attended	6.4	7.5	10.8	5.7
DNA rate	21%	10%	11%	18%
FSA - booked	4.5	4.3	6.7	3.6
FSA - attended	3.8	4.0	6.1	3.1
DNA rate	17%	7%	10%	15%
FU - booked	3.8	3.2	5.6	3.9
FU - attended	3.1	2.9	4.9	3.3
DNA rate	18%	10%	12%	16%
Days w bookings	152	146	182	191

Note: FSA = first specialist appointment, DNA = did not attend, w = with, OP = outpatient, NSH = North Shore Hospital, WTK = Waitakere Hospital.

Table 42: Ethnicity of people attending paediatric outpatient clinics, West Auckland

Clinic location	Māori	non-Māori
Totara Health, New Lynn	14%	86%
Outpatient Day Centre	8%	92%
Paediatric Outpatient Clinic, NSH	8%	92%
Rangatira Unit outpatient clinic, WTK	16%	84%
Whānau Centre	17%	83%

Table 43: DNA rates for West Auckland patients at different paediatric clinic sites and who are/are not Whānau Centre clients

		Clinic location	
	Year	Whānau Centre	Other location
Whānau Centre clients	2015	43%	28%
	2016	44%	25%
All West Auckland residents	2015	21%	15%
	2016	22%	12%

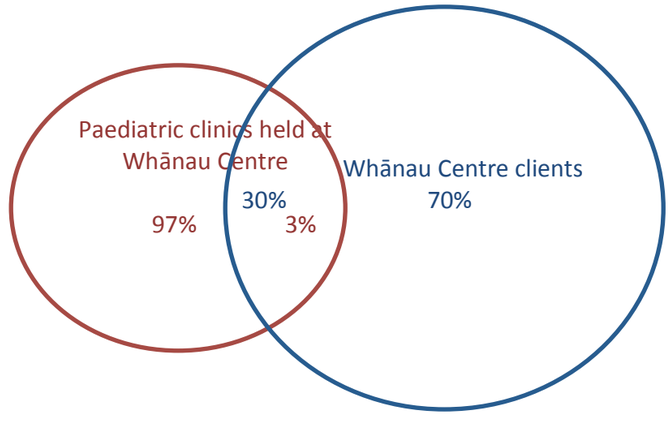


Figure 10: Overlap between paediatric clinic population and Whānau Centre population

Although not the focus of this report, it was noted that Totara Health (New Lynn) paediatric clinics have relatively low DNA rates (10%). Discussion with ETHC suggests that this is at least in part due to inclusion of a paediatric Child Nurse Specialist (CNS). The Whānau Centre paediatric clinics do not currently involve a CNS, and this could be a useful approach to reduce DNA rates at those clinics. There are therefore opportunities identified to increase the proportion of Whānau Centre clients to be seen at this location, to examine the impact on DNA rates, and to consider other service development measures to reduce DNAs.

Diabetes clinics

Several diabetes clinics run at Whānau Centre have low DNA rates, noting that at all DHBs including Waitemata DHB Diabetes clinics have some of the highest DNA rates by clinic, particularly for Māori and Pacific clients. It is also noted that there has been substantial effort in the Long Term Conditions teams to reduce DNA rates for diabetes clinics, including community provision of service such as at Whānau Centre.

The nurse-led and dietician clinics have lower DNA rates (both 18%; noting that these are not part of the DHB DNA measure which applies to Consultant clinics) than equivalent clinics held at Waitakere Hospital (26% and 23%). The diabetes follow-up clinic also has a low DNA rate (17%), but only has a small number of patients (60 attendances; Table 44).

In contrast, DNA rates for Whānau Centre podiatry clinics (21%) are higher than those at other locations including Waitakere (9%). Diabetes First Specialist Assessment (FSA) clinics at Whānau Centre also have a high DNA rate at 36%, similar to Waitakere (35%), though only small numbers of attendances (29).

The diabetes clinics at Whānau Centre include a walk-in component. DNA rates are not applicable to walk-in clinics. However, excluding walk-in patients did not make an important difference to DNA rates.

