AUCKLAND
DISTRICT HEALTH BOARD
Te Toka Tumai

Community and Public Health Advisory Committee – Commissioning Health Equity Advisory Meeting

Wednesday, 18 November 2020

1:30pm

Marion Davis Library
Building 43
Auckland City Hospital
Grafton

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Agenda
Community and Public Health Advisory Committee – Commissioning Health Equity Advisory Meeting 18 November 2020

Venue: Marion Davis Library,
Building 43, Auckland City Hospital

Time: 1.30pm

Board Members	**Auckland DHB Executive Leadership**	
Teulia Percival (Committee Chair)	Karen Bartholomew	Director of Health Outcomes – ADHB/WDHB
Michelle Atkinson (Deputy Committee Chair)	Ailsa Claire	Chief Executive Officer
Jo Agnew	Margaret Dotchin	Chief Nursing Officer
Zoe Brownlie	Dame Naida Glavish	Chief Advisor Tikanga and General Manager Māori Health – ADHB/WDHB
Peter Davis	Dr Debbie Holdsworth	Director of Funding – ADHB/WDHB
Tama Davis	Meg Poutasi	Chief of Strategy, Participation and Improvement
Fiona Lai	Sue Waters	Chief Health Professions Officer
Bernie O'Donnell	Dr Margaret Wilsher	Chief Medical Officer
Michael Quirke	**Auckland DHB Senior Staff**	
Heather Came-Friar	Nigel Chee	Interim General Manager Māori Health
Michael Steedman	Marlene Skelton	Corporate Business Manager
	(Other staff members who attend for a particular item are named at the start of the respective minute)	

Agenda

Please note that agenda times are estimates only

1.30pm **0. KARAKIA**

1.35pm **1. ATTENDANCE AND APOLOGIES**

1.37pm **2. REGISTER OF INTEREST AND CONFLICTS OF INTEREST**

Does any member have an interest they have not previously disclosed?

Does any member have an interest that may give rise to a conflict of interest with a matter on the agenda?

3. CONFIRMATION OF MINUTES -NIL

	4.	**ACTION POINTS - NIL**
1.40pm	**5.**	**INDUCTION AND OVERVIEW**
		[One hour has been allocated to this induction]
	5.1	Planning Funding and Outcomes: Approach to Commissioning
	5.2	Planning, Funding and Outcomes: Summary of community investment and areas of focus
2.40pm	**6.**	**ASIAN, NEW MIGRANT, FORMER REFUGEE & CURRENT ASYLUM SEEKER HEALTH PLAN 2020-2023**
3.00pm	**7.**	**ORAL HEALTH - UPDATE**
3.20pm	**8.**	**ARPHS - UPDATE**
3.40pm	**9.**	**HPV SELF TESTING - UPDATE**
	10.	**RESOURCE CENTRE**
		[*Secretarial Note: This is reference material related to items on the agenda. To enable you to easily access it during the meeting it has not been placed in the BoardBooks Resource Centre but appended to the end of the agenda*]
	10.1	System Level Measures Improvement Plan 2020/2021

Next Meeting:	Wednesday, 10 February 2021 at 1.30pm A+ Trust Room, Clinical Education Centre, Level 5, Auckland City Hospital, Grafton

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Kia kotahi te oranga mo te iti me te rahi o te hāpori

Karakia

E te Kaihanga e te Wahingaro

E mihi ana mo te ha o to koutou oranga

Kia kotahi ai o matou whakaaro i roto i te tu waatea.

Kia U ai matou ki te pono me te tika

I runga i to ingoa tapu

Kia haumie kia huie Taiki eee.

Creator and Spirit of life

To the ancient realms of the Creator

Thank you for the life we each breathe to help us be of one mind
As we seek to be of service to those in need.
Give us the courage to do what is right and help us to always be aware
Of the need to be fair and transparent in all we do.

We ask this in the name of Creation and the Living Earth.

Well Being to All.

Attendance at Community and Public Health Advisory Committee – Commissioning Health Equity Advisory Meetings

Members	19 Feb. 20	22 Apr. 20	03 Jun. 20	15 July 2020	02 Sep. 20	07 Oct. 20	18 Nov 2020
Teulia Percival (Chair)	c	c	c	c	c	c	
Michelle Atkinson (Deputy Chair)	c	c	c	c	c	c	
Jo Agnew	c	c	c	c	c	c	
Zoe Brownlie	c	c	c	c	c	c	
Tama Davis	c	c	c	c	c	c	
Peter Davis	c	c	c	c	c	c	
Fiona Lai	c	c	c	c	c	c	
Bernie O'Donnell	c	c	c	c	c	c	
Michael Quirke	c	c	c	c	c	c	
Heather Came-Friar	c	c	c	c	c	c	
Michael Steedman	c	c	c	c	c	c	
Key: 1 = present, x = absent, # = leave of absence, c = cancelled							

Conflicts of Interest Quick Reference Guide

Under the NZ Public Health and Disability Act Board members must disclose all interests, and the full nature of the interest, as soon as practicable after the relevant facts come to his or her knowledge.

An "interest" can include, but is not limited to:

- Being a party to, or deriving a financial benefit from, a transaction
- Having a financial interest in another party to a transaction
- Being a director, member, official, partner or trustee of another party to a transaction or a person who will or may derive a financial benefit from it
- Being the parent, child, spouse or partner of another person or party who will or may derive a financial benefit from the transaction
- Being otherwise directly or indirectly interested in the transaction

If the interest is so remote or insignificant that it cannot reasonably be regarded as likely to influence the Board member in carrying out duties under the Act then he or she may not be "interested in the transaction". The Board should generally make this decision, not the individual concerned.

Gifts and offers of hospitality or sponsorship could be perceived as influencing your activities as a Board member and are unlikely to be appropriate in any circumstances.

- When a disclosure is made the Board member concerned must not take part in any deliberation or decision of the Board relating to the transaction, or be included in any quorum or decision, or sign any documents related to the transaction.
- The disclosure must be recorded in the minutes of the next meeting and entered into the interests register.
- The member can take part in deliberations (but not any decision) of the Board in relation to the transaction if the majority of other members of the Board permit the member to do so.
- If this occurs, the minutes of the meeting must record the permission given and the majority's reasons for doing so, along with what the member said during any deliberation of the Board relating to the transaction concerned.

IMPORTANT

If in doubt – declare.

Ensure the full **nature** of the interest is disclosed, not just the existence of the interest.

This sheet provides summary information only - refer to clause 36, schedule 3 of the New Zealand Public Health and Disability Act 2000 and the Crown Entities Act 2004 for further information (available at www.legisaltion.govt.nz) and "Managing Conflicts of Interest – Guidance for Public Entities" (www.oag.govt.nz).

Register of Interests – Community and Public Health Advisory Committee – Commissioning Health Equity Advisory Meeting

Member	Interest	Latest Disclosure
Teulia PERCIVAL (Chair)	Director – Pasifika Medical Association Group Employee Clinician – Counties Manukau Health DHB Chairman – South Seas Healthcare Trust, Otara Board Member – Health Promotion Agency (Te Hiringa Hauora) Senior Lecturer Researcher – University of Auckland Director Researcher – Moana Research	24.07.2020
Michelle ATKINSON (Deputy Chair)	Director – Stripey Limited Trustee - Starship Foundation Contracting in the sector Chargenet, Director & CEO – Partner	21.05.2020
Jo AGNEW	Professional Teaching Fellow – School of Nursing, Auckland University Casual Staff Nurse – Auckland District Health Board Director/Shareholder 99% of GJ Agnew & Assoc. LTD Trustee - Agnew Family Trust Shareholder – Karma Management NZ Ltd (non-Director, majority shareholder) Member – New Zealand Nurses Organisation [NZNO] Member – Tertiary Education Union [TEU]	30.07.2019
Zoe BROWNLIE	Partner – Team Leader, Community Action on Youth and Drugs Board Member – Waitakere Health and Education Trust Co-Director – AllHuman	11.11.2020
William (Tama) DAVIS	Director/Owner – Ahikaroa Enterprises Ltd Whanau Director/Board of Directors – Whai Maia Ngati Whatua Orakei Director – Comprehensive Care Limited Board Director – Comprehensive Care PHO Board Board Member – Supporting Families Auckland Board Member – Freemans Bay School Board Member – District Maori Leadership Board Iwi Affiliations – Ngati Whatua, Ngati Haua and Ngati Tuwharetoa	02.07.2020
Peter DAVIS	Retirement portfolio – Fisher and Paykel Retirement portfolio – Ryman Healthcare Retirement portfolio – Arvida, Metlifecare, Oceania Healthcare, Summerset, Vital Healthcare Properties	19.11.2019
Fiona LAI	Member – Pharmaceutical Society NZ Casual Pharmacist – Auckland DHB Member – PSA Union Puketapapa Local Board Member – Auckland Council Member – NZ Hospital Pharmacists' Association	26.08.2020
Bernie O'DONNELL	Chairman Manukau Urban Māori Authority(MUMA) Chairman UMA Broadcasting Limited Board Member National Urban Māori Authority (NUMA) Board Member Whānau Ora Commissioning Agency	27.08.2020
Michael QUIRKE	Chief Operating Officer – Mercy Radiology Group Convenor and Chairperson – Child Poverty Action Group Director of Strategic Partnerships for Healthcare Holdings Limited	27.05.2020
Heather CAME-FRIAR	Employed by – Auckland University of Technology Contractor – Ako Aotearoa Acting Co-President – Public Health Association of NZ	27.07.2020

	Fellow – Health Promotion Forum Co-Chair – STIR: Stop Institutional Racism Member – Tamaki Tiriti Workers	
Michael STEEDMAN	No interests	27.08.2020

Planning Funding and Outcomes: Approach to Commissioning

Recommendation

That the Community and Public Health Advisory Committee note:

1. **The focus of Planning, Funding and Outcomes on equity and evidence informed commissioning initiatives.**
2. **The exemplar case studies are provided to illustrate the commissioning approach.**
3. **The need for continued investment in primary and community services to achieve equity address the continuum of prevention, early detection and service needs including the impact on secondary care.**

Prepared by: Tim Wood (Manager Primary Care), Ruth Bijl (Manager, Child Women and Youth Health), Kate Sladden (Manager Health of Older People), Meenal Duggal (Manager Mental Health), Shayne Wijohn (Manager Māori Health Gain), Leani Sandford (Pacific Portfolio Manager), Sam Bennett (Manager Asian Health Gain).
Endorsed by: Dr Debbie Holdsworth (Director Funding) and Dr Karen Bartholomew (Director Health Outcomes)

Glossary

AE	Alternative Education
ALT	Alliance Leadership Team
CARE/KARE	Co-ordinated care, Assessment, Rehabilitation, Education
CLTC	Community and Long-term Conditions Directorate
CVD	Cardiovascular Disease
DHB	District Health Board
DSLA	Diabetes Service Level Alliance
EPOA	Enduring Power Of Attorney
ESBHS	Enhanced School Based Health service
FACE	Full and Complete Financial Entitlements
FPS	Foot Protection Service
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GNS	Gerontology Nurse Specialist
GP	General Practitioner
HbA1c	Glycated Haemoglobin
HCSS	Home and Community Support Service
HEEADSSS	Home, Education/Employment, Eating, Activities, Drug and Alcohol, Sexuality, Suicide and Depression, Safety
HIP	Health Improvement Practitioner
IBT	In Between Travel
IPMHAS	Integrated Primary Mental Health and Addiction Services
LMC	Lead Maternity Carer
MaCSA	Maternal and Child Services Alliance
MoE	Ministry of Education
MSD	Ministry of Social Development
NASC	Needs Assessment Service Coordination
NA-HH	Noho Āhuru – Health Homes
NCHIP	National Child Health Improvement Platform
NHI	National Health Index

NIR	National Immunisation Register
NZSSD	New Zealand Society of the Study of Diabetes
PFO	Planning, Funding and Outcomes
PHO	Primary Health Organisation
PPE	Personal Protective Equipment
MHAS	Mental Health and Addiction Services
NGO	Non-Governmental Organisation
SiP	Safety in Practice
TPU	Teen Parent Unit
UR-CHCC	Uri Ririki – Child Health Connection Centre
WCTO	Well Child Tamariki Ora

1. Introduction to the Planning, Funding and Outcomes Team

The joint Planning, Funding and Outcomes (PFO) Unit was established six years ago across Auckland DHB and Waitematā DHBs. The PFO Unit is the largest in the country and arranged across Funding functions (funding and development managers and their teams) and Health Outcomes which includes Health Gain and Planning and Health Intelligence (public health physicians, epidemiologists, and planning managers and their teams). The PFO Unit has a strong equity focus across the two directorates and includes a specific focus for three priority populations; Māori Health Gain, Pacific Health Gain and health gain for Asian, new migrant, former refugee and asylum seeker populations. The team provide the planning and commissioning functions for Auckland DHB across both hospital and community services.

Figure 1. Elements of DHB Commissioning

The Hospital Team manage expectations for delivery of the volume of services in the provider arm against agreed funding and other expectations (for example timelines). The Hospital Team also engage on issues of significant risk, such as in vulnerable services. The focus is often metro Auckland, northern region or national which fits well with the approach outlined in the Health and Disability sector review.

Primary and community services are managed across a range of portfolio areas such as Mental Health, Health of Older People and Child, Youth and Women. The programme, alignments and points

of leverage are also often northern region DHBs or metro Auckland. Information on these programmes are regularly reported to CPHAC. The PFO team also undertake the accountability functions of the DHB in terms of legislative reporting requirements, including the Annual Plan and the Annual Report. While divided into portfolios, there is integrated working across the teams including Māori Health Gain and Pacific Health Gain.

Commissioning is defined as: 'the process of continuously developing services and committing resources to achieve the best health outcomes for individuals and the population, ensure equity and enhance experience within the resources available' (see Figure 2 below). The outcomes frameworks, that demonstrate how the PFO approach, investment and areas of focus map to health outcomes is provided in Appendix 1 and the Māori Health Outcomes Framework (Nga Painga Hauora), developed for the Outcomes commissioning approach with Māori Providers is in Appendix 2.

Within constraints, PFO works to understand unmet health needs and apply available funding or build support to improve health outcomes, with a particular focus on equity. This includes service design and development, innovation and model of care experimentation, research and evaluation (such as HPV self-sampling), some relatively operational elements such as managing the local National Immunisation Register (NIR), through to pure procurement and contract management and performance management.

Figure 2. Commissioning cycle

The PFO Unit has demonstrated on numerous occasions that it is the leading health commissioning agency in the country. This is a result of having a highly competent and very dedicated team adhering to a number of key traits, including impartiality, and also due to applying a consistent set of principles that drive our approach. These principles are:

- Elimination of gaps in equity of outcome
- Population health focus and needs assessment
- Evidence based or developing an evidence base
- Deep understanding of the data
- Continuous quality and equity improvement
- Partnership with people with lived experience, communities and providers of services

In terms of #3 above the PFO Unit is committed to evidence-based service development, and often undertakes assessment of international and local evidence as it develops and improves services.

However, in many areas of innovation or action on inequities international context may not be directly relevant or the evidence may be absent, PFO then has to develop an evidence base for the work it commissions through research, quantitative and qualitative evaluation and the development of logical models with appropriate measurement (including in contracts). Ensuring we understand what works and why (critical success factors) is a key approach the team takes across the breadth of the work programme.

The recent Health and Disability sector review highlighted the general underinvestment in population health and in primary and community sector over time, despite the critical importance of these areas. The review report confirms the approach taken by PFO is pertinent and appropriate. The report emphasises the importance of commissioning and of taking a population health approach and states:

> "Population health has an inherent, explicit focus on equity. Working to eliminate systemic inequities in health outcomes requires:
>
> - looking at which groups are most impacted
> - understanding how and where inequities manifest
> - recognising the socioeconomic determinants that underpin health inequity
> - implementing comprehensive strategies to eliminate or reduce inequities."

Some of the success of the PFO approach has been the result of intentionally focusing on and progressing a smaller sub-set of areas rather than trying to simultaneously work on all areas requiring attention. The previous CPHAC scorecard (see recent example Appendix 3) is an example of this approach – the indicators are 'red' because the areas of focus are purposely chosen due to inequities or potential for health gain, and are the focus of specific work programmes. Another example of this is the process with the Alliance Leadership Team (ALT) and the Metro Auckland Clinical Governance Forum (MACGF) to identify the highest priority areas – diabetes and cardiovascular disease (CVD), and to develop specific clinical indicators and programmes of work to focus attention (see case study below). CPHAC is invited to discuss our approach, and priorities especially in light of the recently received Health and Disability System Review Report.

This paper outlines exemplar case studies that demonstrate the approach outlined above, including some key successes, the challenges to achieve these, and what we have learned along the way.

- Turning equity focused research into practice – Abdominal Aortic Aneurysm (AAA) Screening
- Co-design with the community – Mental Health and Addictions; Diabetes
- Social determinants of health and cross-sectoral initiatives – First 1000 Days; School Based Health Services
- Quality improvement initiatives – Home and Community Support; KARE; Safety in Practice (SiP).

This paper demonstrates the breadth of PFO activity however, it does not cover all that we are working on and what we do – further high level information is provided in the companion paper on community investment. The case studies do demonstrate that the issues being addressed are complex, multifactorial and longstanding, and that the context of Auckland DHB and metro Auckland are also complex in terms of scale (population and providers), population need and population mobility. There are no simple/quick fixes, and many of the programmes of work to shift indicators such as life expectancy, amenable mortality and ambulatory sensitive hospitalisations (see the System Level Measures overview, Appendix 4), as well as functions such as provider capacity and capability development, have long term time horizons. Combining the PFO team across both DHBs has provided the ability to develop sufficient scale and to leverage progressive approaches across such a large region, also enabling the development of speciality skillsets (eg data, research and evaluation), demonstrated in many of these examples.

2. Turning equity focused research into practice – AAA Screening

Abdominal Aortic Aneurysm (AAA) screening was identified as a highly cost-effective intervention that could make a small but significant impact on increasing Māori life expectancy and reducing the survival gap between Māori non-Māori. A series of pilot projects undertaken by Auckland DHB and Waitematā DHB between 2016 and 2018 to screen for abdominal aortic aneurysm (AAA) and atrial fibrillation (AF). The projects were evaluated to determine (1) Whether organised screening for AAA is justified, safe, acceptable and accessible, and (2) How AAA screening should be implemented to maximise participation and participant experience. Summary findings are included in this case study, and were featured in the 2019Health Quality and Safety Commission report *A window on the quality of Aotearoa New Zealand's health care– a view on Māori health equity*.[1]

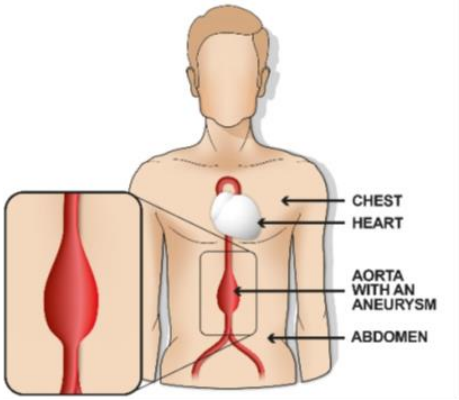
The projects were developed with strong Māori leadership from Māori public health physicians, the Project steering group and advisors, the Māori Health Gain Team, and the Māori screening team members. The project was also driven by strong epidemiological support from the Health Gain Team. The intention of the project was to design-in equity as both a primary purpose of the work and to maximise the potential benefit for Māori from a tailored screening approach.

2.1 Abdominal Aortic Aneurysm

An AAA is a widening in the lower aorta, the major artery that supplies blood to the body. The major complication of AAA is rupture, which is usually fatal. Māori are disproportionately impacted by AAA. They are significantly more likely to die from a ruptured AAA and are less likely to have elective surgery to have it repaired. Māori also develop AAA on average 8 years earlier than non-Māori.

Large randomised trials in Europe and Australia have shown that it is possible to reduce mortality from AAA through once-in-a-lifetime ultrasound screening of the abdominal aorta to detect, monitor and repair aneurysms before they rupture. Abdominal ultrasound is quick and accurate, and screening has been found to be cost-effective in at-risk populations.

Figure 3: Abdominal Aortic Aneurysm



2.2 AAA Screening Research Programme

The research programme was the first screening programme to specifically focus on Māori in New Zealand. The programme consisted of a series of pilot projects to screen for AAA, and later also atrial fibrillation (AF), between June 2016 and March 2018. AF is an irregular heart rhythm that is a risk

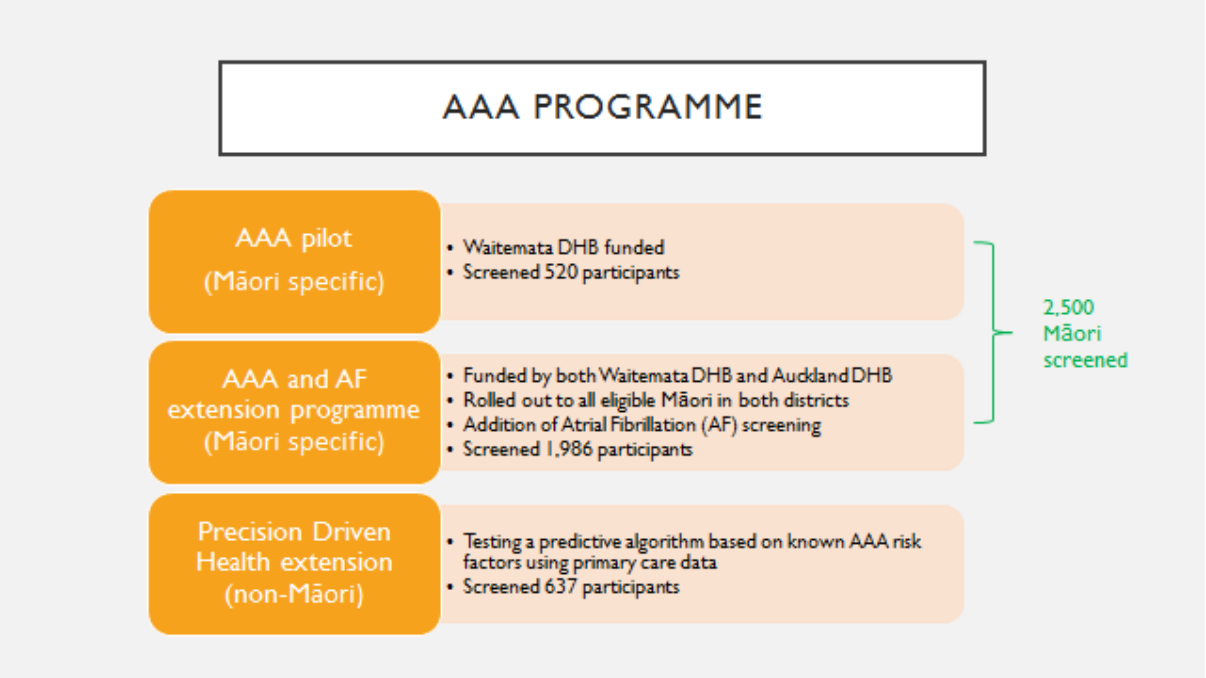
[1] See: https://www.hqsc.govt.nz/our-programmes/health-quality-evaluation/publications-and-resources/publication/3721

factor for stroke. There have been international trials on whether screening for AF prevents stroke, with results awaited, however none have been in indigenous population (for example for Māori the average age for stroke is 6-8 years earlier than Other groups). The AF component was therefore also a discrete piece of research, within the AAA research programme.

An initial Māori-specific pilot tested a range of parameters of importance to the development of a screening programme and to national policy, including feasibility of community screening, participation, prevalence of AAA in the target population and completion of follow up. The initial pilot consisted of screening 50 Māori Waitematā DHB staff and 470 eligible Māori from three primary care practices. The success of the initial pilot study informed further investment across both Waitematā and Auckland DHBs to extend the programme to all eligible Māori (men aged 60-74 years and women aged 65-74 years). Screening for AF was added in the roll-out, testing the integration of a second life-threatening condition into the screening session. Blood pressure was taken on all participants, and smokers were given brief cessation advice and offered referral to quit smoking services.

A third component of the screening project, a Precision-Driven Health (PDH) Pilot, was undertaken in June to October 2017 to test the validity and precision of a New Zealand-specific risk algorithm for AAA in 637 non-Māori patients enrolled in Coast to Coast Healthcare. Under the Māori Health Pipeline the performance of the risk prediction algorithm for Māori is currently being assessed.

Figure 4: Schematic of the DHB AAA Research Programme



Māori were involved at all levels of the project design, development and implementation of the AAA screening projects. This project grew out of the partnership between the DHBs and MoU partners Ngāti Whātua and Te Whānau o Waipareira. Māori patient and whānau experience was centralised for the projects and Māori leadership and high-quality Māori:non-Māori partnerships were reflected at each stage of project development and implementation. The project was approved, supported and guided by the DHBs' GM Tikanga, the Māori Research Advisor, Māori public health physicians and three Māori providers. A Māori screener (ultrasound technician) and administrator worked

directly with invitees, and Māori health literacy experts and researchers were engaged to develop culturally appropriate materials and evaluation approach.

The project began with an awareness-raising hui. Tailored invitation letters and brochures, incorporating a personal story and use of Te Reo, were mailed to eligible Māori, with follow-up phone calls. Screening was community-based, at venues close to public transport, including primary care practices, marae and more remote locations. Evening clinics were also offered.

A Māori ultrasound technician received specialised training for the DHB programme and conducted AAA screening under the supervision and quality assurance of the radiology team. AF screening was conducted using a simple AliveCor device which produces a heart rhythm trace on a wirelessly linked mobile device. Positive AF traces were interpreted by the University cardiac physiology team and Auckland DHB cardiology. AAA referral protocols were based on Vascular Society of New Zealand guidelines.

2.3 Results of the AAA programme

The research programme successfully screened more than 2,500 eligible Māori across Auckland DHB and Waitematā DHBs (see Figure 2). The project enabled high participation rates and valuable information was gathered on the prevalence of AAA for Māori men and women (the first AAA programme to include women internationally) and cost effectiveness being provided to inform national policy discussions.

Participation rates were 79% in the initial pilot and 65% in the wider roll out. These participation rates are very high and compare very favourably to other screening programmes. Over the two pilot projects, seven large AAAs (≥50mm) requiring urgent assessment, were detected and 65 small AAAs. Appointments at vascular services were prompt, and successful repair was achieved for the majority of large AAAs identified. Results of AAA screening are summarised in Figure 3.

Figure 5: Results of AAA screening

Prevalence

Men (60-74y) = 3.7%
Women (65-74y) = 1.8%

Note: If use a gender-specific cut-off of 27mm prevalence = 2.3%

RESULTS OF SCREENING

		Number	%	Outcome
Pilot and extension (Māori specific)	Large AAAs ≥50mm	7	2.8%	4 have had surgical repair, 2 awaiting
	Small AAAs	65		Referred for assessment /surveillance
	Mild aortic enlargements (ectasia)	39	1.7%	Referred for assessment /surveillance
	AF new cases	36	1.5%	Referred to GP
Precision Driven Health (non-Māori)	Large AAAs ≥50mm	3	5.5%	3 have had surgical repair
	Small AAAs	31		Referred for assessment /surveillance
	Mild aortic enlargements (ectasia)	61	9.4%	Referred for assessment /surveillance
	AF new cases	10	1.8 %	Referred to GP

In addition:

- 36 new cases of AF were detected (prevalence 2.0%)

- 37 participants were urgently referred back to their General Practitioner (GP) for very high blood pressure (≥190 systolic and/or ≥130 diastolic)
- 34 referrals to smoking cessation services were made.

2.4 AAA Screening Evaluation

The programme has been evaluated and a series of patient and whānau interviews have been conducted by an independent Māori researcher, including an assessment of potential anxiety generated by the process of AAA screening (an issue raised in the international literature). Factors identified as critical to the programme's success are summarised in Table 1 below.

Table 1. Critical Success Factors for the AAA screening projects

- Māori leadership at all stages of project development and implementation
- Optimisation of the screening programme for Māori from the outset of project development
- Tailored strategies to optimise Māori participation in screening
- Ensuring that the pilots included all the critical elements of a high quality screening programme
- A close working relationship with primary care
- Robust processes to exclude people who would not benefit from screening
- Integration of co-benefits into the programme (including cardiovascular risk assessment, blood pressure measurement and smoking cessation)
- Awareness and minimisation of stresses and anxieties for participants arising from screening and diagnosis
- Workforce development - ultrasound sonographer role

From the outset, the pilots aimed to optimise the programme for Māori, making it different to other screening programmes, which tend to retrofit equity improvements. Careful attention was given to the design of a person-centred and culturally appropriate programme, and this led to a high level of satisfaction with the screening process from participants interviewed, many of whom wanted it made more widely available to family members:

> *… if you can keep it going for those out there who may be like me.*
>
> *…I rung my other brother, I told him that he had to go and have this check-up….so he did*

A number of tailored strategies were used to optimise Māori participation in screening, including carefully designed invitation resources targeted to the population and incorporating personal stories. A health literacy approach was important to ensure that written and verbal information (in Te Reo and English) was presented in a clearly understandable format, minimise anxiety and facilitate sharing of information with whānau. This was also facilitated through community awareness-raising hui and verbal conversations through a representative well known in the community. Screening clinics located in accessible community locations (including primary care and marae) were important, as was active follow up of invitations with phone calls.

A close relationship with primary care was a focus of the project, particularly during the initial pilot, to ensure the purposes and process of screening were clear, as well as actions needed for those with non-normal results. Greater involvement of GPs, as in the initial and PDH Pilots, led to higher participation rates and more accurate identification of people who were unlikely to benefit from screening. Participants reported positive engagement with GP endorsement of the programme, including invitation letters that came directly from the GP.

Particular attention was given to ensuring that the pilots included all the critical elements of a high quality screening programme, including strong clinical governance and oversight, robust quality assurance and strong information technology (IT) systems and follow up. Strong clinical governance

and oversight facilitated good working relationships between the screening programme (including DHB programme providers, primary care, radiology) and the vascular service.

Quality assurance processes ensured that accurate imaging was achieved by the trained ultrasound technician. Almost all non-normal screening AAA scans and over 20% of normal AAA screening scans were reviewed by a senior radiology registrar. This provided strong support for a model of screening undertaken by an ultrasound technician with specialised training and support. Quality assurance for AF screening was undertaken by an experienced cardiac physiologist.

Robust failsafe processes by screening, vascular and public health staff ensured that there was not only complete, but timely, follow-up of all patients with non-normal screening results. This was made possible by the comprehensive IT system developed specifically for the programme.

Interviews with screening participants also highlighted that an awareness of, and a need to minimise, stresses arising from screening and diagnosis are important, particularly around attending appointments and anxiety for a proportion of those identified with small AAA. Practical suggestions from participants to reduce stress and anxiety in these areas included: encouragement of whānau engagement with the programme, and facilitating whānau support throughout the pathway; a nurse or Māori cultural support worker at or post vascular appointments to answer questions and clarify and discuss any key messages; personalised written information for people attending vascular appointments; and assistance getting to appointments such as provision of transport and free parking to reduce stress of attending hospital appointments.

2.5 Conclusion

The DHB AAA research programme confirmed the high burden of AAA for Māori, and the highly cost effective nature of abdominal ultrasound screening. The strong positive feedback and high participation rates indicate that with careful attention to design of a person-centred and culturally appropriate programme, a one-off screen for AAA is highly acceptable. AF screening was readily incorporated into the programme, and a number of co-benefits (identification of high blood pressure, referral to quit smoking services, positive life-style changes) were achieved. The programme remains under the Māori Health Pipeline with the extension of analysis to determine the performance of the risk prediction algorithim for Māori participants. Based on the success of the programme a Pacific AAA project was initiated – with the pilot for Tongan men recently completed. A further proposal to consider AAA screening in Northland DHB is being undertaken for the Kōtui Hauora Iwi-DHB Parthership Board in December 2020.

3. Co-design with the community - Awhi Ora/Te Tumu Waiora

3.1 Background

PFO worked collaboratively with providers and the community using co-design principles to develop Awhi Ora Supporting Wellbeing (Awhi Ora)and Te Tumu Waiora. Te Tumu Waiora is the name of the model placing Health Improvement Practitioners (HIPs) and Health Coaches within a general practice setting. Awhi ora is a co-designed preventative and early intervention approach to support people with mild to moderate mental health and addiction issues. This is achieved through the integration of Non-Governmental Organisation (NGO) support services within general practice and other community settings to deliver psychosocial support and navigation services.

Both HIPs and Health Coaches are based in general practices and offer easy access to psychosocial support and goal setting. HIPs are registered mental health practitioners (usually psychologists) who provide brief support to people with a wide range of behavioural issues. Health Coaches are non-clinical positions that help people build knowledge, skills and confidence to manage health conditions that are often co-morbid and chronic. These models were further tested and refined through interim investment via *Fit For the Future*, a Ministry of Health programme, to test and upscale a range of initiatives to better meet the needs of people with mild to moderate mental health and addiction issues within primary care settings.

In addition to the models above, Auckland DHB and Waitematā DHB received a small investment for secondary mental health services to support general practice. This investment is designed to assist confident and competent general practice and better link general practice with specialist services. This is built upon the model initially developed in Waitematā DHB under the Our Health in Mind programme. Counties Manukau received funding for Wellness Support for their general practice support model. As additional funding becomes available consideration will be given to implementing the Counties Manukau Wellness Support model.

An independent evaluation was undertaken by Synergia as part of *Fit For the Future*. The evaluation utilised both qualitative and quantitative data and found these interventions effective. The key findings noted that these interventions are:

- Effective at reducing distress and increasing ability to cope.
- Effective at providing navigation and access to a wide range of support services.
- Positively viewed by people engaged in the service as well as primary care providers.
- Timely in preventative support for people whose needs would have likely to be unmet.
- Effective at engaging people with short-term interventions and support.
- Effective at reducing missed appointments.
- Significantly, from an equity perspective, Awhi Ora was shown to successfully engage Māori and Pasifika populations at high rates when compared to DHB demographics

The testing and evaluation of Awhi Ora, HIPs and Health Coaches within Auckland and Waitematā provided evidence of their efficacy and subsequently led to their adoption as key requirements by the Ministry of Health for national delivery of Integrated Primary Mental Health and Addiction Services (IPMHAS).

3.2 Extension of approach with the Integrated Primary Mental Health and Addiction Services

He Ara Oranga, the report of the government inquiry into mental health and addiction, noted that mental health and addiction services (MHAS) need significant change to meet the needs and expectations of the community. Expanding access to, and choice of, primary mental health and addictions services is the flagship initiative for the Government on wellbeing and the cornerstone of the Wellbeing Budget 2019. There is particular emphasis on expanding access to services for people

with mild to moderate mental health and addiction needs who are unable to access secondary MHAS. The Wellbeing Budget 2019 provided $455 million available over a four year period. This is allocated to expand access to and choice of primary mental health and addictions support and will provide access to 325,000 people by 2023/24. IPMHAS is the initial response to this investment.

The Ministry of Health have run a series of procurement processes, through Request for Proposal, to confirm funding levels and rate of roll out of the IPMHAS. There are separate procurement processes for kaupapa Māori, Pacific, youth and mainstream IPMHAS services. The aim of the funding is to expand on current service delivery to:

- Increase access and equity of access,
- Increase choice in addressing people's holistic needs,
- Reduce wait times, and
- Improve outcomes and equity of outcomes.

Key stakeholders within the Metro-Auckland region elected to establish a collaborative IPMHAS proposal in response to the Request for Proposal, to provide greater consistency and integration of service. The resulting collaborative (Auckland Wellbeing Collaborative) includes the three Auckland DHBs, Treaty Partners, seven Primary Health Organisations (PHOs), Māori and Pacific health organisations and a significant number of NGOs.

The Auckland Wellbeing Collaborative's response was based on our previous experience has resulted in us being an early recipient of funding to roll out the model. The partnership developed within *Fit For the Future* included DHBs, PHOs and NGOs (including Pacific and kaupapa Māori providers) and formed the basis of the collaborative that responded to the Ministry request for proposals and who now oversee the Metro-Auckland solution.

In total $15.6 million of service delivery and a further $3.1 million for enablement costs is available for the initial 15-month period across Metro-Auckland. This will support 54 regional general practices. These practices have been chosen primarily based on the enrolled Māori and Pacific populations. Service delivery regionally includes approximately 49 HIP full time equivalent positions, 38 Health coaches and 38 Awhi Ora support workers. In addition to the range of NGO and PHO providers, the Whānau Ora Commissioning Agency will lead the kaupapa Māori response for which 10% of service delivery funding has been set aside so that the models can be implemented within 8 identified Metro-Auckland Māori practices.

Within the initial term Auckland DHB receives service investment of $3.4M which supports 14 general practices within the area with 11.6 HIPs, 8.2 Health Coaches and 8.2 Awhi Ora workers.

Enablement is contracted on behalf of the region by Auckland DHB and covers a range of positions and functions. These positions will assist the implementation and ongoing provision of the services described above. The Enablement team will drive the roll out of the programme, support recruitment and set up of robust data capture and management functions.

3.3 Moving forward

We are drawing on the methodology for managing successful programmes which outlines three levels of governance and oversight with addition of a Taumata (see diagram overlead). These are:

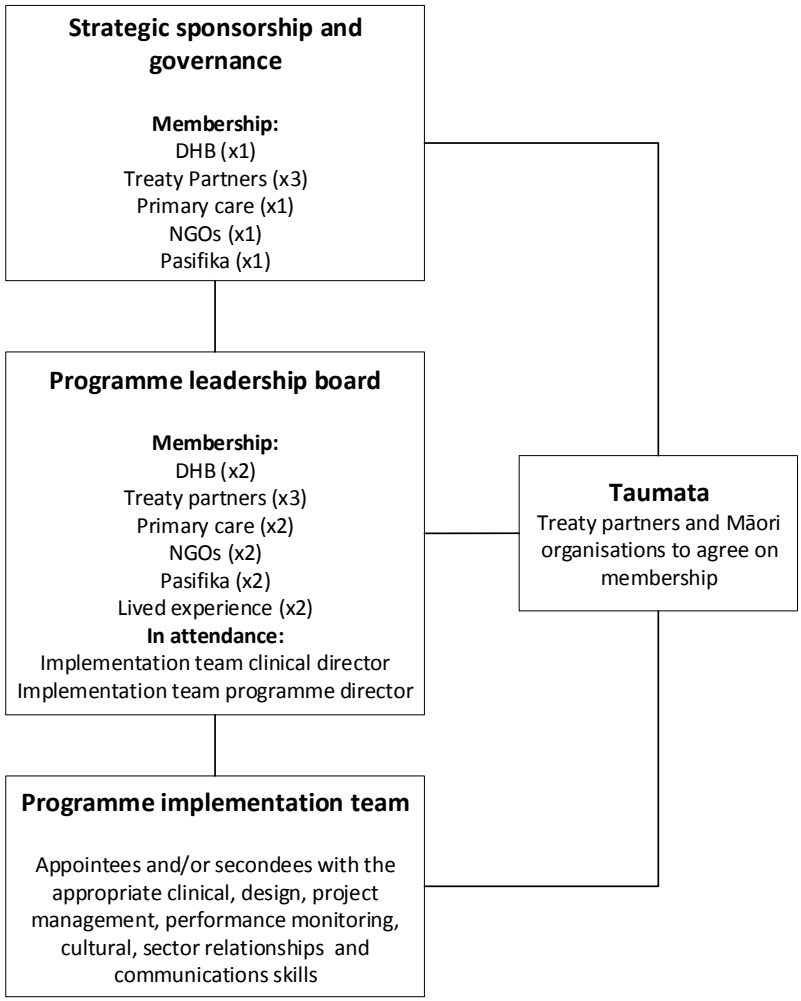
- Strategic Sponsorship and Governance - This is a high level sign off and escalation point if all else fails in resolving issues at programme board level. It has a role in monitoring broader developments both across the health sector (beyond the mental health and addictions.

space) and across other sectors (for example, changes in Ministry of Social Development (MSD), Whānau Ora or Oranga Tamariki, which may have a bearing on the health system).