The Whānau Centre diabetes clinics serve a predominantly (74%) Māori population (Table 45). Other West Auckland clinics serve predominantly non-Māori populations. About half of diabetes appointments for Whānau Centre clients occur at Whānau Centre clinics, and Whānau Centre clients make up 36% of all appointments at Whānau Centre diabetes clinics (Figure 11).

Table 44: West Auckland diabetes clinics and attendances

PurchaseUr	PUDesc	description2	Attended	DNA	Grand Total	DNA rate
MS01.01	**Nurse Lead Clinics**	Whanau Ora House	458	102	560	18%
		Outpatients Clinic WTH	1,710	591	2,301	26%
		Level 2 Totara Health Building	158	80	238	34%
		Other West	33	14	47	30%
		North Shore and Rodney	1,702	437	2,139	20%
MS01.01 Total			**4,061**	**1,224**	**5,285**	**23%**
M20.05	**Diabetes Follow Up**	Whanau Ora House	60	12	72	17%
		Outpatients Clinic WTH	583	220	803	27%
		Other West	4		4	0%
		North Shore and Rodney	662	160	822	19%
M20.05 Total			**1,309**	**392**	**1,701**	**23%**
AH01001	**Dietician**	Whanau Ora House	244	53	297	18%
		Outpatients Clinic WTH	822	239	1,061	23%
		Level 2 Totara Health Building	36	8	44	18%
		Other West	36		36	0%
		North Shore and Rodney	1,049	212	1,261	17%
AH01001 Total			**2,187**	**512**	**2,699**	**19%**
M20.04	**Diabetes First**	Whanau Ora House	29	16	45	36%
		Outpatients Clinic WTH	334	183	517	35%
		Other West	46	10	56	18%
		North Shore and Rodney	370	76	446	17%
M20.04 Total			**779**	**285**	**1,064**	**27%**
AH01006	**Podiatry**	Whanau Ora House	158	43	201	21%
		Outpatients Clinic WTH	1,674	169	1,843	9%
		Level 2 Totara Health Building	47	1	48	2%
		North Shore and Rodney	1,706	64	1,770	4%
AH01006 Total			**3,585**	**277**	**3,862**	**7%**
AH01010	**Psychologist - non MH**	Whanau Ora House	23	14	37	38%
		Outpatients Clinic WTH	71	9	80	11%
		North Shore and Rodney	113	28	141	20%
AH01010 Total			**207**	**51**	**258**	**20%**
Grand Total			**12,128**	**2,741**	**14,869**	**18%**

Table 45: Ethnicity of people attending West Auckland diabetes clinics

Clinic	Māori	Non-Māori
Totara Health, New Lynn	5%	95%
Outpatients Waitakere	9%	91%
Other West	13%	87%
North Shore and Rodney	9%	91%
Whānau Centre	74%	26%

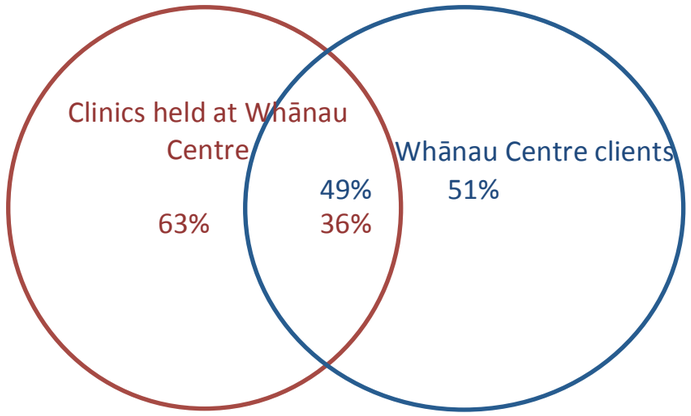


Figure 11: Overlap between diabetes clinic population and Whānau Centre client population

Table 46: DNA rates for West Auckland patients at different diabetes clinic sites and who are/are not Whānau Centre clients

		Clinic location	
	Year	Whānau Centre	Other
Whānau Centre clients	2015	12%	23%
	2016	18%	29%
All West Auckland residents	2015	16%	20%
	2016	20%	20%

Table 47: Attendances per session for Whānau Centre clinics

Clinic type	Diabetes	Pelvic floor	Paediatrics
Sessions (days)	33	39	147
Attenders	111	168	879
Average attendances per session	3.4	4.3	6.0

There were fewer attendances per session for diabetes clinics than paediatric clinics at Whānau Centre (Table 47). It is not clear whether this is because the clinic is more resource-intensive, or because the paediatric clinic is more heavily staffed.