- Programme Leadership Board - This is the decision making group where oversight and management of the collaborative programme occurs at a collective level. Its functions include resolution of any issues, driving equity, ensuring that inter-organisational connections are maintained, clinical governance and monitoring of risk. The Programme Leadership Board has a role to play in being aware of and attending to future opportunities.
- Operational Implementation - This take the form of the enablement / implementation team charged with standing up responsive, high quality IPMHAS for the population, to realise benefits, and deliver the contracted services, on behalf of the Auckland Wellbeing Collaborative.
- Taumata - The role of the Taumata is to act as the cultural safe keepers for the Auckland Wellbeing Collaborative, where stakeholders will be able to access collective expertise. There are three tiers of activity for the taumata to maintain Te Kawa, Ngā Tikanga and Ngā Whakaritenga.

Figure 6.

Auckland Wellbeing Collaborative – Leadership structure



The Terms of Reference and meetings schedules are in place for both the Strategic Sponsorship and Governance Group and Programme Leadership Board. The Taumata is led by the Māori partners and they are meeting regularly.

Positions within the interim enablement team have been filled. They are rolling out delivery of all models in line with the agreed schedule. HIPs and Health Coaches are presently in approximately 18 Metro-Auckland practices and Awhi Ora is in many more practices. Contracts have been drafted for all providers in the initial phase of delivery (22 contracts within Auckland and Waitematā) and more will follow as expansion continues. The timing of the rollout schedule means new providers will join the collaborative at various points during the 2020/21 financial year.

As noted above, the Ministry of Health has separate procurement processes for kaupapa Māori, Pacific and youth primary MHAS. Successful providers will be invited to join the collaborative so that integration of all services can occur without duplication.

An evaluation will be undertaken nationally by Ministry of Health of all IPMHAS investment.

4. Co-design with the community – Diabetes programme

4.1 Background

Diabetes is a major health problem in Auckland District Health Board. Morbidity and mortality associated with diabetes is high and people with diabetes are placing an increasing burden on healthcare services at all points along the continuum of care. As the population grows there will be a continued increase in the number of people at risk of developing diabetes. There is also widening inequity associated with access, quality of care and diabetes related outcomes between Māori and non-Māori.

Addressing the impact of long term conditions including diabetes is an important focus for the Government to support its vision that all New Zealanders 'live well, stay well and get well' as signalled in the refresh of the New Zealand Health Strategy (2015) . The national diabetes strategy, 'Living Well with Diabetes – A plan for people at high risk of or living with diabetes, 2015-20' outlines several 'Priority areas for action' which aligns with this vision and supports this transformational change.

To tackle this complex and longstanding issue, the Auckland DHB and Waitematā DHB ALT identified diabetes as a key area of focus and commissioned three significant pieces of work to set the scene and context for future diabetes work. These were

1. A stocktake and gap analysis of current services being delivered to people with diabetes in the Auckland DHB and Waitematā districts
2. The development of the Diabetes Intervention Logic Model
3. The establishment of the Diabetes CVD Clinical Indicators and Measures.

The ALT also commissioned the formation of the Diabetes Service Level Alliance (DSLA) tasked with developing, overseeing and advising the ALT on appropriate work programme and investment decisions required to achieve the agreed outcomes for people living with type 2 diabetes. In August 2015 the DSLA was formed with the vision that people living with diabetes are enabled to be leading partners in their own care within systems that ensure they can manage their condition effectively with appropriate support from proactive care teams. The DSLA developed a Work Programme which draws heavily on the three pieces of work that were completed prior to the establishment of the DSLA.

The stocktake involved a robust analysis of diabetes services identified the following areas for improvement which formed the basis of the DSLA Work programme:

- Lack of coordination / integration / communication between services / providers
- A lack of outcomes data to establish the quality / appropriateness/effectiveness of services
- Sub-optimal management of diabetes and CVD
- Workforce sustainability issues
- Known inequities – monitoring and action by ethnicity

A Diabetes Intervention Logic Model and an outcomes framework consisting of the Diabetes and CVD Clinical Indicators and Measures were developed. There are in total 22 indicators out of which the following five have been identified by the ALT for the initial phase of the implementation of the Work Programme.

- Glycaemic control
- Blood pressure control
- Management of microalbuminuria
- Secondary CVD prevention (triple therapy)

- Primary CVD prevention (dual therapy)

Now that we have good data capture and reporting on the abovementioned five measures work is underway in selecting the next set of measures to implement.

4.2 Priority Populations

For the purpose of the Work Programme the following population groups have been identified as the priority populations:

- People with newly diagnosed type 2 diabetes
- People with poorly controlled (HbA1c > 75 mmol/mmol) type 2 diabetes
- Māori with type 2 diabetes
- Pacific with type 2 diabetes
- Asian with type 2 diabetes and,
- Quintile 5 populations with type 2 diabetes

4.3 Components

The Work Programme comprises of the following four workstreams:

- **Workstream 1: Systems Redesign**
  Create a 'system' that is patient-centred, better integrated, accountable, and maximizes outcomes for consumers through the introduction of integrated frameworks, models, and concepts.

  This workstream includes; (i) review, design and implementation of retinal screening, (ii) review, design and implementation of podiatry services, and (iii) co-design of primary care diabetes care.

- **Workstream 2: Optimising Clinical Management**

- **Workstream 3: Self-Management Support including Care Planning and Diabetes Self-Management Education (DSME)**

- **Workstream 4: Workforce Development**

Each workstream contains a number of initiatives that need to be undertaken in order to achieve the overall vision and goal of the DSLA. It is of note that the Systems Redesign is considered as the overarching workstream with the other workstreams forming the various parts of the system itself. The following sections highlight some of the key projects.

4.4 Podiatry

Foot protection services (FPS) are an essential component of managing one of the more costly and devastating consequences of diabetes. Most diabetes related foot complications could either be avoided or optimally managed by following internationally recommended guidelines. The complex nature of foot problems in diabetes requires a team approach to care, with the person with diabetes and their whānau at the heart of the care plan.

An integrated future model of care for diabetes foot care services has been designed, which includes the following components:

- all people with diabetes receive a high quality foot check at least annually, more frequently if clinically indicated
- the tiered approach to care is improved with intensification of management of the high risk foot using a hub and spoke service delivery model

- access to foot care services is based on stratification of foot risk
- all people with diabetes with moderate or high risk feet are eligible for referral to podiatry-led FPS
- FPS are predominantly community based, culturally aligned and free at point of care
- all health care providers involved in patient care have access to necessary patient information, working towards having electronic shared care records
- establish a regional diabetes register which captures a minimum diabetic foot dataset across the care continuum
- establish an integrated clinical governance structure across Auckland DHB and Waitematā DHB to ensure ongoing quality improvement of diabetes foot care services
- support and enable health professionals caring for patients with diabetes-related foot problems to work at the top of their scope of practice

Key milestones achieved are:

- Establishment of the National Diabetic Foot Knowledge and Skills Framework in collaboration with New Zealand Society of the Study of Diabetes (NZSSD), Executive Committee including: (i) quality standards, (ii) credentialing framework and (iii) clinical oversight and support for community podiatrists.
- Improved referral pathways between community podiatry and secondary services via the use of e-referrals.
- Development of educational programme for general practice teams to enable accurate and appropriate foot screening and risk assessment for all people with diabetes.

4.5 Retinal Screening

Diabetic retinopathy is a chronic eye disorder which causes visual impairment and blindness in people with diabetes. All people with diabetes are at risk of developing diabetic retinopathy. Risk increases with duration of diabetes, poor diabetic control, being unable to access health services, pregnancy, uncontrolled hypertension and renal impairment.[2] Approximately 20–25% of New Zealanders living with diabetes have some form of diabetic retinopathy, with 10% having sight-threatening retinopathy.[3,4,5] Māori and Pacific people living with diabetes have higher incidence of moderate and severe diabetic retinopathy compared with New Zealand Europeans and are less likely to access screening.

Diabetic retinopathy can be detected by retinal screening where the retina is photographed and assessed for signs of disease. People with significant disease can then be referred for treatment to reduce the risk of visual loss. The Ministry of Health recommends people with diabetes undergo regular retinal screening.[6]

There has been extensive engagement with stakeholders to review existing services and develop the new service model. The project team undertook additional consumer engagement work in late 2018 to inform the design of the new model. This engagement focused on Māori and Pacific people, and people with diabetes who were not well engaged with the current diabetes retinal screening

[2] Ministry of Health, *Diabetes Retinal Screening, Grading, Monitoring and Referral Guidance*. 2016, Ministry of Health: Wellington.
[3] Coppell, K.J., et al., *The quality of diabetes care: A comparison between patients enrolled and not enrolled on a regional diabetes register.* Primary care diabetes, 2011. **5**(2): p. 131-137.
[4] Frederikson, L.G. and R.J. Jacobs, *Diabetes eye screening in the Wellington region of New Zealand: characteristics of the enrolled population (2002-2005).* The New Zealand Medical Journal (Online), 2008. **121**(1270).
[5] Papali'i-Curtin, A.T. and D.M. Dalziel, *Prevalence of diabetic retinopathy and maculopathy in Northland, New Zealand: 2011-2012.* The New Zealand Medical Journal 2013. **126**(1383).
[6] Ramke, J., et al., *Diabetic eye disease and screening attendance by ethnicity in New Zealand: A systematic review.* Clinical & Experimental Ophthalmology, 2019. **47**(7): p. 937-947.

services.

Through these interviews it became apparent that diabetes retinal screening clinics need to be available in numerous locations throughout the Auckland DHB and Waitematā DHB districts, much closer to where people with diabetes live and work. It was also evident from these interviews that trusted, familiar providers (Māori providers and Pacific providers) have a very positive effect on uptake of services. Further consultation occurred in the second half of 2019 with 120 people with diabetes taking part.

A new model for delivery of retinal screening has been developed. The next step is to implement the new model. The new model is substantially different to that currently in place and will require change management over the next 12 months or more to establish.

Additionally, we have put in place a regular data matching exercise. The aim of the data match is to identify people who are not known to retinal screening services i.e. those people with diabetes who should be offered a retinal screening referral. Patient lists are only available to the respective PHOs that people with diabetes are enrolled with. A prioritisation framework has been developed to prioritise patient lists by ethnicity and latest HbA1c result (a measure of diabetes control). Prioritisation of the unscreened population supports a strong focus on equity and clinical risk to ensure those people at highest risk of diabetic eye disease are offered a retinal screening referral first. PHOs download prioritised lists of people with diabetes who are enrolled with their practices who are not currently known to services, i.e. people who should be offered a referral for retinal screening. PHOs will work with practices to contact patients starting with those at highest risk first to offer them a retinal screening referral. Following discussion and consent from the person with diabetes practices will refer people to the diabetic retinal screening services.

4.6 Co-Design

The intent is to ensure people with diabetes are able to manage their condition effectively with appropriate support from proactive care teams. We are after:

- Patient centred and relationship based care
- Reduced system barriers: easy access across the age and social spectrum, affordable, community based services
- Self-directed and empowered patients, patients who understand their condition and are supported to self-manage
- Partnership between patients and health professionals
- Improved standards across the board
- A seamless system of support for people, partnership between primary and secondary care
- Strength based approach
- Clinicians listen, use every day language. Every contact counts
- More culturally competent and ethnically diverse workforce
- A sustainable and future proof model of care
- Confident, competent and appropriately funded workforce
- Flexibility to work with who we need to, cognisant of factors external to health
- Resources in various languages easy to understand and read
- Consistency of information provided to practices and patients

There have been two sets of engagement with people with diabetes to find out what is important to them, what are the challenges and what would they like to see differently. Key messages, with many other insights, coming out of these engagement processes are:

- Discrimination exists in the health and social care system and cultural differences are not always understood or valued in the current system of care.

- Understanding what it means to have diabetes and its complexity is fundamental to behaviour change, self-monitoring and management. People are overwhelmed by the information when they are diagnosed in what is a distressing time, it is not always clear to them which are the correct resources and where to get them from.
- People living with diabetes find support and motivation through trust, compassion and inspiration while lack of control, competing priorities and mental health challenges can undermine their confidence.
- People experience numerous barriers when accessing care. We heard that for many people the cost and time required to access care gets in the way. People talked about work commitments, transport issues or the cost of attending their doctors and picking up their scripts.

We are working with people with diabetes and their primary care teams to co-design a new way of working in the general practice setting. This involves bring people with diabetes, whānau and general practice teams together to work together on improved ways of delivering care and advice.

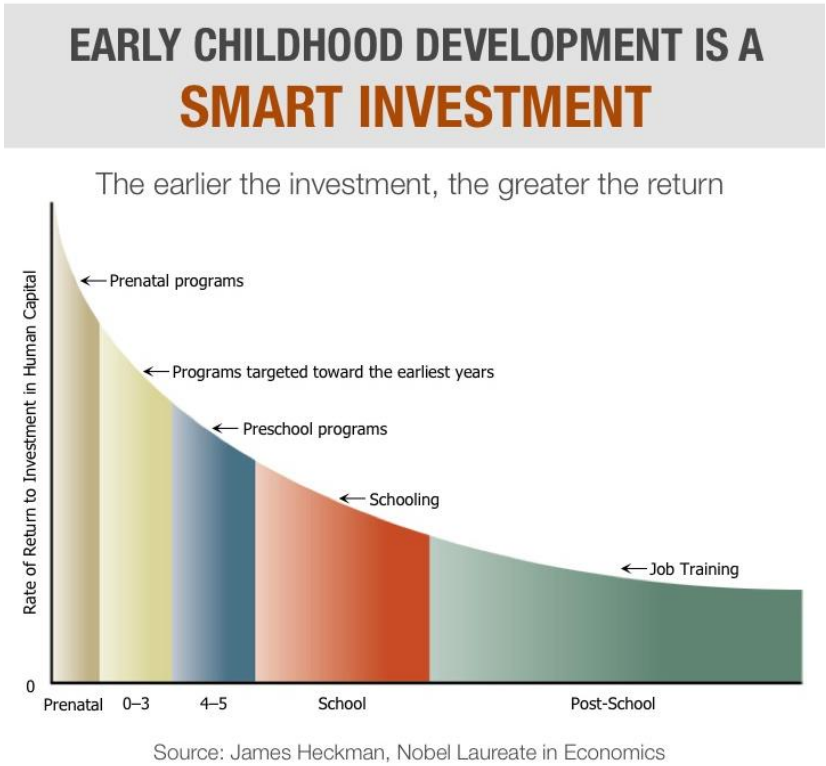
5. Cross-sectoral initiatives - First Thousand Days, Noho Āhuru - Healthy Housing and Uri Ririki – Child Health Connection Centre

5.1 Background

Improving child health is a Government priority highlighted through the development of the Child and Youth Well-being Strategy. This includes a focus on the first 1000 days of life. It is critical to give children the best start possible in the first few years of life, when their development is at greatest risk from disadvantage.[7] Many adverse outcomes for disadvantaged children and young people continue to have detrimental effects on their lives well into adulthood. While children who miss out in early stages can often 'catch up' given appropriate interventions, this becomes progressively more difficult (and expensive) to achieve with age. The economic cost to the New Zealand economy of poor child outcomes is of the order of 3% of GDP (approximately $6 billion)[i8]. This includes increased health, welfare, remedial education, crime and justice expenditure as well as lower productivity. There is international unanimity that deprivation is a primary risk factor in early childhood resulting in poor outcomes in adulthood. Deprivation includes inadequate family income, poor quality housing, inability to access health services, educational opportunities and reduced social engagement.

The first 1000 days are a period when investment in early intervention pays off, as shown below.

Figure 7. The Heckman Curve[9]



[7] Centre for Community Child Health (2018). The First Thousand Days – Our Greatest Opportunity, Policy Brief Number 28. Murdoch Children's Research Institute/The Royal Children's Hospital, Parkville, Victoria. https://doi.org/10.25374/MCRI.5991184

[8] 1000 days to get it right for every child The effectiveness of public investment in New Zealand children. A report prepared by Infometrics Ltd for Every Child Counts. 2011

[9] https://heckmanequation.org/resource/research-summary-lifecycle-benefits-influential-early-childhood-program/

Addressing the challenges of disadvantage including racism and the socioeconomic determinants of health is compounded by the complexity of the health workforce delivering services over the first 1000 days of life. A range of providers support pregnant women, their pēpi and whānau along their pregnancy and first 1,000 days' journey. Providers include general practices (General Practitioners, Practice Nurses and others including PHOs), lead maternity carers (LMCs, both self-employed midwives and obstetricians), DHB maternity services and Well Child Tamariki Ora (WCTO) providers, amongst others. A significant cohort of children experience poor health outcomes[10] yet many of these children have interfaced with healthcare providers, but their needs have either not been identified, or not addressed.

5.2 Maternal and Child Services Alliance

There are several funder led initiatives designed to combat some of these challenges. One is building a coalition of providers committed to working collectively to address inequity. A Maternal and Child Services Alliance (MaCSA) is focused on the challenges over the first 1000 days. MaCSA is understood to be unique in bringing together senior leadership together across maternity, child and mental health from DHB including (PFO), PHOs, WCTO, LMC (College of Midwives). Ngati Whātua o Orakei and Māori Health Gain team and Pacific Health Gain team are key participants. MaCSA is focused on delivering better health outcomes throughout the first 1000 days of a baby's life, including a focus on pre-conception, pregnancy and up to a child's second birthday. The group's goal is that by 'working intentionally, as joined up teams, we will deliver equitable, holistic healthcare to mama, pepi and whānau'. The group has agreed a work programme for 2020/21 which includes a focus on collective actions across six domains:

- Women's experiences driving service improvement
- Increasing access to long acting contraception
- Increasing enrolment and engagement
- Improving access to Healthy Housing and Safe Sleep spaces and practices
- Improving access to maternal perinatal health
- Increasing immunisation coverage.

Two funder led programmes are key enablers of this work programme. Noho Āhuru – Healthy Homes (NA-HH) and the local National Child Health Improvement Platform (NCHIP) – both of which sit within UR-CHCC.

5.3 Noho Āhuru Healthy Homes

NA-HH programme supports addressing some upstream determinants of health with a focus on effectively addressing housing, amongst other identified needs. Our team is working to increase the proportion of eligible families referred to NA–HH during pregnancy in order that babies are discharged to warm, dry homes. Social work providers (DHB and NGO) complete home visits and assessments. The assessments include whether families are receiving their full and complete financial entitlements (FACE) from MSD, as well as a bio-psycho-social assessment. In addition to housing interventions, such as support to get more appropriate accommodation, minor repairs, curtains, beds and bedding, other interventions may be facilitated including immunisation and smoking cessation.

As at 30 June 2020, Auckland DHB received 1,406 referrals to NA-HH. This included 5,299 family members getting access to healthier home interventions. Of the referrals received, 464 (33%) were for families with an infant under one year of age or hapu woman.
We know this programme works. A presentation was provided to CPHAC in October 2019, which outlined the findings of a national evaluation (details can be found at

[10] Leversha A. 2017. Ready for School

https://www.health.govt.nz/news-media/media-releases/healthy-homes-initiative-evaluation-shows-strong-health-benefits

The national evaluation[11] compared health outcomes for the referred child in the one-year follow up period to health outcomes in the year prior to the intervention. Of the children, 55% were Māori, 37% Pacific with nearly half in a Kainga Ora (formerly Housing NZ) house and38% in private rentals. Across the 15,330 referrals and over 40,000 interventions, the evaluation demonstrated:

- There were less hospitalisations (1,533 less hospitalisations directly attributable to the programme)
- Hospitalisation were less costly, shorter duration (on average, 0.69 nights shorter, $541 less)
- Less visits were needed to GPs and less pharmaceuticals were dispensed (9,443 prevented GP visits; 8,784 fewer dispensings)
- 1 hospitalisation was prevented for every 10 children (referred and received services)
- 1 less script for every 6 children
- 1 less GP visit for every 6 children
- From a cost perspective, the programme costs an estimated $1,205 to deliver per family of which there was a $19m cost to Health (over 3 years). However, the cost averted was $30m of which ~$27m hospitalisations / reduced cost to hospital
- The return on investment was repaid in less than 2 years noting, analysis only considered the referred child for one year following intervention - that is cost savings would be far greater when considering all household members.

From a parent's perspective, *"It has been amazing since [we moved into my new house], all my kids are thriving, Junior* has only had 1 hospital visit since, but he is doing well*". (*Not his real name)
From the evaluators' perspective, "*The benefits will be realised by all household members, and are likely to be long term". "Restricting ourselves to just the major health effects for one child per household underestimates the effects of the HHIs [Healthy Housing Initiatives]."*

In our local Auckland DHB and Waitematā DHB programme, based on a Starship Bronchiectasis Audit 2018 (Dr Cranshaw), a housing-related condition which often requires multiple admissions for 2 weeks for intravenous antibiotics and chest physiotherapy, the observation was made that following NA-HH referral, children were in hospital less. The audit of 39 referrals who had also received a housing intervention (moving to a better house or getting insulation, curtains, carpet, heating or mechanical ventilation in current house) confirmed this observation, showed a statistically significant reduction in hospitalisation and antibiotics.

The most commonly provided interventions of our local NA-HH were:

- Key messages (practical advice on keeping a specific home warmer and dryer)
- Bio-psycho-social assessment
- Bedding
- FACE

Locally, over 12% of the families were relocated into social housing (279/2299).
In discussion with the 2019 joint CPHAC, it was concluded that:

- Inter-agency cooperation is key to achieving healthy homes objectives
- There is value from use of 'health based' social workers
- Current funding is from a Crown Funding Agreement (CFA) and it is essential that this programme continues

[11] Pierse N. White M. Riggs L. Healthy Homes Initiative Outcomes Evaluation Service: Initial Analysis of Health Outcomes (Published 23 September 2019)

- The programme needs more funding per family, including for interventions
- The programme should expand to a fuller wrap around service, with a nurse component delivered alongside social work services
- We need to start even earlier, that is get more referrals for eligible pregnant women
- We should strongly advocate for more affordable, better quality housing as a health issue.

5.4 Uri Ririki - Child Health Connection Centre

The Uri Ririki - Child Health Connection Centre (UR-CHCC) is now established. UR-CHCC comprises teams of administrators tasked with managing NA-HH, the NIR and the National Child Health Information Platform (NCHIP).

The NIR was successfully repatriated into UR-CHCC in November 2019 and is providing ongoing support to general practices and immunisation providers. The NIR is a key tool supporting high immunisation coverage. NCHIP is still undergoing development. The system was adopted from Waikato but has been advanced considerably to deliver a platform that performs for three of the northern DHBs, particularly regarding automation of data entry and an opt-off registration.

There has been extensive privacy review of the system which functions as a population register for the 0 – 6 year old cohort. Data from 16 systems is warehoused and connected to help understand whether children are receiving all the free health services they are eligible for. The system does not contain clinical information but helps build an understanding of enrolment and engagement. The primary goal of the system is for it to be used to identify who is missing out on services, and to facilitate engaging those whānau with an appropriate health provider/s. The free services include milestone events for newborn hearing screening, GP enrolment, immunisation, oral health and well child tamariki ora checks.

The DHBs have memorandum of understanding with MSD and Ministry of Education (MoE) where there is one way sharing of contact information. In addition to being able to check the NIR, B4SC database and hospital information for the most up-to-date contact information, if whānau still cannot be contacted based on this information, the team can reach out to MSD for the latest contact information they hold. Linkage with the MSD continues to evolve, with business processes now in place for the one-way sharing of contact details for children who are overdue immunisations and unable to be located by *any* child healthcare organisation (including home visits).

After the first quarter of operation, 134 children were identified as 'lost-to-services' and requests made for MSD contact details. A total of 52 (39%) were known to MSD, of whom new contact information was provided for over half (36 children), including 6 who had gone overseas or out of the DHB areas. The UR-CHCC service is working with HealthWEST Out-reach Immunisation Service, to provide immunisation access for these 52 children this quarter. This new process will continue to be closely monitored to ensure privacy and security standards are maintained.

One of the objectives of NCHIP and UR-CHCC is to reduce duplication of effort in the sector and reduce complexity for parents in accessing service. An early benefit of NCHIP has been the discovery of duplicate NHIs that were previously unknown. In these cases the same baby is being followed up and caregivers are offered duplicate services at least twice by all the different care providers. In this quarter 21 babies less than 8 months old were discovered with duplicate NHIs that required merging by the Ministry of Health. One infant already had 3 NHIs. A new release of NCHIP in June 2020 has added features that improve identification of high needs children who may have missed several milestones. Intensive data quality work is continuing such as flagging and disabling historical records for more than 900 deceased children under 6 years of age.

Socialisation of UR-CHCC – Child Health Connection Centre continues. The service is starting to work with Well Child Tamariki Ora providers, PHO child health representatives and Oral Health to develop systematic pathways to re-engage those who are identified as lost-to-service. Future NCHIP enhancements are planned that will provide look up access to the child's milestone information for these providers. From 2021, it is expected that NCHIP will be a central tool supporting the engagement or re-engagement of with health services.

6. Cross sectoral initiatives - Enhanced School Based Health Services

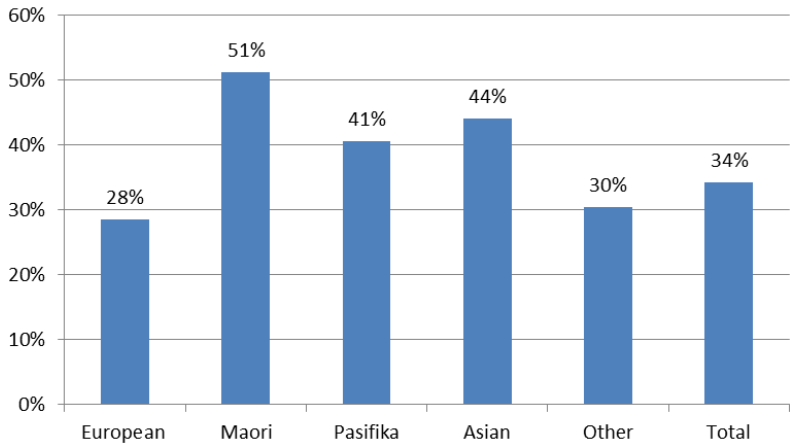
6.1 Background

Young people attending lower decile secondary schools are less likely to access youth appropriate primary and mental health care when they need to. This can result in missed opportunities for preventive health care and poorly managed health conditions. As well as the negative impact on health, it also affects their educational outcomes. The ESBHS programme is delivered in ten mainstream secondary schools, Alternative Education (AE) settings and the Teen Parent Unit (TPU). The programme provides youth friendly, confidential, and easy to access health services – the nurse is available at school every day, supported by a visiting general practitioner and visiting clinical psychologist. Services in schools provide an opportunity to increase health literacy and to identify and address unmet health needs for an identified population of young people with higher needs, risk and complexities.

The model involves a contract between the DHB and school to fund and employ appropriately qualified nurses and set expectations, such as all Year 9 students having a bio-psychosocial HEEADSSS (Home, Education/Employment, Eating, Activities, Drugs and Alcohol, Sexuality, Suicide and Depression, Safety) assessment to identify unmet health needs. All registered nurses are required to have or be working towards a post-graduate youth health qualification. The ratio of nurses to students is approximately 1:700 in decile 2 or higher schools, 1:500 in decile 1 schools (most deprived) and 1:200 in AE/TPU. For each 1 Full Time Equivalent (FTE) nurse, there is one general practitioner session (0.1 FTE) and one clinical psychologist (CP) (0.1FTE). The nurses work under standing orders audited by the GP. This ensures all nurses are enabled to work to the top of their scope of practice. The services are supported by a GP leader, CP leader and a Nurse Educator and Programme Manager who work to ensure consistent, quality services are provided across the programme. All ESBHS use MedTech and provide quarterly reporting. Through this programme about 8,607 secondary school students have improved access to primary healthcare in Auckland DHB. The Ministry of Health target for HEEADSSS assessments is 95% by the end of the school year.

By the end of school mid-year, Term 2, the school nurses in Auckland DHB have completed on average 34% of HEEADSSS assessments for Year 9 students. Even with the disruptions caused by COVID-19 lockdown and school closures, the completion rate for HEEADSSS assessments by school Term 2 is similar to previous years.

Figure 8. The proportion of completed HEEADSSS assessments



Some of the factors that affected service delivery included:

- Start of alert Level 1 (on 8 June) with only 3 weeks into the end of term 2
- School attendance down to about 80%
- Staff not wanting students to miss classes resulting in nurses finding it hard to get students out of class, even with clear communication provided by Senior Leadership team to staff
- Heightened anxiety in the community especially following the Measles outbreak last year resulting in high student absence rates and increased parental queries
- Increase in sexual health consults
- Increase in mental health concerns and severity of the concerns.

To help nurses complete psychosocial/wellbeing assessments for all students in Year 9, the DHB employs a 'roaming' nurse to support schools on an as needs basis. This has been a successful initiative to increase completion of HEEADSSS assessments. In addition, to further enable nurses to complete these assessments, the DHB is also implementing YouthChat, a self-completed psycho-social assessment. A face-to-face interview based HEEADDSSS assessment takes around an hour to complete. Research has demonstrated that YouthChat supports the delivery of HEEADSSS assessments by allowing the nurse to focus on the most important presenting issue, potentially decreasing the time taken to complete the assessment and obtaining more accurate responses to sexual and mental health concerns[12]. The DHB has provided funding to support the provision of an iPad or tablet for each nurse which will be used by the students at the health centre for the purpose of completing YouthChat. YouthChat will be rolled out in Auckland AUCKLAND DHBDHB during terms 3 and 4.

Acceptability of the service is routinely monitored by undertaking a student survey and by monitoring repeat visits by ethnicity. There is high uptake of the service, with the average attendance (return rate) highest for Maori and for Pacific students.

[12] Comparison of YouthCHAT, an Electronic Composite Psychosocial Screener, With a Clinician Interview Assessment for Young People: Randomized Trial https://www.jmir.org/2019/12/e13911

7. Cross-sectoral initiatives - Tāmaki

Auckland DHB has had a longstanding work programme with the Tāmaki Regeneration Company (TRC), a housing redevelopment programme in the communities of Glen Innes, Panmure and Point England. The focus of recent Auckland DHB and partnership efforts have been to create the underlying conditions and capabilities to ensure that there will be strong Pacific community participation in the co-design of the Wellbeing Hub and any other health and wellbeing initiatives in Tāmaki.

7.1 What do we want to achieve?

A platform for an ongoing partnership between agencies and the Pacific community in Tāmaki.

7.2 Why is this important?

Pacific peoples comprise approximately 36% of the total population in Tāmaki[13]. The three largest Pacific ethnic groups are 40% Tongan, 27% Samoan and 18% Cook Island. They have high recorded health needs, for example approximately 12% of the Pacific population in Tāmaki have Diabetes; 11% are registered against a Mental Health service; and 4.2% suffer gout.

The Pacific community in Tāmaki has a strong sense of connectedness, with many families having lived there for generations, and as such have formed strong community networks and infrastructure. Auckland DHB and TRC recognise that lasting effective change for the Pacific community in Tāmaki is not possible without the support and active participation of the Pacific community in the planning, design and implementation of any initiatives and data-driven solutions that are intended to be of benefit to them.

Some key benefits of a partnership approach with the Pacific community include:

- Strengthening insights and understanding about Pacific families' current experiences, what is working well now and what is not, where they see their own stories in the data, and what success measures are important to them.
- These insights will feed into and inform Agency decision-making, Strategic and operational plans, and the design of innovative models of care and service delivery
- Strong Pacific community support, with Pacific community leaders in Tāmaki not only participating in change initiatives, but also championing them throughout the community
- Implementation of data-driven social change will be feasible and sustainable

7.3 Approach

Auckland DHB and TRC are working with The Lalanga Foundation to build relationships of trust between the agencies and the Pacific community in Tāmaki. The Lalanga Foundation is a not-for-profit charitable trust established by local Tāmaki Pacific residents, who have deep connections in Tāmaki, most having been born and raised there. The Lalanga Foundation provide support and advocacy for Pacific families and aim to serve as a platform of engagement between the Pacific community in Tāmaki and agencies.

The team at Lalanga are trusted by local Pacific community leaders and the Pacific community at large in Tāmaki. They mobilised the Tāmaki Pan-Pacific community network, which includes strong membership of local pastors and church leaders from the Tongan, Samoan, Cook Island, Niuean and Fijian congregations in Tāmaki. They also have strong Pacific youth and elder networks, and relationships with local Pacific youth community activators.

[13] 2013 Census Data

7.4 Meeting the Pacific community

Lalanga is offering to introduce agencies to the Tāmaki Pan-Pacific community network and their other Pacific networks, with a view to establishing a trusted partnership. According to Lalanga, they have the capacity and capability to ensure that the Pacific community voice is brought into the co-design of innovative solutions – such as the Tāmaki Wellbeing Hub – and new models of care.

Auckland DHB staff working in partnership with TRC on Tāmaki Wellbeing initiatives have been offered to meet with the Tāmaki Pan-Pacific community network Faife'au (pastors) this side of Christmas as a starting point for developing a continuous relationship with the Pacific community in Tāmaki to generate the support necessary for long-term successful change. Lalanga will also be engaging with their Pacific community networks to gather some health specific insights on what is working well for them, what is not working, and what should change.

Auckland DHB and TRC will continue to work with Lalanga and the Pacific community in Tāmaki to investigate options for supporting this local Pacific infrastructure and platform for engagement.

8. Quality improvement - Home and Community Support Services

8.1 Background

In July 2009 Auckland DHB transitioned from the traditional task based /fee for service model for Home and Community Support Service (HCSS) to a restorative model of care. A case mix is used to enable clustering of client need and associated payment on this basis. The cost model which underpins the restorative model of care allows HCSS Providers to be more flexible in responding to a client's changing needs and services are not solely based on personal care and household management.

Under the restorative model, clients who are non-complex are referred immediately to the HCSS Provider for assessment and service delivery, which reduces duplication and ensures a timely service. It also means the specialist DHB Needs Assessment Service Coordination (NASC) service can focus on assessing complex clients and determining their needs before referring these individuals to the HCSS provider for service delivery.

8.2 Structure

The service design was achieved through a collaborative contracting structure with four community providers identified through a tender process (Healthcare NZ, The Lifewise Trust, Royal District Nursing NZ and Presbyterian Support Northern – Enliven), and the University of Auckland developed the cost model.

Development and implementation of the Auckland DHB model has been an iterative process and a high level of trust and transparency has been built up between the four HCSS providers, the provider arm - Community and Long-term Conditions Directorate (CLTC) and the Funder. The structure has also fostered an environment where providers are open to innovations and are willing participants in changing services to better meet the needs of AUCKLAND DHB's older population. Strategic oversight and governance of the model is led by the Steering Group which meets monthly and includes representatives from the above parties. An Operations Group also meets monthly with a focus on benchmarking performances measures and leading continuous improvement projects.

8.3 Service improvement

Some of the improvement projects implemented in the last few years by the Steering Group are listed below:

STOP and WATCH tool

The Stop and Watch Tool has a number of key indicators of early clinical deterioration which a support worker will look for at every visit for example 'talks or communicates less' or 'change in skin colour'. If any are noticed a HCSS support workers will escalate to their clinical manager who will then escalate to either the client's family, GP or CLTC as required. Stop and Watch events are recorded in quarterly performance monitoring reports.

Cultural responsiveness

Supporting cultural safety training and embedding it in practice is ongoing. A cultural responsiveness workshop hosted by Auckland DHB HCSS providers and led by a presentation from Dame Naida Glavish resulted in the sharing of resources including the Meihana model toolkit, which was integrated into the NASC/HCSS joint orientation package (see below). A secondary outcome of this work is the inclusion of some key measures into the HCSS providers' performance monitoring reports including discharge destination of Māori clients and the proportion of each provider's workforce that is Māori.

Joint DHB NASC/HCSS NASC Orientation
An orientation package was developed in 2019 to give new CLTC and HCSS Provider staff a good overview of the restorative model, and many of the tools developed by the alliance over the years including cultural responsiveness tools, case studies for enabling independence for clients, the client journey, and a shared language for restorative care including factsheets for clients.

HCSS and Auckland DHB NASC workshops
Approximately two workshops are held annually on key areas highlighted by members of the Operations Group. Recent workshops include:

- A collaborative workshop on ethics and safety with a panel of experts from Auckland DHB available to talk through some of the complex and ethical scenarios, which come up for clients, support workers, NASC and HCSS providers in the community
- Planning and Funding liaised with HQSC who presented a workshop to the Auckland DHB HCSS providers on 'developing leadership for quality and safety'.

8.4 National direction

There have been significant changes to HCSS nationally in the last five years with the introduction of the In-between Travel (IBT) Settlement Agreement. Part A of the Agreement means HCSS workers are being paid for travel and time between clients and Part B of the Settlement covers regularisation of the workforce (sometimes called guaranteed hours) and future models of care.

The future models of care work has culminated in a national HCSS service specification and case mix algorithm to reduce variation in HCSS across DHBs. Planning and Funding has had representatives on the working groups developing these national components of HCSS. All DHBs have been directed to move to the new model of care by July 2022. The existing Auckland DHB HCSS model aligns well with the new service specification and only small incremental changes will be required.

The Pay Equity Settlement has meant a gradual increase of support workers wages from July 2017 with the final increase in July 2021. Current support workers rates are between $20.50 and $25.50 depending on experience or qualifications.

8.5 COVID-19 Preparedness

During the recent COVID-19 outbreak, HCSS Providers responded thoughtfully and support workers continued to provide care for clients with personal care needs and other essential services. Non-essential services were put on hold and those clients were provided with daily to fortnightly welfare checks, depending on their circumstances, to ensure they were coping. All the HCSS providers in AUCKLAND DHB undertook COVID-19 preparedness assessments which covered aspects including communication to clients and staff, ability to provide care to clients who had contracted COVID, personal protective equipment (PPE), and infection prevention and control training for staff, any workforce challenges, and any support they required from the DHB.

9. Quality improvement - KARE - Co-ordinated care, Assessment, Rehabilitation, Education

9.1 Introduction

The Co-ordinated care, Assessment, Rehabilitation, Education (CARE) Project proposal was set-up in 2014 and implementation commenced in five general practices in Waitematā DHB in July 2015. The programme is now in nine general practices. To avoid confusion with any other programmes this programme is now known as KARE. The KARE Project aims to improve the health of older people aged 75 and over and Māori and Pacific people aged 65 and over, at high risk of hospitalisation and placement in Aged Residential Care by developing and delivering a more proactive primary care model aimed at delaying ARC placement and reduce hospitalisations. While it has been developed and piloted in Waitematā DHB, it was undertaken with the specific intent to rollout across the combined districts as funding allowed.