5. Summary

Whānau Centre is a physical location which brings together Te Whānau o Waipareira Whānau Ora services (a broad range of health, social, education, justice and employment services) and co-located external services including a general practice clinic owned by East Tamaki Healthcare. Te Whānau o Waipareira's early adopter model of Whānau Ora service provision has been established since 2010 and this report offers an opportunity to describe the populations served and identify opportunities for improvement and development.

Whānau Centre populations

There were 8,294 current clients identified from the Whānau Centre register. Clients become part of the register when they are enrolled in a Whānau Centre service, so this register is not necessarily representative of the local population. Whānau Centre clients are young (55% under 25 years, the majority of whom are enrolled for attendance services) and 52% are Māori (compared to 12% of the West Auckland population).

Three quarters of Whānau Centre clients are West Auckland residents, with 55% in Henderson-Massey local board. Henderson-Massey is a locality with the highest deprivation in Waitemata DHB; 38% of Whānau Centre clients are in the highest deprivation Quintile 5, and this rises to 51% for those living in Henderson-Massey. More broadly, 73% of Whānau Centre clients are in the top two deprivation Quintiles 4 and 5, compared to 24% in Waitemata DHB overall.

Whānau Centre is therefore successful in reaching local Māori, and is serving a high deprivation population.

Health status

Whānau Centre, or local populations where data was not available for Whānau Centre clients, record lower life expectancy, higher rates of premature mortality, higher hospitalisations (particularly ED visits and ambulatory sensitive hospitalisations) and high mental health service use.

Whānau Centre service provision

Waipareira provides a range of health and other services at Whānau Centre. Despite co-location only 21% of clients use more than one service. Much of the service use recorded is attendance services and family violence screening. Although co-located external provider data was not available, and it is not clear whether wider service use would be beneficial at an individual or whānau level (for example via Whānau Ora assessment or referral documentation), it is likely with this high need population that it would be. Only 21% of the Whānau Centre population was enrolled with the co-located general practice, although this was higher for Māori clients (27%).

Some aspects of service provision, utilisation and internal referrals have been examined in this report. External co-located provider referrals were not able to be examined but further work on this would be useful. Overlap in service provision between sectors was also not examined, and there may be opportunities for Waipareira to explore with service funders to determine whether a more holistic approach or timely solutions could be possible for this client group.

Waitemata DHB outpatient service provision

Delivering care closer to home is a key strategy for Waitemata DHB to improve patient experience and health outcomes. The recent joint Waitemata DHB and Auckland DHB Did Not Attend (DNA) Strategy included a focus on reducing high Māori and Pacific DNAs, and a key recommendation to accelerate alternative modes of service delivery to reduce DNAs (such as community locations, after-hours provision, alternate providers). The Whānau Centre diabetes clinic model was examined as part of the strategy development.

The diabetes clinic at Whānau Centre serves predominantly Māori patients and achieves low DNA rates for nurse-led and dietician clinics. The rates for diabetes consultant clinics (particularly First Specialist Assessment; FSA) and podiatry clinics however, are as high as hospital based diabetes clinics. The Whānau Centre paediatric clinic also has high DNA rates.

Locating a clinic at Whānau Centre does not guarantee that it will have low DNA rates, although there has been substantial work on developing the nurse-led model of care for diabetes at Whānau Centre including walk-in clinics and call-to-remind activities. However, it would be useful to further investigate whether the success of the diabetes clinic nurse-led clinic model is transferable to other clinics, and what additional changes might be required to also reduce the diabetes consultant DNA, podiatry and paediatric clinic DNA rates.