The development and implementation of the KARE Project service delivery model represents a significant change for the delivery of primary care. A highly collaborative approach which includes Gerontology Nurse Specialist (GNS) support, regular collaborative workshops, focus on quality processes and evaluation was being adopted to this change management process. The success of the programme has been due to the initial and on-going full engagement of the general practices.

A project team was established that included general practitioner, nursing, gerontology, public health, PHO, researcher and management skills. The project lead the design processes and worked with the general practices teams individually and in the collaborative workshops to support implement, problem solving and skill improvement.

Further the programme was designed from the beginning to ensure approximately 1,100 older people were engaged in the programme so we could effectively measure outcomes with appropriate confidence there were attributable to the programme and consistent across practices.

The programme design approached proactively included alignment with:

- Clinical pathways
- Cognitive Impairment Pathway (e.g. only 1 of the current practices has received CIP training and this is a fundamental requirement for all CARE Project practices)
- SiP project and use of “trigger tools”
- Mental health learnings from Tāmaki.

The project team worked with five and subsequently nine Waitematā DHB general practices in a phased and iterative approach. This enabled a collaborative development of the programme that recognised variability in general practice capability and capacity resulting in a tailored programme. The programme developed:

- a new comprehensive risk assessment of patient needs.
- a care plan developed with the patient and their needs at the forefront. This includes advice on getting an Enduring power of Attorney (EPOA) in place.
- care coordination, including proactive follow up on discharge.
- a fit for purpose practice management system tool that supports the effective and consistent delivery of the programme and enabled standardisation of data recording and collection.
- formalised training and support of the general practice team by the DHB gerontology service.

In total, 1,186 people aged 75 years and over (Māori/Pacific aged 65 years and over) living in the Waitematā area agreed to participate and have a recorded comprehensive assessment completed by 31 August 2017.

The mean age of participants was 82 years at the baseline assessment, which is consistent with the intent to enrol frail patients. Patients in the KARE cohort will on average become frailer over the course of their involvement.

Overall, 72% of patients are of European/NZ ethnicity, followed by 21% Other European. There are 45 Māori in the cohort which represents around 4% and is higher than the target expected (3%) based on the demographics of the practices.

9.2 Initial Evaluation

An external evaluation consisting of semi-structured interviews from patients, families/whānau, Māori patients and whānau, staff across all KARE Project General Practices, and members of the KARE Project team and leaders shows there is strong support for the KARE Project from participating General Practices and patients involved, including Māori patients and whānau.

General Practice stakeholders noted that the project had enabled them to:

- Detect urgent but previously hidden patient needs and respond to them
- Get an in-depth picture of the health status of participants and plan accordingly
- Teach participants about their condition and care so the patient could be prepared and equipped to manage changes in their clinical status
- Provide care in a more holistic way – for example by increasing awareness of home issues which directly impact the health of the patient
- Provide social connection, especially for those socially isolated and/or cognitively impaired
- Be a potential place of connection with extended family/whānau or care-givers of patients and involve them in on-going care and management of the patient
- See who needs help earlier and take preventative action.

The external evaluation noted that KARE patients were almost always positive about the intervention, and that they understood that the KARE Project was about helping them to continue to live in the community. They also reported feeling they had increased understanding of their condition and its management and felt better equipped to manage as well as recognise and respond to changes in health status. Further, patients greatly appreciated being able to ring their GP clinic, getting advice and being "known" by someone there.

The external Māori evaluation showed mixed results, but an overall acceptability for the project and approach from a Māori perspective. Most participants could recall the aims of the programme but could not recall being given specific written information nor did they have a clear understanding about the KARE Project's selection criteria or processes. A strength of the project for Māori was the longer length of appointment times and the high level of whānaungatanga (relationships and connections) that resulted between nurses, GPs and kaumātua. This led to a greater sense of 'care partnership' between the health provider and the older person. The 'extra' time provided a greater opportunity for health providers to ask questions and to really 'listen' to the older person. Whānau also felt included in the process. Greater understanding of the elder person's health needs and circumstances resulted. Participants felt heard and were more confident to take responsibility for their own health. Timely, appropriate referrals resulted from longer assessments. However, participants were generally unaware that a care plan was formulated nor did they discuss or view an actual care plan with their health provider.

Initial results for the pre/post data of the available 618 KARE Project participants showed positive impacts, including:

- A trend to fewer falls
- Substantially fewer participants reporting "concerning pain"
- A highly significant decrease in reported anxiety
- Significantly decreased rates of depression
- Significantly fewer participants reported having questions or concerns about medications, and more reported using medication blister packs to help manage their medications
- Significant increase in CARE participants designating an EPOA for health and welfare
- Significant increase in the General Practice obtaining a record of the EPOA.

9.3 Final Evaluation

The KARE Project Final Outcome Evaluation report highlights positive outcomes through improved quality of care, and improved quality of life for frail older patients, including:

- Reduced mortality, reduced emergency department attendances, and probable delayed aged related residential care admissions but no decrease in acute hospitalisations
- Improved outcomes such as patient self-management and self-perceived depression and anxiety, and EPOA designation.

Further, the qualitative evaluation highlighted that:

- The KARE model of care is strongly patient and relationship centred, and has a high level of patient acceptability whereby KARE patients feel more cared for, and general practice teams have improved knowledge and understanding of frail older patient needs and their whānau
- The implementation of the model of care has resulted in practice level change in terms adopting a nurse-led approach to deliver more proactive comprehensive and planned care than standard care for frail older people living in their homes
- KARE has upskilled and empowered the Practice Nurse workforce to work more effectively in partnership with GPs and community services
- Primary and secondary care integration is being achieved through the GNS working alongside Practice Nurses and GPs.

It is noted that a further follow up on patient outcomes is planned to assess on-going impact.

9.4 Summary of learning

The KARE Project is a complex primary care intervention and shows promising results in terms of general practice acceptability, patient uptake, and initial patient outcomes. For any primary care based project to succeed, the clinical model of care and business model need to align. Success factors identified through this project include:

- It has to be a "real" problem for primary care and involve systems and processes that fit the individual General Practice by General Practice work flow
- Taking a long term commitment (i.e. 10 year time frame) to project development and refinement enables changes in models of care while minimising the business risks for General Practices of investing in extra staffing and system changes, and reflects an understanding of the timeframe needed to implement change in primary care, including allowing the necessary allowing flexibility of timeframes for practice implementation to fit in with pressure of day to day General Practice workload
- Staging implementation and initially working with committed and engaged General Practices, facilitating a practice team (doctors, nurses and practice manager/administrators) approach; and, and building in processes of sharing learning between practices/facilitating cross fertilisation is important
- Having a dedicated budget for project implementation/practice time that reflects true costs is an important enabler along with a clear lean project structure that includes: a Steering

Group of key stakeholders to provide overall governance, an interdisciplinary project team with strong clinical leadership, clinical sub-team to plan and resolve detail at a practice by practice level (tailored practice support), and a dedicated project management resource to keep the project on track

- Utilising a model of care focused on holistic/patient centred care is more complex than single clinical issue projects and requires greater team work: , clear understanding of roles, effective communication, flexibility and individualised practice problem solving, including a commitment to learn from mistakes and being open to change
- Empowerment of nurses has been a key focus and is critical for providing care for highly complex patients in a sustainable manner; this and building continuity of care, which requires: time and space within the practice, professional supervision sessions/patient specific review sessions to increase nursing skills and knowledge, facilitating reflective practice, and dedicated workforce development opportunities for knowledge sharing, networking, and building greater understanding of community based services.

10. Quality improvement - Safety in Practice

10.1 Introduction

Patient harm is frequently associated with medication errors and medications themselves. There is strong evidence from research in Australia and the United Kingdom of prescription errors and adverse drug events resulting in disability, harm or admission to hospital. These admissions were mainly attributed to problems with prescribing, monitoring and patient adherence. Rob et al[14] confirmed that this is also a problem in New Zealand with harm occurring at a rate of 34.7 per 100 admissions. It was found that 29% of this harm originated in the community and precipitated an admission to hospital. According to international studies, errors within primary care occur in approximately 1-2% of consultations particularly involving the elderly, those with co-morbidities and those on multiple medications.5 this evidence indicates that patient safety is severely compromised and initiatives must be put in place to help clinical practice change.

The SiP programme is an initiative designed to provide quality improvement (QI) tools and training to primary health care teams to enable them to reduce preventable harm to patients when receiving care in the community. The programme was first introduced to the Auckland Metro region in 2014 with 23 general practices involved. For 2020/21 there are 19 general practices and 54 pharmacies engaged in the programme. A further 27 participate in the 'alumni' programme has they have completed the three year learning and development component.

The programme utilises quality improvement methodology to help teams identify and improve processes within their practice that would increase patient safety. The initiative aligns well with the seven strategic themes identified by Auckland and Waitematā DHBs to guide the future vision for health services in the region [Section 2.2]. The SiP programme is well aligned with the strategic priorities of the Health Quality and Safety Commission (HSQC) New Zealand.

Additionally, the programme has been recognised by the Health Quality & Safety Commission (HQSC) New Zealand as an effective programme to bring the focus on patient safety beyond the hospital walls.

The SiP programme has identified key clinical areas believed to present the greatest risk to patient safety in the community for primary care teams to focus on. It is structured over three years with a new high-risk area being chosen by teams each year. Training and tools specific to each area are delivered to participating primary care teams through collaborative learning sessions. They provide primary care teams with the skills and knowledge to actively monitor their own systems and processes and develop quality improvement measures.

The SiP website profiles the programme and provides participants access to programme resources. https://aucklandnc.safetyinpractice.co.nz/

10.2 Programme Structure

The scope of the SiP programme is designed as a series of systems improvement modules together with quality improvement methodologies and culture tools structured over three years.

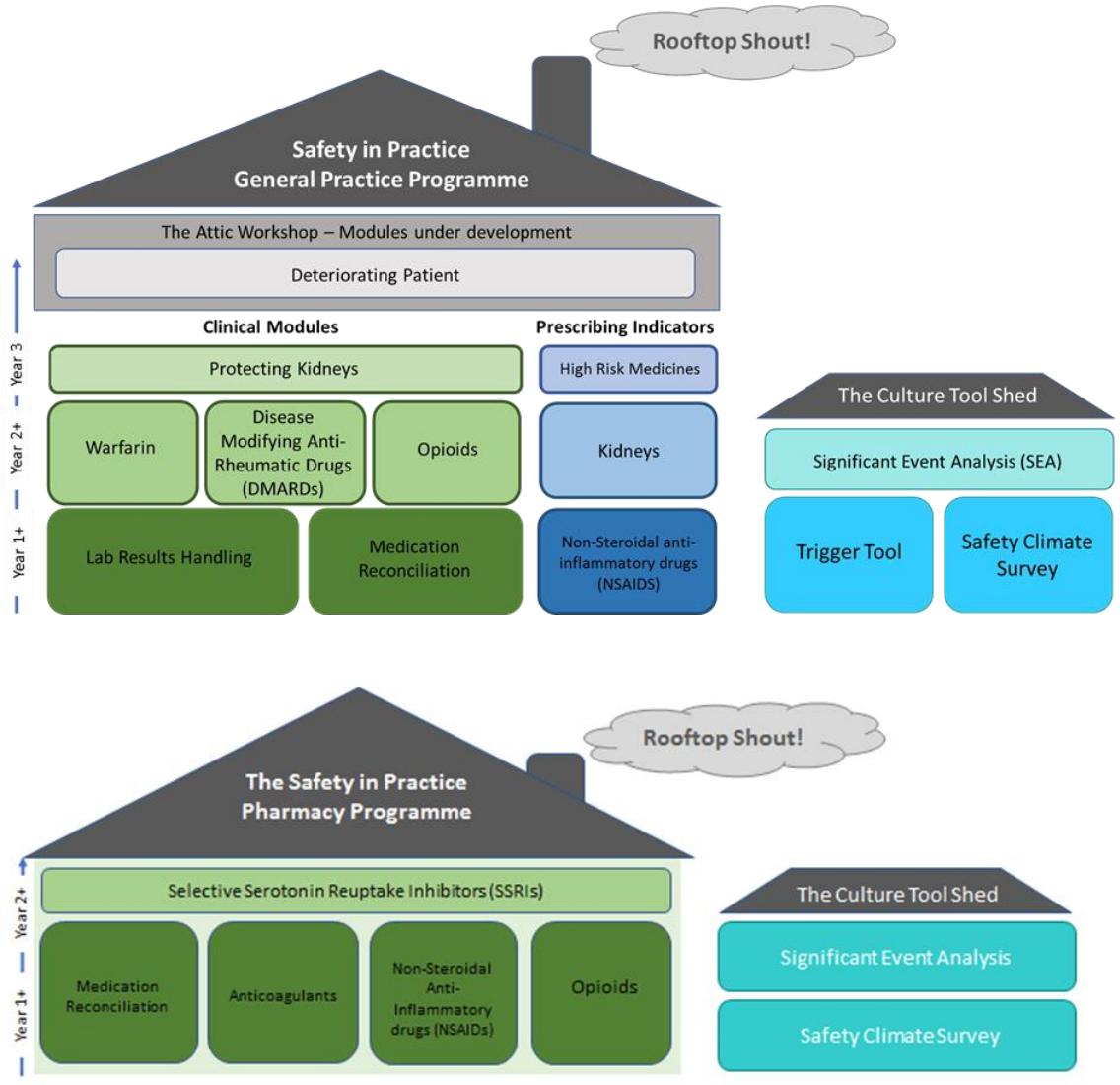
For GP teams there are two foundation modules (Lab results Handing and Medication Reconciliation) which form the core of the programme and must be completed in order to graduate from the programme in Year 3. It is recommended for GP teams to begin year 1 of the programme with one of the core foundation modules, the NSAIDs prescribing indicator and one of the tools from

[14] 4. Gillian Robb, Elizabeth Loe, Ashika Maharaj, Richard Hamblin. Mary Seddon. Medication-related patient harm in New Zealand hospitals: NZMJ 11 August 2017, Vol 130 No 1460.

the Culture Tool Shed. Each subsequent year teams can select any one of the other modules, tools and prescribing indicators they wish to focus on each year in accordance to their own practice and patient needs [Figure 1].

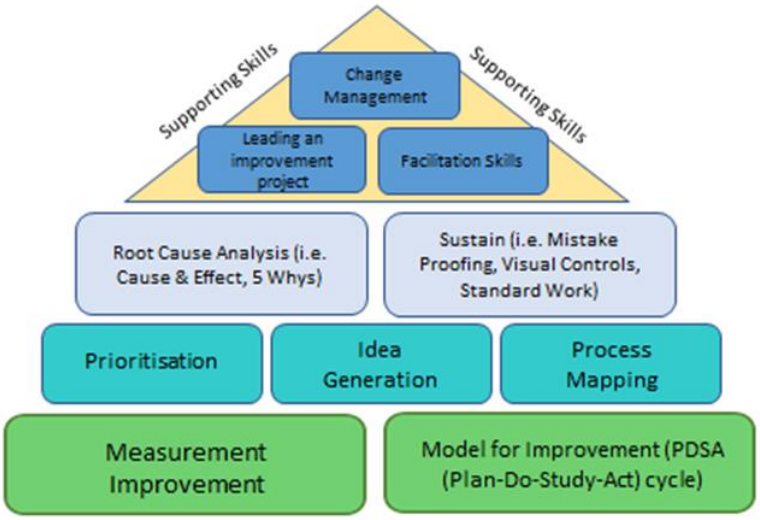
For Community pharmacy teams there are four modules that can be done at any stage during the 3 years. Pharmacy teams must complete the safety climate survey as their culture tool during their first year of the programme and either repeat this or complete a significant event analysis in Figure 1 SiP GP/Urgent care Programme Structure subsequent years (Figures below).

Figures 9-10. Pharmacy structure and schematic



Learnings from the SiP programme are supported by a strong foundation of quality improvement methodology. Figure 3 maps out how the programme is designed to develop quality improvement skills within the primary care teams as they progress through the programme. There is scope within the programme to change the structure of the three year curriculum to have all quality improvement skills taught during the first year in a stand-alone learning session.

Figure 11. Quality improvement skills development plan



10.3 Results

Feedback from participants in the programme is positive and includes the importance to meet, discuss and learn from others dealing with the same challenges along with the dedicated time to reflect on progress without distraction. On average 98% of participants leave learning sessions with at least one idea to progress and 82% recommend the programme to others.

The teams report on how the programme has led to improved communication between them and has supported implementation of system changes to overcome the fallibility of individuals to remember to do the right thing. They further report they now learn from mistakes and have the tools and knowledge to prevent reoccurrences.

Anecdotally we understand that participants found the tools useful in formulating and putting in place responses to covid-19.
The SiP programme was winner of the Patient safety award at the New Zealand Primary Healthcare Awards, He Tohu Mauri Ora 2020.

The following graphs show the type of results being achieved.

Figure 12. General Practice Results Handling Compliance 2018/19

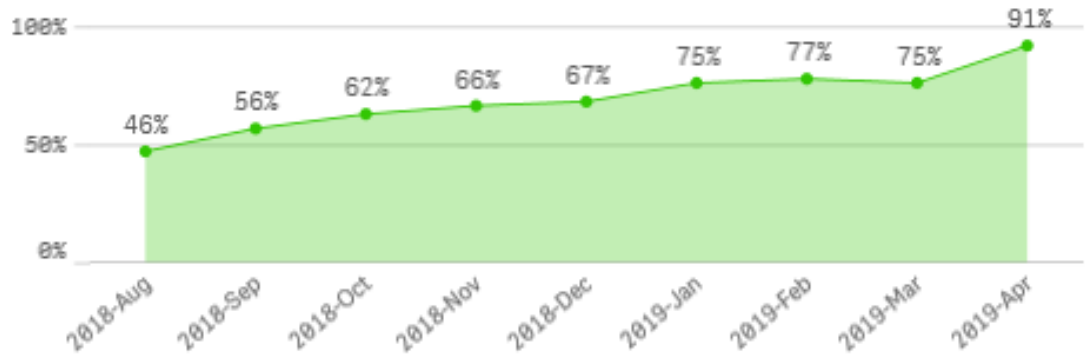
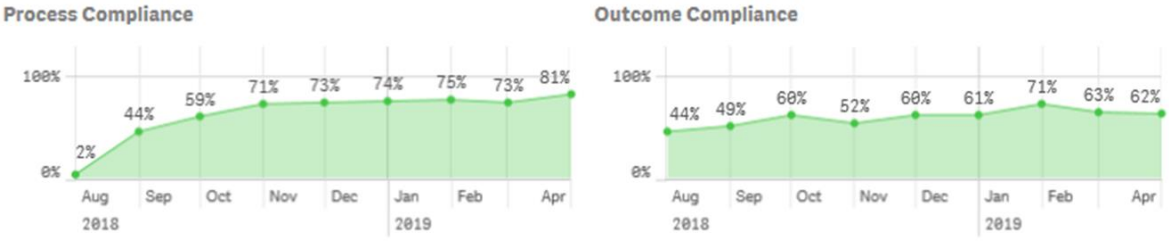
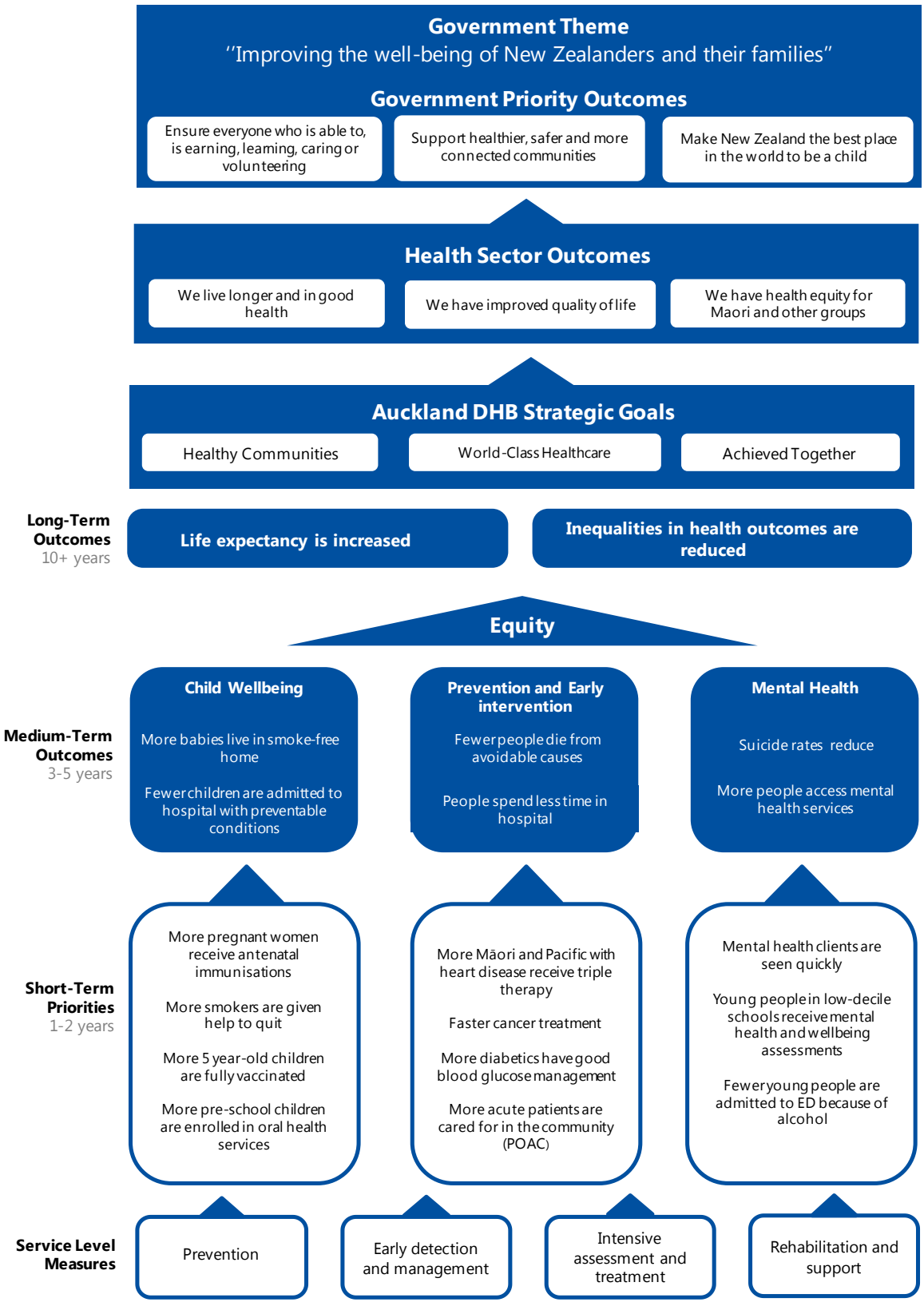


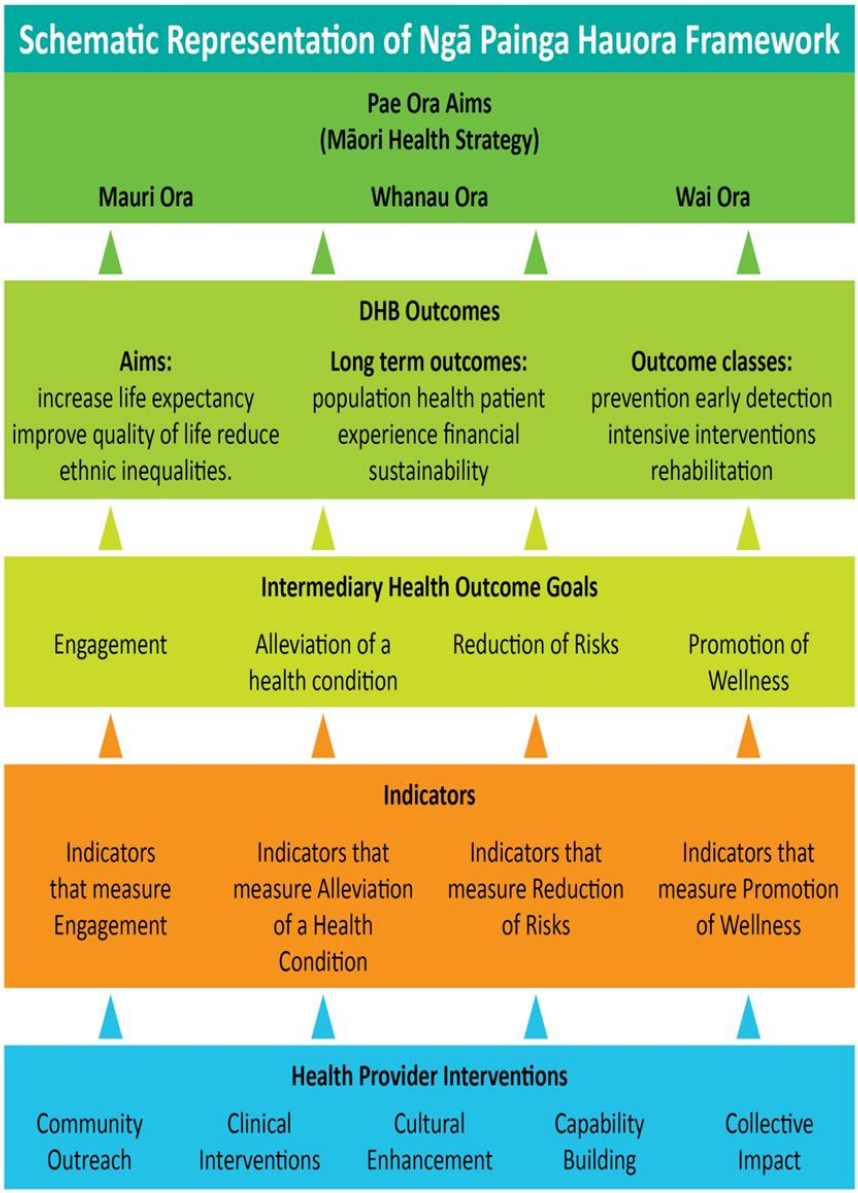
Figure 13. Pharmacy NSAID Compliance Module



Appendix 1. Auckland DHB Performance and Outcomes Framework 2020/21



Appendix 2. Nga Painga Hauora (Sir Mason Durie) Outcomes Framework



Appendix 3. CPHAC Scorecard June 2020

Auckland and Waitematā DHB Quarterly Performance Scorecard

CPHAC Outcome Scorecard
June 2020
2019/20

Priority Health Outcomes - Auckland DHB

Better help for smokers to quit - primary care	Actual	Target		Trend
Total	87%	90%	●	▲
Māori	86%	90%	●	▲
Pacific	87%	90%	●	--
Other	87%	90%	●	▲
Increased immunisation (8-month old)				
Total	94%	95%	●	▲
Māori	83%	95%	●	--
Pacific	92%	95%	●	▲
Asian	98%	95%	●	▲
Other	90%	95%	●	▼
Raising Healthy kids				
Total	100%	95%	●	--
Māori	100%	95%	●	--
Pacific	100%	95%	●	--
Asian	100%	95%	●	--
Other	100%	95%	●	--

Priority Health Outcomes - Waitematā DHB

Better help for smokers to quit - primary care	Actual	Target		Trend
Total	79%	90%	●	▼
Māori	82%	90%	●	▼
Pacific	81%	90%	●	▼
Other	78%	90%	●	▼
Increased immunisation (8-month old)				
Total	92%	95%	●	▼
Māori	84%	95%	●	▼
Pacific	87%	95%	●	▼
Asian	98%	95%	●	▲
Other	91%	95%	●	▼
Raising Healthy kids				
Total	100%	95%	●	--
Māori	100%	95%	●	--
Pacific	100%	95%	●	--
Asian	100%	95%	●	--
Other	100%	95%	●	--

Child, Youth and Women - Auckland DHB

b. Oral Health - % Infants enrolled at 2 years	Actual	Target		Trend
Total	102%	95%	●	--
Māori	73%	95%	●	▲
Pacific	92%	95%	●	▼
Asian	92%	95%	●	--
Other	138%	95%	●	▲
f. Oral Health - % enrolled utilisation at 2 years (last 12 mths)				
Total	76%	80%	●	--
Māori	66%	80%	●	--
Pacific	62%	80%	●	--
Asian	79%	80%	●	--
Other	81%	80%	●	▼
c. HPV immunisation coverage - girls				
Total	64%	75%	●	▼
Māori	67%	75%	●	▼
Pacific	63%	75%	●	▼
Asian	69%	75%	●	▲
Other	62%	75%	●	▼

Child, Youth and Women - Waitematā DHB

b. Oral Health - % Infants enrolled at 2 years	Actual	Target		Trend
Total	101%	95%	●	▼
Māori	73%	95%	●	▼
Pacific	100%	95%	●	▼
Asian	93%	95%	●	--
Other	120%	95%	●	▼
f. Oral Health - % enrolled utilisation at 2 years (last 12 mths)				
Total	62%	80%	●	▼
Māori	48%	80%	●	▼
Pacific	42%	80%	●	▼
Asian	68%	80%	●	▼
Other	67%	80%	●	▼
c. HPV immunisation coverage - girls				
Total	60%	75%	●	▲
Māori	60%	75%	●	▲
Pacific	65%	75%	●	▼
Asian	74%	75%	●	▲
Other	55%	75%	●	▲

Primary Care - Auckland DHB

e. PHO enrolment	Actual	Target		Trend
Total	94%	90%	●	--
Māori	82%	90%	●	--
Pacific	103%	90%	●	--
Asian	86%	90%	●	--
Other	100%	90%	●	--
d. Diabetes management				
Total	61%	65%	●	▲
Māori	50%	65%	●	▲
Pacific	49%	65%	●	▼
Other	68%	65%	●	▲

Primary Care - Waitematā DHB

e. PHO enrolment	Actual	Target		Trend
Total	96%	90%	●	--
Māori	83%	90%	●	▼
Pacific	102%	90%	●	--
Asian	90%	90%	●	--
Other	101%	90%	●	▲
d. Diabetes management				
Total	63%	65%	●	--
Māori	49%	65%	●	▲
Pacific	49%	65%	●	▼
Other	68%	65%	●	▲

Health of Older People - Auckland DHB

a.	Actual	Target		Trend
HBSS clients with Clinical interRAI	*96%*	*95%*	●	--
ARC residents LTCF interRAI w/in 230 days of previous	89%	90%	●	--
ARC residents HC interRAIs prior to LTCF interRAI	86%	90%	●	▲

Health of Older People - Waitematā DHB

a.	Actual	Target		Trend
HBSS clients with Clinical interRAI	*98%*	*95%*	●	--
ARC residents LTCF interRAI w/in 230 days of previous	84%	90%	●	▼
ARC residents HC interRAIs prior to LTCF interRAI	52%	90%	●	▼

How to read

Performance indicators:

- ● Achieved/ On track
- ● Substantially Achieved but off target
- ● Not Achieved but progress made
- ● Not Achieved/ Off track

Trend indicators:

- ▲ Performance ***improved*** compared to previous month
- ▼ Performance ***declined*** compared to previous month
- -- Performance was ***maintained***

Key notes

1. Most **Actuals and targets** are reported for the reported month/quarter (see scorecard header).
2. ***Actuals and targets*** in *grey bold italics* are for the most recent reporting period available where data is missing or delayed.
3. **Trend lines** represent the data available for the latest 12-months period. All trend lines use auto-adjusted scales: the vertical scale is adjusted to the data minimum-maximum range being represented. Small data range may result small variations perceived to be large.

a. Mar 20
b. Denominator - Population projections 2019 update for Calendar year reporting. >100% due to mismatch of population projections and ARDS database ethnicity categorisations
c. Annual data Jun 20, (MOH updated report 21.07.2020 underestimates coverage due to NIR denominator).
d. Aligns with MACGF indicator; differs from MoH indicator
e. Jun 2020 - enrolment data now based on National Enrolment System data and updated 2019CY population projectons (2019 update of 2013 census).
f. Percentage of children who turned 2yrs old in the last 12 months that were seen before they turned 2.

A question?

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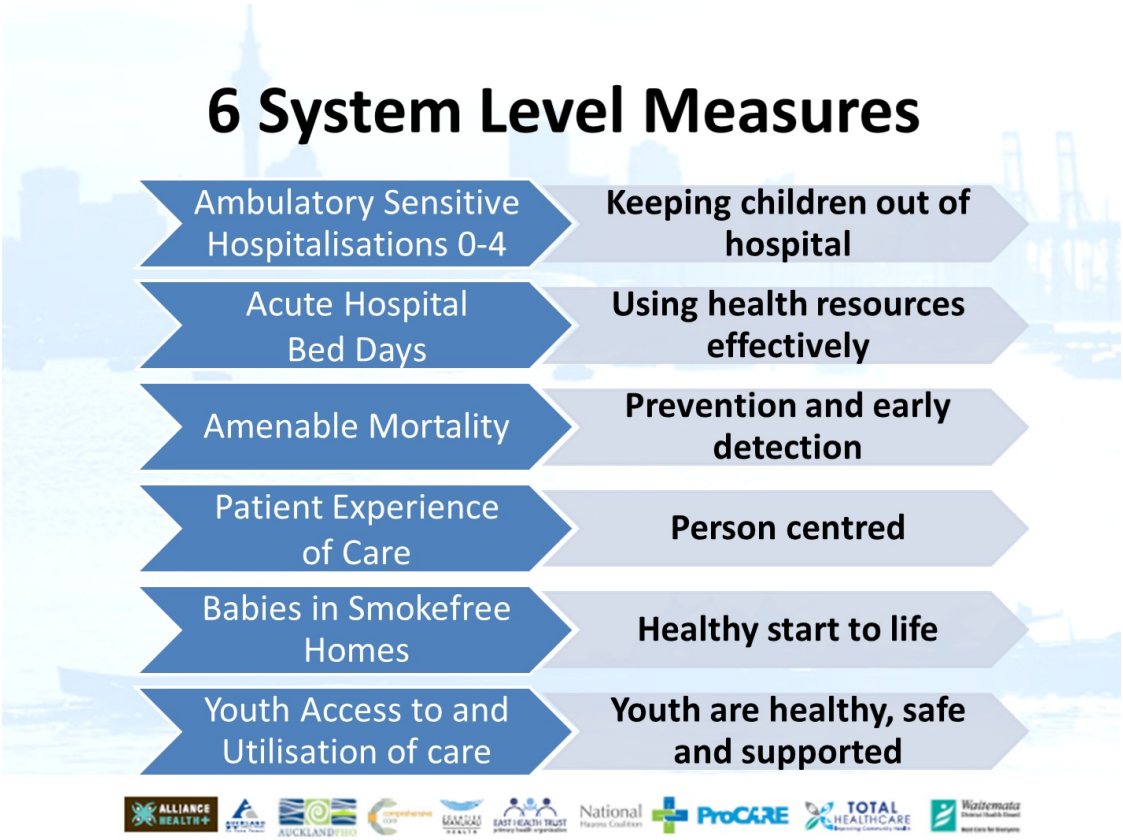
Appendix 4. System Level Measures Framework (schematic overview)



Planning, Funding and Outcomes: Summary of community investment and areas of focus

Recommendation

That the Community and Public Health Advisory Committee note:

1. **The range, value and breadth of community investment and areas of focus.**
2. **The constraints on funding and contracting arrangements, with limited discretionary funding opportunities.**

Prepared by: Tim Wood (Manager Primary Care), Ruth Bijl (Manager, Child Women and Youth Health), Kate Sladden (Manager Health of Older People), Meenal Duggal (Manager Mental Health), Shayne Wijohn (Manager Māori Health Gain), Leani Sandford (Pacific Portfolio Manager), Sam Bennett (Manager Asian Health Gain), Jo Brown (Hospital Funder).
Endorsed by: Dr Debbie Holdsworth (Director Funding) and Dr Karen Bartholomew (Director Health Outcomes)

Glossary

ACC		Accident Compensation Corporation
ALT		Alliance Leadership Team
ARC		Aged Residential Care
ATD		Access to Diagnostics
CPHAC		Community and Public Health Advisory Committee
DHB	-	District Health Board
HCSS		Home and Community Support Services
HVAZ		Healthy Village Action Zones
HOP		Health of Older People
ICS		Interim Care Scheme
LARCs		Long Acting Reversible Contraction
LMC		Lead Maternity Care
MACGF		Metro Auckland Clinical Governance Forum
MMR		Measles Mumps and Rubella
MoH		Ministry of Health
MoU		Memorandum of Understanding
NASC		Needs Assessment Service Coordinator
NCHIP		National Child Health Information Platform
NIR		National Immunisation Register
PBFF		Population Based Funding Formula
PHAP		Pacific Health Action Plan
PFO		Planning, Funding and Outcomes
PHO		Primary Health Organisation
POAC		Primary Care Acute Options
POI		Palliative Care Outcomes Initiative
OIS		Outreach immunisation service
RFPs		Request for Proposals
RUG		Resource Utilisation Group
SLMs		System Level Measures
SUDI		Sudden Unexpected Death of an Infant
WCTO		Well Child Tamariki Ora

1. Executive summary

This paper provides a background for Auckland District Health Board (DHB) Community and Public Health Advisory Committee (CPHAC) members on the breadth of activity, areas of focus and investment in primary care and community. The paper covers a high level overview and then further detail about key investments and areas of focus, arranged in Planning, Funding and Outcomes (PFO) portfolio areas. An overview on health system operations is also provided Appendix 1 for information.

2. Background

The approximate total investment across the Planning, Funding and Outcomes (PFO) team is the Auckland DHB Population Based Funding Formula (PBFF) share $1.2B (see Appendix 2). The approximate scale of the primary and community investment is $635M. Funder or Hospital Provider investments are also made in the ongoing development and improvement of services. While this background paper covers primary and community investment managed by PFO, it is excludes the significant investment in community services delivered within the provider arm directorates.

2.1 Investment decision making

There are a range of parameters around where (and how) DHB investments can be made, including:

- Accountability Agreements which require DHBs to deliver the full range of secondary and tertiary services (eg ophthalmology, cardiac surgery). These are largely, but not exclusively, hospital services and generally services delivered by the hospital provider arm.
- Crown Funding Agreements where a national decision is implemented through a specification (eg the B4School check programme), but where there may be some local delivery design.
- National contracts/programmes which includes areas where the Ministry of Health (MoH) has not devolved funding (eg maternity, national screening programmes) or where there is a nationally specified agreement (eg pharmacy, Aged Residential Care).
- Discretionary funding which can be applied to an area of specific need, in line with the delegation policy (that is, as approved by Board, Chief Executive or Director of Funding).

2.2 Contracting and funding arrangements

PFO manage a large number of contracts (more than 1000) with primary and community care providers. These contracts may be for Auckland DHB alone, or for joint, metro Auckland or regional services (eg fertility services) and others are for national providers (eg the eye bank).

In addition to specific contracts, there are four contract types that are nationally consistent and negotiated nationally for all 20 DHBs. These are:

1. Adolescent Oral Health (three large providers and a range of private dentists)
2. Age Related Residential Care (68 facilities)
3. Community Pharmacy (143 contracted providers), and
4. Primary Health Organisation (PHOs, five contracted providers).

National agreements have nationally consistent service specifications, reporting requirements and funding models. However, for some such as the PHO agreements, DHBs can add other DHB/regional specific services elements eg the Alliance Leadership Team (ALT) requirements. In some instances PFO local initiatives can become the benchmark for all DHBs, and may be incorporated in to the subsequent national agreements.