As part of consideration of two new clinics services at Whānau Centre (a Waitemata DHB Annual Plan deliverable) it seems an opportune time with the approval of the DHB DNA strategy to examine the ability of community locations such as Whānau Centre to improve access (measured by reduced DNAs), robustly test new clinic models and examine opportunities to leverage the Whānau Ora approach and community reach of Whānau Centre to support access. There are opportunities identified in this report related to long term conditions and mental health that could be considered for service development, as well as further development of current clinics.

Waitemata DHB provides two main secondary services at Whānau Centre: diabetes and paediatrics. Thirty-six percent of Waitemata DHB diabetes services are provided at Whānau Centre, although only half the patients seen at the clinic are Whānau Centre clients. Only 3% of the paediatric appointments provided by Waitemata DHB are delivered at Whānau Centre.

The Whānau Centre diabetes clinics are successful overall, particularly the nurse-led and dietician clinics. Nurse-led clinics and dietician clinics at Whānau Centre have lower DNA rates (18%) than overall clinic DNA rates. For diabetes consultant clinics however DNA rates at 36% are similar to other DHB diabetes clinics although 75% of patients are Māori (the current DHB Māori DNA rates are 2-3 times higher than non-Māori non-Pacific). Podiatry clinic DNAs are also high at 21%. Paediatric clinic DNA rates are as high as outpatient clinics at Waitakere Hospital.

This report was not able to assess how resource-intensive the diabetes clinic model for engaging with patients is, or whether its success is highly dependent on the characteristics of the individual staff members involved. Both should be considered before pursuing this model further.

Enrolment and prevention

Overall PHO enrolment for Whānau Centre clients was 86% (lower than the Waitemata DHB total of 93% but higher than the Waitemata DHB Māori rate which is 85%). Of those enrolled in a PHO only 36% were recorded in the Whānau Centre data.

Preschool Whānau Centre clients also had a low dental enrolment rate (67%) despite co-located dental services, Waipareira oral health services and 54% of children being enrolled in the local Tāmariki Ora services.

Immunisation rates (fully immunised at 8 months) for Whānau Centre were lower than Waitemata DHB at 73%, although Whānau Centre immunisation status was recorded for 63% of children.

Smoking was recorded for only 11% of Whānau Centre clients, with brief advice documented for 8%. Likewise for the Whānau Centre clients who were Wai Health clinic clients their CVD Risk Assessment rate was 90%, however for the overall eligible Māori and Pacific Whānau Centre clients it was low at 44%.

It is also noted that there appears to be under-recording on Whānau Centre records of key medical conditions for which a Whānau Ora approach would be beneficial and some services are already provided, such as CVD, diabetes, cancer and respiratory disease.

6. Appendices

Appendix A: Whanau Centre Health Needs Assessment Project Steering Group

Name	Title / Organisation	Role
Simon Bowen	Director Health Outcomes Waitemata and Auckland DHBs	Co-Sponsor
Edith McNeil followed by Ngaire Harris	Contracting and Funding Advisor Te Whānau o Waipareira Trust Clinical Director Te Whānau o Waipareira Trust	Co-Sponsor Waipareira Liaison
Aroha Haggie	Manager, Māori Health Gain Waitemata DHB and Auckland DHB	Funder
Jamie Hosking	Public Health Physician Waitemata DHB and Auckland DHB	HNA Lead, report author
Kate Moodabe	General Manager Central and West Localities, Nirvana Group/Total Healthcare PHO	Primary Care representative, Wai Health general practice
Brad Norman	Director Wai-Business Solutions	Data lead, Te Whānau o Waipareira Trust
John Huakau	Outcomes Measurement Lead and Senior Epidemiologist Te Pou Matakana	Analyst
Jacqui Harema	Strategy and Innovation Lead Te Whānau o Waipareira Trust	Provider representative, Te Whānau o Waipareira Trust
Danielle Cuthers	Wai Intel Analyst Te Whānau o Waipareira Trust	Analyst
Jean Wignall	Outcomes Analyst, Health Intelligence, Waitemata and Auckland DHBs	Analyst
Craig Heta	Māori Planning and Policy Manager, Māori Health Gain Team, Waitemata and Auckland DHBs	Funder, Whānau Ora Portfolio
Jo Nicholson	Project Lead Whānau Centre Collective Impact Initiative	Observer to align this work to Collective Impact workstreams
Karen Bartholomew	Public Health Physician Waitemata DHB and Auckland DHB	Project initiation and review
Jon Meyer	Social Ventures Australia (SVA) Collective Impact	Observer to align this work to Collective Impact workstreams

Appendix B: Services delivered by Te Whānau o Waipareira at Whānau Centre

Note: Health service highlighted

Service Name	Funding Contract Name	Provider Service Description	Target clients / eligibility
Alternative Education Unit	Alternative Education Services	Teachers provide alternative education to students who are not attending mainstream schooling.	Co-ed students aged 13-16 who have not attended mainstream schooling or other educational providers for the past 2 terms
Whānau & Support Services for Schools / Truancy	Attendance Services	Service supporting whānau with truancy issues.	Any
Cervical Screening Services	Cervical Screening Services	Independent Service Provider (ISP) support to services (support to screening or support to treatment) with a view to reduce the incidence and mortality rate of cervical cancer.	Women over the age of [20 - 69yrs]
Behaviour Support	Challenging intellectual disability behaviour support	Social workers assist whānau with challenging intellectual disability behaviour and support whānau to develop a plan to manage the behaviour	Whānau with a whānau member with challenging intellectual disability behaviour
Community Nutrition, Cardio Vascular Disease Prevention	Community Nutrition Physical Activity and CVD Prevention	Community education programmes to promote the importance of a healthy diet, regular physical activity, smokefree whānau and healthy lifestyles to Māori communities.	West Auckland Māori
Mission Slimpossible	Community Nutrition Physical Activity and CVD Prevention	Free community fitness programme for all whānau of all ages, sizes and fitness levels.	All whānau
Engaging Priority Families	Engaging Priority Families/Whānau Initiative	Kaimahi work with whānau with 3-4 year old children to enrol their tamariki into a quality ECE centre.	Whānau who need the most support to enrol tamariki in ECE
Incredible Years	Incredible Year Parent Programme	A group-based parenting programme for parents and caregivers in line with the Incredible Years methodology.	6-12yrs
Break Away Programme	Integrated Contract - Social	Holiday programmes will incorporate activities that keep participants engaged and are beneficial to their development. A minimum of 60mins physical activity is incorporated. This is for youth aged 11-13 yrs and 14 - 17 yrs.	Holiday programme for Youth aged 11-13 yrs and 14-17yrs
Break Thru Programme	Integrated Contract - Social	Youth and social workers identify and support at risk youth and their families especially those who are at risk of becoming involved with a young gang culture.	Youth (aged 6 - 24) at risk of becoming involved with a young gang culture
Budgeting services	Integrated Contract - Social	Advisers support whānau to develop budgets and provide education around financial literacy.	
Family Support	Integrated Contract - Social	Clients supported who are assessed as at risk or in crisis.	
Parents as First Teachers	Integrated Contract - Social	A flexible home based programme that works with parents; caregivers and whānau of children aged 0-3. This programme recognises parents as their child's most important first teacher.	Parents; caregivers and whānau of children aged 0-3