Local agreements may also be entered into, usually following a formal procurement process. Service specifications are developed and form part of the procurement and negotiation process. A Contracts Equity Audit has recently been conducted (and will be presented to Finance, Risk and Assurance Committee) which demonstrates that our local contracts perform well compared to national contracts in terms of an equity approach. Local contracts are managed and monitored by programme managers through their relationships with the providers.

Table 1 shows the broad allocation and value of spend (further detail in Appendix 2).

Table 1. Categories of PFO expenditure

Allocated Area	Spend per Annum ($M)
Māori and Public Health	$4
Mental Health	$53
Personal Health	$37
Palliative Care	$7
Primary Care	$163
Community Laboratory	$30
Community Pharmacy	$147
Health of Older People	$193

The Provider arm can also be contracted on a programme/service basis through a Service Level Agreement. This approach may be undertaken with a new service, until it has matured to the point where it can be captured through the price volume schedule process.

Local contracting processes are affected by national processes, such as the recent Ministry run mental health tendering process (Request for Proposals - RFPs). PFO may also be called on to address other critical operational matters, such as establishing a breast screening service at short notice. The team is flexible and adaptable, driven by a desire to achieve the best possible outcomes for the population, with a strong imperative to design services to address inequity.

2.3 Current procurement processes

Current local procurement processes are being run, or have recently concluded for:

- First trimester abortion services
- Pulmonary Rehabilitation Services

2.4 Contractual and other challenges

The PFO team need to comply with the Government's Rules of Procurement. This requires impartiality, good process, value for money considerations and avoidance of conflict of interest. A legal review of key documentation is undertaken at key points along the contracting pathway, and before final agreements are entered into. Exemption from the application of the Rules can be obtained where provider selection is not appropriate. For example, when all existing providers will be offered the opportunity to provide the service.

3. Primary Care

Primary Care plans and manages a wide range of community based services in the following key areas:

3.1 Primary Health Organisations

There are five Primary Health Organisations (PHOs) for Auckland DHB: Auckland PHO, Alliance Health+, National Hauora Coalition, ProCare and Total Healthcare. The PHOs are the link organisations to general practices, and they receive essentially four funding streams through a nationally negotiated agreement (as previously noted):

a. Capitation for enrolled patients at nationally derived rates.
b. Flexible Funding Pool for improved patient outcomes and access for high need people at nationally derived rates. The Flexible Funding Pool (FFP) refers to the total sum of funding received by each PHO to provide; Health Promotion (HP), Services to Improve Access (SIA), CarePlus (C+) and the PHO Management fee.
c. System Level Measures (SLMs) a programme of work to address six Ministry of Health defined areas for improvement.
d. DHB specific funding streams for initiatives such as diabetes care, and cardiovascular risk assessment and care.

3.2 Community Pharmacy

In addition to usual medication dispensing and advice we support specific service initiatives such as smoking cessation. Community pharmacies operate under a national agreement.

3.3 Palliative Care

Palliative care for Auckland DHB is managed through Mercy Hospice and a metro Auckland Better Palliative Care Outcomes Initiative (POI).

The POI has the purpose of enabling the six hospices across the Auckland region to work together with the Metro Auckland DHBs, Age Related Residential Care and primary care stakeholders to achieve better palliative care outcomes for those with a terminal illness and their families/whānau regardless of where in the system palliative care is provided.

3.4 Community Care Providers

A range of community care providers are engaged through programmes such as Primary Options for Acute Care (POAC, approximately $1.4M), Access to Diagnostics (ATD), Asthma Society and Pulmonary Rehabilitation.

POAC and ATD are both programmes that support clinical referrers, primarily GPs, to commission community-delivered services with the aim of improving patient experience, outcomes and the effective use of health resources.

The core intent of POAC is to safely and effectively manage more acute demand in the community, with the objective of reducing attendance at EDs and admittance to a hospital bed. POAC works by providing a payment to any community provider for undertaking actions to avoid an ED attendance, or by paying for and co-ordinating a community-delivered activity, across a range of investigations, care and treatment, that avoids ED attendance. Much of the POAC service is provided in the general practice by the practice team.

POAC can also be used by hospital clinicians to arrange for community-delivered services that will support safe early discharge or avoid a return to ED. Urgent Care Clinics may also utilise POAC payments to undertake actions to avoid ED attendance. POAC services do not incur a co-pay. GPs are able to access defined 'virtual' budgets to pay for their patients to attend a range of radiology services provided by community providers. They are assigned this budget based on an algorithm taking into account the practices total registered patient population, the demographics and socioeconomic need.

3.5 The Alliance Leadership Team

The primary care team also provides the leadership and support required for the ALT, the Joint ALT (metro Auckland), and a regional clinical governance forum (Metro Auckland Clinical Governance Forum (MACGF) comprising clinical leaders from PHOs and DHBs). ALT consists of Auckland DHB and Waitematā DHBs, six PHOs, Ngati Whatua as the Te Tiriti partner and Te Whānau o Waipairera as the MOU partner for Waitematā DHB. ALT oversee the range of primary care initiatives. The Joint ALT brings the Counties Manukau Health ALT and ours together for regional collaboration. The Clinical Governance Forum supports the ALTs so we have consistent clinical advice and leadership across the programmes of work.

3.6 Other areas of focus

In addition to work programmes on improving access and care across the abovementioned areas the team also provide strategic leadership across areas such a primary care nursing development, and use of data. Improved use of data to inform decisions, monitor performance and identify outcome improvement opportunities is playing an increasing more significant role. Early innovative use of tracking dashboards was demonstrated in the after hours programme, which is now a mature initiative, and the use of benchmarking programmes such as StatPlanet in SLMs. Data matching exercises are increasing being used to target services, particularly in terms of a systematic focus on equity for Māori. Data matching is being applied in areas such as retinal screening so those at most risk of eye disease from diabetes are identified and proactively engaged to have their eyes assessed.

4. Health of Older People

The Health of Older People (HOP) Team within the PFO unit plans and manages a range of community based services for the older population with an annual expenditure of approximately $149m. The two most significant community based services for this population group are:

- Home and Community Support Services (HCSS)
- Aged Residential Care (ARC)

4.1 Home and Community Support Services

The number of people within ADHB receiving HCSS is approximately 3,800 and the DHB annual expenditure is close to $22m.

There are four HCSS providers operating within a collaborative contracting structure. The restorative model of care and the case mix funding approach is detailed in the companion PFO Approach paper, prepared for this CPHAC meeting.

In recent years there have been two substantial settlement agreements for HCSS support workers that the DHB has implemented at a local level:

- The Inbetween Travel Settlement Agreement – payment of support workers for time and travel between clients, and regularisation of the workforce
- The Pay Equity Settlement Agreement – an increase in support worker rates based on experience or qualifications.

These have been significant changes for this aged care workforce and important for the sustainability of the sector.

4.2 Aged Residential Care

The DHB has contracts with 68 ARC facilities with approximately 3,400 residents and an annual expenditure close to $124m. ARC operates under a national agreement comprising four levels of care:

- Rest home
- Dementia (secure)
- Hospital
- Psychogeriatric (secure)

All ARC facilities are certified by the Ministry of Health and payment is via a set bed day rate for bed days used. The service is demand driven but in order to enter ARC, a person must be assessed by the DHB Needs Assessment Service Coordinator (NASC) as requiring residential care at one of the four levels of care. NASC accepts referrals from: self, whānau/family, health professionals, GPs, hospital staff and specialists.

In accordance with the Residential Care and Disability Support Services Act 2018 (previously the Social Security Act), residents entering ARC have a financial means assessment to determine if they are eligible for a residential care subsidy, paid by the DHB.

Last year an ARC Funding Model Review was completed, updating the previous review of 20 years ago; the ARC sector has changed significantly during this time. The average age of entry to ARC has increased to 85 years, with residents more frail than in the past. Over half of residents have some form of cognitive limitation, and many have multiple co-morbidities. The median length of stay is now around 18 months. A key recommendation from the Review is to expand the levels of care/care categories using a RUG approach. This approach would be more sensitive than the current four levels of care.

4.3 Other HOP contracts

There are a number of other services for older people developed and managed by the HOP Team with a particular focus on enabling people to remain living in their own homes including:
Falls and fracture prevention services (via a Partnership Agreement with Accident Compensation Corporation (ACC)):

- In Home Strength and Balance Programme – a six month in home exercise programme delivered by physiotherapists and registered nurses; based on the internationally recognised Otago Exercise Programme, which reduces the risk of falls
- Fracture Liaison Service – the service identifies inpatients and outpatients who have sustained a fragility fracture and ensures they are assessed and treated for bone health, i.e. bone densitometry and/or bone sparing medications, to reduce the risk of a second fracture
- Interim Care Scheme (ICS). Patients who do not have an acute medical condition but are unable to be managed safely and appropriately at home are admitted into an ICS ARC facility for a short term stay. The aim of ICS is to maximise the patient's functioning during the period of care to enable a safe return home. The ICS ARC facilities are supported by the DHB Community and Long Term Conditions Directorate e.g. allied health, gerontology nurse specialists
- Dementia day care programme delivered by four contracted community providers
- Dementia education support services (via a contract with Dementia Auckland) focusing on supporting carers of people with dementia.

5. Child Women and Youth

The Child, Youth and Women's Health portfolio covers those areas inclusive of oral health, immunisation (excluding 'flu of over 65s) and maternity. Some of the work of the team is described in more detail in two of the case studies in the accompanying paper (First 1000 Days and School Based Health Services).

5.1 Maternity

Delivering the best possible outcomes for maternity is highly constrained by the design of the health system. The team have few levers however in maternity as funding for primary maternity sits with the MoH paid under the Section 88 Notice. This Notice funds Lead Maternity Care (LMC) provided for the most part by midwives, but also significantly by private obstetricians and some general practitioners. It also covers fees for pregnancy scans.

The Ministry is currently consulting on changing elements of the Section 88 Notice, but has not signalled devolution. The team plays a role in trying to bring parts of the maternity/early infancy sectors together, bridging elements of the interface between primary and secondary including in areas such as early engagement with an LMC.

The team also manage the contract for the Primary Maternity Facility held by Birthcare. Auckland DHB funds Birthcare in excess of $6M pa to provide and staff a primary maternity facility which, for the most part, provides post natal stays following discharge from Auckland City Hospital.

5.2 Immunisation

Responsibilities in Child Health include delivering to the Immunisation Focus Area. A year ago, the team brought the National Immunisation Register (NIR) in-house (which as was consistent with the model in both Counties Manukau and Northland, as well as other parts of the country). In addition to the childhood immunisation schedule, there is a focus on antenatal immunisation and the recent addition of the Measles Mumps and Rubella (MMR) catch up campaign targeting 18 – 30 year olds, Māori and Pacific peoples.

The main focus is on the primary series of childhood immunisations (at 6 weeks, 3 months and 5 months), which has a 95% coverage target measured at 8 months of age. Auckland DHB is a high performer against the total coverage target, but remains challenged with delivering equity for Māori for this indicator, despite a continuous improvement programme. The Immunisation programme is supported by a national database (the NIR) which is an essential tool in identifying children at risk of missing out on their vaccines.

While the majority of vaccines are given in primary care general practice settings, success in terms of coverage and equity is dependent on having an effective outreach immunisation service (OIS). Auckland DHB OIS is contracted to HealthWEST - a west Auckland based Māori Health provider. Both Māori and Pacific infants are over-represented in OIS delivery.

The team have been achieving success in increasing immunisation coverage for pregnant women, with both Māori and Pacific women reaching the antenatal target in the SLM programme this year. The team developed an effective campaign to promote immunisation as part of a suite of other health considerations for a healthy pregnancy (including healthy eating, and positive mental health).

5.3 Well Child/Tamariki Ora

Well Child Tamariki Ora (WCTO) services are another example of an area over which the team have limited controls as the main provider, Plunket, is funded directly by the MoH. Plunket deliver around 94% of WCTO services in Auckland DHB, against a nationally prescribed schedule.

Auckland DHB is unusual in having a provider arm child health service which delivers WCTO to the highest needs children. Many are from refugee backgrounds or have care and protection concerns. In addition to nursing staff, the Starship Community WCTO service includes social workers and a group of ethnically diverse community healthcare workers.

The other WCTO contracts sit with the Māori and Pacific teams, with services coordinated by the WCTO Programme Manager in the Child Health Team.

5.4 Sudden Unexpected Death of an Infant

There is a Crown Funding Agreement for Sudden Unexpected Death of an Infant (SUDI) prevention. In part this is about safe sleep, but there are other contributing factors that require a more 'whole of system' response including early engagement with a Lead Maternity Carer and with a WCTO provider, smoking cessation services, access to health information, a safe sleeping space and engagement of whānau around this.

Auckland DHB overall has a low number of pregnant women who smoke, although inequities in smoking rates persist for Māori women. Maternal smoking remains a significant concern for SUDI. Maternal smoking cessation services are managed by the Primary Care team and Auckland DHB augments the current smoking cessation aspect of the MoH contracted Ready Steady Quit service (ProCare) with funding for a maternal smoking cessation incentives programme (pregnant women and their whānau). Funding was recently extended for this programme.

Overall SUDI rates for Auckland DHB are low, and there is not and equity gap, however we have not seen any further reductions in SUDI rates recently (plateau). In terms of ongoing programmes of work, some progress has been made in improving access to wahakura and other safe sleep spaces alongside education.

Many families who may benefit from a wahakura or safe sleep space may be eligible for the Healthy Housing Initiative (this is detailed further in the companion paper). Under the Rheumatic Fever programme, we will be trialling a whānau nurse assessment, alongside the Social Work assessment and Healthy Housing interventions. More information will be provided in a paper on Rheumatic Fever to CPHAC in 2021.

5.5 National Child Health Information Platform

As further detailed in the companion paper, the team have recently implemented a database called the National Child Health Information Platform (NCHIP). This provides a local view of access to the 29 universal milestone checks children are eligible for by their 6th birthday. The NCHIP team, and Missed Events Service are focussing their initial efforts on early engagement – that is engagement with a general practice and WCTO service following discharge from maternity care around 6 weeks of age. The goal is that 'every child counts' – that is we know about them, and provide support for early engagement with a provider that meets their needs.

There are a range of contracts in child health across a broad range of areas including for data analysis (from the University of Otago), through to Trauma Counselling and a contract for home cares for medically fragile children being discharged from hospital care.

5.6 Youth Health

Youth Health is an often over-looked area of health. Evidence shows that young people need a range of entry points to encourage uptake of health services. In addition to primary care, the DHB funds school based health services in ten secondary schools. This significantly improves access to primary healthcare as detailed in the case studies. The model in Auckland DHB has been in place from its original base of nurse led only services to the current model which has been in place for around five years where the nursing service is supplemented by a visiting GP and a visiting Clinical Psychologist.

The Auckland DHB model is considered the most comprehensive in the country. Practitioners are supported by a Nurse Educator, Programme Manager, GP Lead and Psychology Lead. There is robust reporting from the programme. Young people have been under particular stress during 2020, due to COVID-19.

The health and well-being needs for some students, particularly in the decile 1 schools (Tāmaki, Otahuhu and McAuley Colleges) are very high. Without the school based health service, these young people would be unlikely to be able to access care when needed. The service has demonstrated its acceptability by the number of repeat visits by students (which are highest for Māori) and student surveys. The service is detailed in the companion paper.

5.7 Long Acting Reversible Contraction

Women's health includes services for Long Acting Reversible Contraction (LARCs), designed to improve access to high quality contraception options and abortions. The Funder has led contracting processes for these services. For abortion, this has followed a two year process with the metro Auckland DHBs to develop an agreed service specification and agree the service configuration for all services. The abortion tender is currently in the market.

The intent for both LARCs and first trimester abortion services is to increase access including by provider type – that is general practices, nurse led services, midwifery provided services and NGO providers such as Family Planning, as well as the DHB provided services that interface with the community through Sexual Health and Women's Health.

5.8 Fertility Services

Fertility services for the northern region DHBs are managed by the Child, Youth and Women's Health team. There are three providers, two private and the Auckland DHB provider arm. Since we entered into the current contracting arrangements with the providers, an effective advisory group has formed. The group is supported by an epidemiologist funded by PFO.

All providers submit data which is then independently analysed for consideration by the advisory group. This approach has led to greater consistency across providers. The group also consider issues as they arise, including regarding eligibility. This has led, for the most part, to unanimous decisions being made about cases bought to the group. Funded service volumes have been capped, and have not kept pace with population growth. As a result, time to treatment has extended beyond the expected 12 months from referral.

5.9 Other women's health contracts

Women's health services also cover a number of screening programmes including cervical and breast screening. The Funder has been actively working with the MoH to rapidly establish a new Auckland DHB breast screening service, following the exit of the incumbent private provider.

Other contracts cover a range of other areas such as family violence and sexual violence support services.

6. Mental Health

The Mental Health and Addiction Services team is responsible for developing, commissioning and managing services for people experiencing mental health and addiction issues in the community. The team contract with 30 NGOs who provide a range of community based services. Auckland DHB has an investment of approximately $43 million in services provided by NGOs in the mental health and addiction sector, and approximately $2 million in services delivered by PHOs.

The type of services provided, the number of service providers and an approximate amount of the service investment is set out in Table 1 below.

Table 2. Mental Health by Service Type

Service Type	No. of Providers
Mental Health Residential Rehabilitation	7
Individual NHI Bespoke Contracts	10
Crisis Respite Residential	2
Community Support	9
Employment Support	1
Family/Whānau Support	1
Housing Support	1
Day Activity Programmes	7
Telephone or On-line Support	2
AOD Residential Programmes (metro Auckland)	4
AOD Community Support	1
PHO Primary Mental Health Initiatives	5

In addition to management of these contracts the team carry out a range of other work. Key examples of recent work include:

- Integrated Primary Mental Health and Addiction Services. Auckland DHB holds the contract for this metro Auckland service as outlined in the companion paper. The team is a key participant in the Auckland Wellbeing Collaborative and carries out ongoing contractual and governance functions.
- The Pay Equity Settlement agreement which had a substantial impact on the mental health and addiction NGOs.
- Implementation of pilots and special projects. An example, of this is the Haven, a recovery café staffed by peer support workers based on Karangahape Road. This was funded from Acute Drug Harm funding.

The Suicide Prevention Co-ordinator and Whānau Support (Bereaved by Suicide) for Auckland DHB is based with the team and carries out the following functions:

- Oversight of the Suicide Prevention Plan
- Secretariat for Suicide Prevention Governance Group
- Cross sector working groups and postvention groups
- Mortality reviews
- Coronial notifications of suspected suicides and follow-up of these.

7. Māori Health Gain

The Māori Health Gain is responsible for Māori community partnerships, Māori health planning and funding for Māori health providers. For the latter, the Māori Health Gain Team manages an annual investment for Māori Health Providers of approximately $6M across the two DHBs. This is a portion of the wider investment into Māori health providers spread amongst various PFO teams at approximately $20M.

The overall PFO Māori health investment includes the following services:

- Mental health and addiction services
- Primary health care
- Youth health services (including the Youth Health Hub)
- Community and mobile nursing for long term condition management
- Well Child Tamariki Ora nursing
- Home based support services
- Social work services
- Parenting support and education programmes

The funding above excludes COVID-19 response funding.

7.1 Māori health providers

Auckland DHB and Waitematā DHBs have contracts with the following Māori Health Providers:

Auckland DHB

- Te Hononga o Tamaki me Hoturoa
- Piritahi Hauora
- Orakei Health Clinic (and Whai Maia)
- National Hauora Coalition
- Mahitahi Trust

Waitematā DHB

- Te Whānau o Waipareira
- Te Rūnanga o Ngāti Whātua
- Te Puna Manawa
- Te Puna Hauora
- Kotuku ki te Rangi

These providers are spread across Auckland (including Waiheke Island) and some cross DHB boundaries in the north and south. Te Rūnanga o Ngāti Whātua and Orakei Health Services are Iwi-led providers, and Te Whānau o Waipareira represent urban Māori living in West Auckland.