Service Name	Funding Contract Name	Provider Service Description	Target clients / eligibility
Strengthening Families	Integrated Contract - Social	This programme supports Whānau Connectedness by engaging appropriate services, and multiple agencies support around Whānau through the strengthening families process.	
Wrap Around (West & South)	Integrated Contract - Social	Comprehensive support for young people in all areas for a maximum of one year Youth Justice referrals for youth who are at risk of offending, being placed in Ministry care, or are requiring CYF intervention.	10-17yrs
Youth At Risk	Integrated Contract - Social	Supervised structured programmes for youth at risk of offending or re-offending.	Structured programmes for aged 8-24 yrs
Advocacy & Peer Support - Adult	Integrated Mental Health Contract	MHW68D To provide information, social and emotional support, develop strategies for coping mechanisms, and advocacy services to whānau or carers of mental health users. Services include providing information regarding relevant legislation, rights and responsibilities.	
Advocacy & Peer Support - Child, Adolescent and Youth	Integrated Mental Health Contract	MHW68D To provide information, social and emotional support, coping mechanisms, and advocacy services to whānau or carers of children or youth who use mental health services including information regarding relevant legislation, rights and responsibilities.	
Community Support Work - Mainstream	Integrated Mental Health Contract	MHA20D For eligible people with mental health problems who have high and ongoing support needs and who require assistance to lead and self-manage their lives in the community. Providing support including cultural support and key co-ordination between whānau, carers, services and community, with the ultimate aim of increasing and strengthening their independent living.	
Community Support Work - Pacific	Integrated Mental Health Contract	MHA20D This service is for PI people with mental health issues who have high and ongoing support needs related to community living. The service is based on Pacific frameworks/models of health. To engage service users in community based activities, support self-care and domestic skills and to remain independent in their communities.	
Home Based Recovery Support Service	Integrated Mental Health Contract	MHA20D For eligible people with mental health problems who have high and ongoing support needs and who require assistance to lead and self-manage their lives in the community. Providing support and recovery oriented services, offering highly responsive and flexible solutions with the ultimate aim of moving towards a less restrictive and independent environment, increasing and strengthening their independent living. Referrals come from DHB Local Coordinate Services.	

Service Name	Funding Contract Name	Provider Service Description	Target clients / eligibility
Iwi Support Work Service	Integrated Mental Health Contract	MHA20D For eligible Māori with mental health problems who have high and ongoing support needs and who require assistance to continue to lead self-management of their lives in the community. Providing support including cultural support and key co-ordination between whānau, carers, services and community.	
Kaupapa Māori Mental Health Services - Day Programmes	Integrated Mental Health Contract	MHA21D Free program designed to aid tangata whaiora on your journey to recovery.	
Kaupapa Māori Alcohol & Drug Services (Non-Clinical)	Integrated Mental Health Contract - Addiction Services	MHD74D We provide a free outpatient based alcohol and drug assessment treatment and consultation/liaison service within a kaupapa Māori framework. This programme aims to help whānau by providing them with advice, information and support in recognition of an alcohol or drug problem.	
Kaiārahi / Navigator	Kaiārahi/Navigator Services	Navigates whānau into the appropriate Waipareira service that best fits the whānau.	All whānau who use a Waipareira service
Whai Ao (HAPAI Public Health)	Māori Public Health Promotion	Their role is to implement public health policies and to deliver public health programmes and services which are designed by Māori for Māori, (but not exclusively), to improve Māori health. E.g. boxing and swimming.	
Rangatahi Mentoring	National Mentoring Services	Mentoring service for Māori and Pasifika students leading to NCEA success.	Students in years 11,12,13 from selected schools
Te Pae o te Haa	Pathway to Smokefree New Zealand	To provide a culturally tailored smoking programme targeted at youth and pregnant women providing weekly clinics and support group sessions.	
Poipoia	Poipoia te Mokopuna	Supporting vulnerable Māori whānau with children under three years of age who are not currently participating in ECE and need support to engage in early learning.	Parents of children aged 0-3 who are not engaged in early learning
Te Puna Kainga	Puna Kainga - Mokopuna	Support up to 25 mokopuna aged 4 yrs(and their siblings) to engage in early childhood learning in order to be school ready at the age of 5yrs.	For mokopuna aged 4 yrs (and their siblings)
Rongoa Services	Rongoā Māori	MAOR0107 Rongoā Māori traditional healing that provides mirimiri, karakia and whakawhitiwhiti kōrero.	Anyone who is in a Waipareira Service
Niwareka	Services to Children, Young People and Families	Confidential and free support group for wāhine wanting to take control of their lives. Supporting families who have been affected by family violence.	This service is for wāhine 16-65 years of age who are in the West Auckland area

Service Name	Funding Contract Name	Provider Service Description	Target clients / eligibility
Taitamariki	Taitamariki Substance Misuse Prevention Service	Support, information and advice programme for taitamariki who are either at increased risk of developing substance misuse problems or those with early stage experimental use of substances and whose parent/s has a substance abuse problem and/or mental illness.	Young people (aged 10 - 13) at risk of developing substance misuse problems
Tikanga Māori Services (Community Probation)	Tikanga Māori Services (Community Probation	Tikanga Māori programme for offenders to help them to reintegrate traditional Māori value, practices and philosophy into everyday life.	Offenders
Triple P (Positive Parenting Programme)	Triple P Intervention and Support Services	A parenting programme delivering up to 4 short 1 to 1 sessions as well as two hour group discussions.	Parents of children up to the age of 12 having behavioural problems.
Cancer Community Health Navigator	Whānau Ora - Supporting Families and Whānau	Navigators provide support to whānau who have been diagnosed with cancer. Navigators support whānau with GP and specialist visits.	Whānau with a whānau member who has been diagnosed with cancer
Cardiac Rehabilitation Service	Whānau Ora - Supporting Families and Whānau	Cardiac nurses provide a home based culturally responsive cardiac rehabilitation service for clients. The service improves access to cardiac rehabilitation and promotes and improves healthy lifestyle behaviours.	Patients who have been diagnosed with a cardiac condition requiring rehabilitation
Family Violence Screening	Whānau Ora - Supporting Families and Whānau	All Kaimahi screen and identify Whānau (women aged over 16) who are exposed to family violence and provide appropriate support, and linkages to other support services.	All whānau
Family/ Whānau Care (Child & Youth)	Whānau Ora - Supporting Families and Whānau	Health checks and some health education in the health clinic, at various Kohanga Reo at the Kura Kaupapa and other schools. Nurses also offer health education packages to 14 -18 year olds. Also provides Hip Hop classes for Children between 7-12 years old (5-6 year olds welcomed but parents need to be present).	3 - 18 year Māori children
Family/Whānau Support (Mama and Pepi)	Whānau Ora - Supporting Families and Whānau	Kaimahi provide support to mothers requiring intensive maternity or child health support.	Mothers who need the most support with maternity and child health issues
Mobile Māori Nursing	Whānau Ora - Supporting Families and Whānau	Māori Mobile Nursing service for enrolled adult whānau.	Whānau (mainly Māori) who have lung, diabetes and/or heart disease.
Oral Health Services	Whānau Ora - Supporting Families and Whānau	To provide dental services for all age groups. Child needs to have a Dental Therapist Referral letter Adults have pain relief.	18+ yrs
Well Child/ Tamariki Ora	Whānau Ora - Supporting Families and Whānau	Health and development checks and education to support families / whānau/ caregivers in maximizing their children's developmental potential and health status.	Parents, whānau, caregivers of babies and children between the ages of 0-5 years,
Whānau Ora Rangatahi	Whānau Ora - Supporting Families and Whānau	To reduce health inequalities amongst our Māori youth by ensuring they are enrolled with a GP, have positive participation in Māori society, are engaged with their culture and connected with their whānau, hapu and iwi.	Māori Youth

Service Name	Funding Contract Name	Provider Service Description	Target clients / eligibility
Kaitoko Whānau Programme		Support for 60 Māori whānau requiring extra support and linking to appropriate education, employment and health services for up to 12 months.	Māori whānau requiring extra support
Kaupapa Māori Day Programme		Free program designed to aid tangata whaiora on our journey to recovery and to remain independent in their communities.	
Kip McGrath / Te Kete Aronui		Out-of-school hours assistance with Literacy and Numeracy.	For Māori children from 7 yrs. to 11.
Rheumatic Fever		Education service and rheumatic fever swabbing	
Tawhirimatea respondent Programme for Māori men		This respondent programme addresses whānau violence with a focus on Māori men. Māori values and principles provide the guidelines for this programme.	
Te Rito O Waipareira (Early Learning Centre)		Early childhood centre for pre-schoolers with a focus on bi-lingual language delivery (Māori and Pakeha).	Babies and children from age 6 months to 5 years old
Wai Home Based Support Services		Personal caregivers, other care services and assistance completing daily household activities for Whānau with a disability who are experiencing difficulty caring for themselves (e.g. illness, post-surgery, chronic medical condition). This service promotes independence and quality of life.	Whānau with a disability who are experiencing difficulty caring for themselves (e.g. illness, post-surgery, chronic medical condition)