The health services offered by these providers are varied. Some have general practices with a number of support programmes offered as additional care for their vulnerable whānau, while others offer only kaupapa Māori mental health and addiction support services. The bulk of these providers are somewhere in-between offering a range of medical, nursing, mental health, addiction and social support services. Complimenting their health services are services and programmes funded by other sectors and agencies, including Ministry of Social Development, Whānau Ora Commissioning Agency, Department of Corrections, and the Ministry of Health.

In order to attain Māori provider status (a criteria applied by the Ministry of Health), over half of each providers' FTEs must identify as Māori and over half of their governance members must also identify as Māori.

7.2 Specific services, programmes and contracts

Governance and decision making

- Regional Iwi partnerships - Kōtui Hauora (the Northern Iwi-DHB Partnership Board). The Māori Health Gain team were responsible for establishing a genuine Treaty partnership between the northern DHBs and their respective Iwi partners. This saw the development of Kōtui Hauora as a partnership between Auckland DHB, Waitematā DHB, Northland DHB and Te Kahu o Taonui (Northern Iwi leaders' forum). This group will be responsible for providing critical and supportive Māori health advice at a governance level, and driving positive change and development across the DHBs and their respective programmes of work.
- Local Iwi/Māori partnerships - Memorandum of Understanding (MoU) partners. In 2002 and 2003, Auckland and Waitematā DHBs signed a MoU with Te Rūnanga o Ngāti Whātua and Te Whānau o Waipareira respectively. These partnerships acknowledge the important role that each of these organisations play in representing the communities they serve. The Māori Health Gain team currently funds 4.5 FTE within our MoU partners to support their valued participation in DHB forums and activities.
- Provider partnerships – Māori provider forum. The Māori provider forum is a regular forum comprising executives from each of the Māori providers and Māori Health Gain representatives. This forum is critical for garnering insights from the Māori health community sector and supporting provider development initiatives. This forum currently has four key projects that they are providing oversight and support for:
    - Māori provider sustainability
    - Māori community workforce development
    - Māori provider and PHO data match project
    - Collective funding bids – Māori mental health funding

Structural support services

Integrated contracts - The Māori Health Gain team have integrated contracts with a number of the Māori health providers. These contracts are linked to our Outcomes Framework – Ngā Painga Hauora (see companion paper on PFO Approach) which has Pae Ora as the overarching outcome we are seeking to achieve (this in turn is linked to He Korowai Oranga – the Ministry of Health Māori Health Strategy which has Pae Ora, Whānau Ora and Wai Ora as its overarching outcomes).

Each integrated contract reduces reporting compliance for the provider by combining multiple contracts with a number of PFO teams into a single, outcome driven, contract. This allows the provider more flexibility to target their efforts and resources on issues affecting the communities they serve, increases integration between their services that enhances their model of care to whānau, and gives surety with long term funding agreements.

Services to whānau

The Māori Health Gain team have developed a number of services that support vulnerable whānau across Auckland and Waitematā DHBs. In addition to the services listed above, there are several complimentary and targeted programmes also delivered by Māori health providers and managed by the Māori Health Gain team.

- Health Babies Healthy Futures – Healthy Babies Healthy Futures is a MoH funded programme designed to educate pregnant mothers and parents/caregivers of young children about healthy nutrition and movement. It is aimed at reducing obesity amongst vulnerable communities

(Māori, Pacific and new migrants). This programme has engaged with over 5,000 whānau since its implementation in 2015. This programme has three key components:
    - Txt match – this is a text reminder and information programme that pregnant mothers and their support people can sign up to for free online. The text messages are provided in a number of different languages including Māori, and the content is developed by a clinical and cultural advisory group
    - Workshops – whānau who require support can enrol in a number of face to face (or Zoom) programmes provided by one of our four community facilitators. These sessions are delivered across Auckland and are often held over two or three days
    - Community initiated workshops – this is a small fund to support community groups to host a facilitated workshop at a venue that they chose (including churches, schools and kohanga)
- Taitamariki service – This is a substance misuse prevention service aimed at 11-12 year olds that are at risk of using drugs or alcohol. Taitamariki can be referred to this service by their whānau, school, social worker, police or a number of other agencies/clinicians. Once enrolled in the programme, their needs are assessed by either a youth worker or social worker to determine the best package of care for them and their whānau. This may include a mix of individual counselling, group sessions, and group programmes. Each of these sessions are designed and delivered under the youth development framework. This framework is essentially about building resilience within a young person so that they are willing and prepared to say no to drugs or alcohol.
- Enhanced Tamariki Ora Service – this is a social worker led service that is attached to Tamariki Ora nursing services. This programme ensures that when Tamariki ora nurses are engaging with vulnerable whānau they have a social worker available to support the whānau to identify and address social issues they may be experiencing.

8. Pacific Health Gain

Pacific health priorities for Auckland DHB are outlined in a joint Pacific Health Action Plan (PHAP) with Waitematā DHB. The current PHAP, which lists eight priorities, is the second iteration of the original 2013 plan, and covers the period 2016-2020.

The eight priorities of the current PHAP include:
- Children are well and safe and families are free of violence
- Pacific people are smoke=free
- Pacific people eat healthy and stay active
- Pacific people get help early
- Pacific people use hospital services when needed
- Our families live in warm healthy houses that are not overcrowded
- Pacific people will experience optimal mind health and wellbeing
- Pacific elders are valued and experience optimal health and wellbeing

MoH launched in June 2020 the new Ola Manuia: Pacific Health and Wellbeing Action Plan 2020–2025. This sets out priority outcomes and accompanying actions for the next five years to improve the health and wellbeing of Pacific populations living in Aotearoa New Zealand. The Auckland DHB PHAP plan is being refreshed and will align with the Ola Manuia framework.

Auckland DHB investment in Pacific specific services is approximately $2.1 million per annum. Most of this funding is invested across three initiatives. They are:
1. Healthy Village Action Zones (HVAZ) programme

2. Pacific Integrated services
3. WCTO

The Pacific Health Gain Team within PFO currently funds two major initiatives within the community and primary care in Auckland. Pacific people are prioritised for these services.

8.1 Healthy Village Action Zones

The HVAZ is a church based programme and a central vehicle which enables the delivery of health promotion activities to Pacific communities across 42 churches. Parish nurses and Parish community health workers engage with churches to provide health promotion, health education and support access to health care. The programme is a partnership between Pacific communities, ADHB and health providers. It is well established and has the vision 'Pacific individuals, families and communities achieving quality health outcomes inclusive of holistic wellbeing.'

8.2 Pacific Integrated Services

The Integrated services/fanau ola programme is a primary care based initiative that involves a multidisciplinary team working with Pacific families to comprehensively address their high health and social needs. The programme is designed to work with the most vulnerable families and households, its purpose to improve access to health education, health services, lifestyle change support, clinical management and navigation to housing, education and social services. Each package of care offered to a family is designed to meet their specific needs and empower them to both make decisions about their own health and navigate services when they graduate from the service.

8.3 Well Child/Tamariki Ora

The third major investment is the provision of WCTO services. This is a national service that provides universal health and development assessment, whānau / family care and support, and health education service.

8.4 Other areas of focus

- COVID-19 and risks to Pacific communities: Auckland DHB needs to ensure that Pacific peoples continue to be well supported and protected from COVID-19. In the recent August outbreak, Pacific represented over 60% of cases. Pacific people are highly susceptible to contracting, transmitting and experiencing significantly poorer health outcomes including death due to COVID-19. Many Pacific people live in larger, multigenerational families and households, are often employed in essential jobs for example manufacturing, ports, aged care residential facilities, and a significant proportion experience underlying health conditions. Ensuring equity of access for Pacific to COVID-19 testing, health care, quality of care and welfare support in addition to partnering with and working alongside Pacific communities will be instrumental in achieving equitable outcomes for Pacific communities during this time.
- There are also a range of recent health initiatives to specifically address the needs of Pacific people across the breadth of PFO activity, these include:
    - Mental Health: a review of Maternal Mental Health Services and the Awhi Ora programme to address the health and social needs of people with mild to moderate mental distress in primary care, particularly Māori, Pacific and youth.
    - Child Health: the Healthy Housing programme, an oral health fluoride varnish outreach programme in Pacific Language Nests, and an on-time immunisation advertising radio campaign aimed at increasing awareness of immunisation in Māori and Pacific communities.
    - Primary Care: targeted approaches to Pacific engagement in the Green Prescription programme, the diabetes work programme including diabetes co-design and improvements to retinal screening with a focus on Māori and Pacific people, and smokefree initiatives.

- Health Gain: a Pacific AAA screening pilot at Auckland DHB, under the umbrella of the Māori Health Pipeline programme of work.

Finally, there are also Auckland regional initiatives to accelerate Pacific health gain (via specific projects in the Pacific Health Pipeline) and increase the supply, recruitment and retention of the Pacific health workforce (overseen by the Pacific ALT).

9. Asian Migrant Former Refugee and Asylum Seeker

The total additional investment in this portfolio area, above that of the team, is modest as the work programme is focused on working with partner organisations across the sector (see accompanying paper outlining the Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan 2020-2023). There is an investment of $100,000 for primary care support to former refugees and current asylum seekers under the *'Improving Access to General Practice Services for Former Refugees and Current Asylum seekers.'* All five Auckland DHB PHOs provide this service.

9.1 Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan 2020-2023

Outside of the work related to COVID-19 the approval and implementation of the Plan is the key current initiative. The areas of focus within the plan are:

- Capability and capacity building**:** Granular data monitoring to level 4. Making sure our data tells us about the subgroups we're interested in.
- Access**:** Equity of access and utilisation of healthcare services:
  - Awareness of the New Zealand Health & Disability System
  - PHO enrolment (eligible new migrants, (**equity of access)** to former refugees, and babies at 3 months) and lower access to primary health services
  - Better management of long term conditions (**equity of access**) to cardiovascular disease – Indian and South Asian; diabetes – Chinese, Indian and South East Asian (Filipino)
  - Mental health and addictions (youth, (**equity of access)** to perinatal maternal mental health)
  - Immunisations (HPV, 5 year event, Influenza over 65 years), and
  - Preschool oral health (Chinese, Filipino and Middle Eastern).
- Health promotion/prevention including culturally tailored and/or targeted preventive healthy lifestyle activities.
- Adopting a partnerships approach to engage segments of the population i.e. students, former refugees and current asylum seekers in awareness raising of health services and health education; and collaborative work with Asian & Middle Eastern, Latin American and African (MELAA) ethnic consumers.

10. Conclusion

This paper details the broad areas and scale of primary and community investment commissioned and managed by the Planning, Funding and Outcomes team. The parameters of this investment, and the areas of focus in developing and improving services to meet population needs, systematically address inequities and improve patient and whānau experience are covered at a high level.

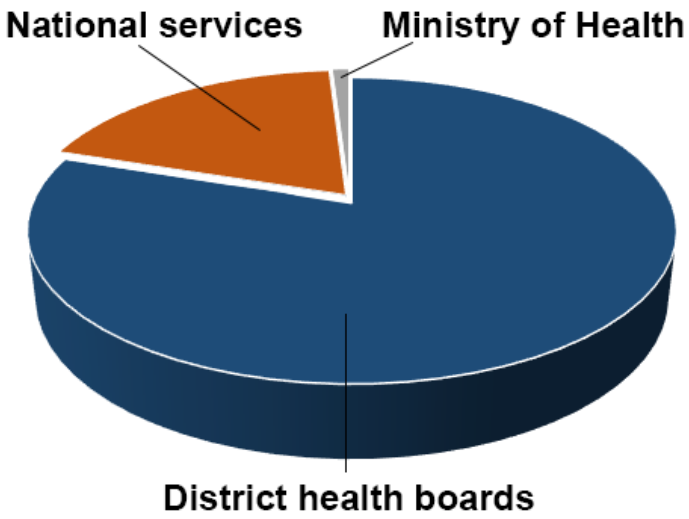
Appendix 1. Health system operations overview

1.1 Introduction

This section provides an overview of how the system has been set up and operates and the role of the various divisions within the DHB.

The structure of the health sector is depicted in the pictorial image in Appendix 1.
The health system's funding comes mainly from Vote Health, which totals $19.871 billion in 2019/20. Other significant funding sources include ACC, other government agencies, local government, and private sources such as insurance and out-of-pocket payments.

The MoH allocates more than three-quarters of the public funds it manages through Vote Health to DHBs, who use this funding to plan, purchase and provide health services, including public hospitals and the majority of public health services, within their areas.



Most of the remaining public funding provided to the Ministry (approximately 19%) is used to fund national services, such as disability support services, public health services, specific screening programmes, mental health services, elective services, Well Child and primary maternity services, Māori health services and postgraduate clinical education and training.

The allocation of funds to DHB is through the Population Based Funding Formula (PBFF). The PBFF is based on the population living in each district. The PBFF does not determine the overall level of funding to DHBs.

The aim of the PBFF is to equitably distribute available funding between DHBs according to the relative needs of their populations and the cost of providing health and disability support services to meet those needs. The PBFF gives each DHB the same opportunity, in terms of resources, to respond to the needs of its population. According to the PBFF, each DHB's share of health and disability funding is determined by:

1. its share of the projected New Zealand population, weighted according to the national average cost of the health and disability support services used by different demographic groups

2. an additional policy-based weighting for unmet need that recognises the different challenges DHBs face in reducing disparities and access to health services between population groups
3. a rural adjustment and an adjustment for eligible overseas visitors and refugees, each of which redistribute a set amount of funding between DHBs to recognise unavoidable differences in the cost of providing certain health and disability support services to these population groups.

1.2 The Role of DHBs

The New Zealand Public Health and Disability Act 2000 created DHBs. It sets out their 22 objectives, which include:

- improving, promoting and protecting the health of people and communities
- reducing health disparities by improving health outcomes for Māori and other population groups and reducing, with a view to eliminating, health outcome disparities between various population groups
- promoting the integration of health services, especially primary and secondary care services
- seeking the optimum arrangement for the most effective and efficient delivery of health services in order to meet local, regional, and national needs
- promoting effective care or support of those in need of personal health services or disability support.
- promoting the inclusion and participation in society and the independence of people with disabilities

DHBs are expected to show a sense of social responsibility, to foster community participation in health improvement, and to uphold the ethical and quality standards commonly expected of providers of services and public sector organisations.

Public hospitals are owned and funded by DHBs. Consequently, DHBs plan, manage, provide and purchase health services for the population of their district to ensure services are arranged effectively and efficiently for all of New Zealand. This includes funding for primary care, hospital services, public health services, aged care services, and services provided by other non-government health providers including Māori and Pacific providers.

District Health Boards (DHBs) are required to budget and operate within allocated funding and to identify specific actions to improve year-on-year financial performance in order to live within their means. Improvements through national, regional and sub-regional initiatives continue to be a focus.

1.3 Te Toka Tumai Auckland DHB

Under the auspices of the Board and Chief Executive the DHB is structured around two broad key functionalities:

1. Hospital Services Provision and Management, Director Hospital Services
2. Planning, Funding & Outcomes, Director Funding and Director Health Outcomes

Hospital Services Provision and Management

The Hospital provider function covers numerous community delivered services as well as hospital inpatient, outpatient and support services. Community services include community child and adolescent health and disability services, community mental health services and district nursing. Auckland DHB are the northern region's provider of some specialist tertiary services e.g. cardiac surgery and radiation oncology services, as well as the provider of specialist services not available within other DHBs including organ transplant services, specialist paediatric services, epilepsy services and high risk obstetrics.

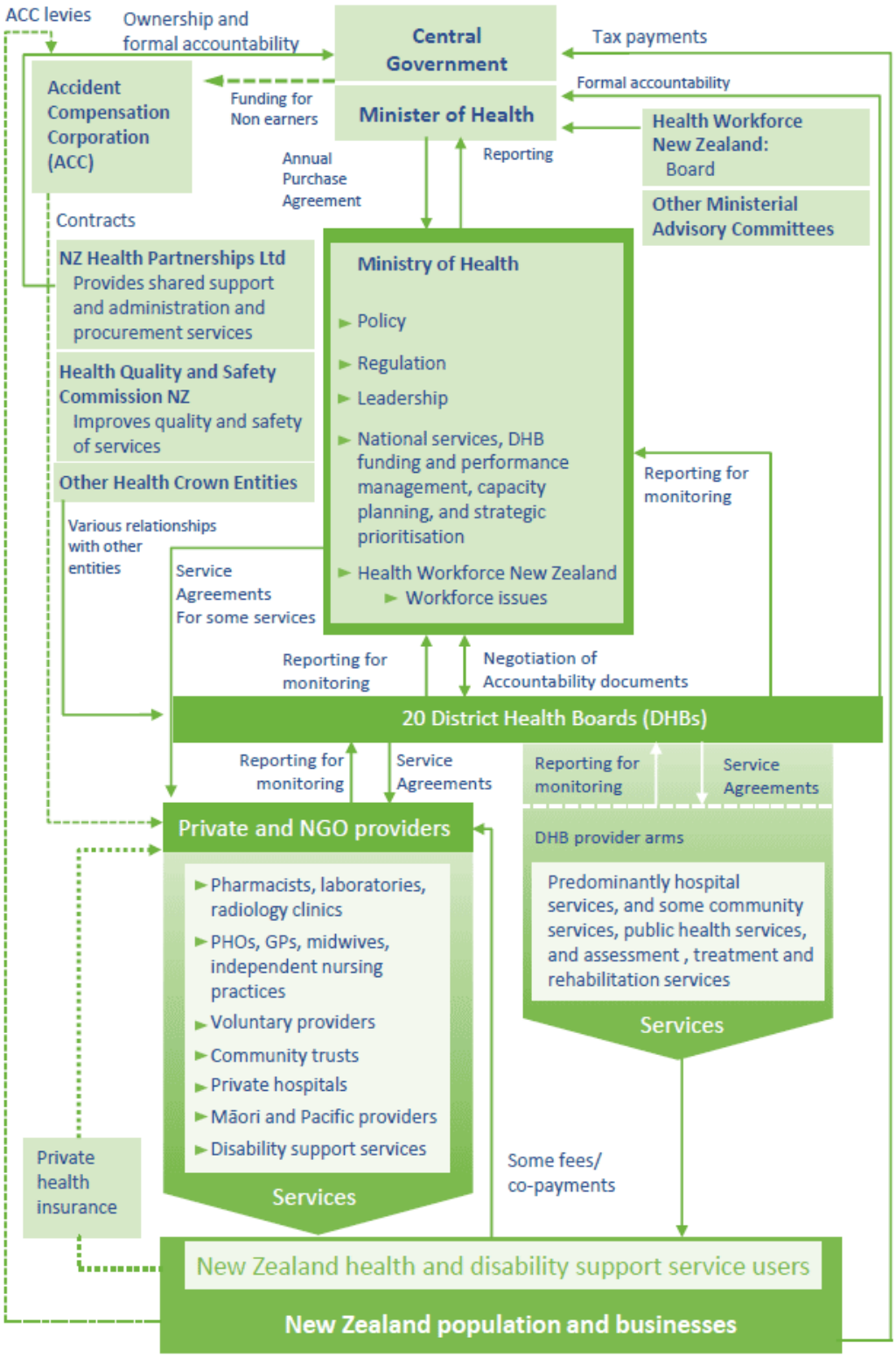
Planning, Funding and Outcomes
In conjunction with the Chief Executive, Chief Financial Officer, and Director Hospital Services PFO allocate the annual PBFF allocation across all services both hospital and community services including primary care, aged residential care, and community services.

PFO undertake commissioning for Auckland DHB including health needs analysis, monitoring and reporting of health status, advice on health gain and opportunities for improvement, and development of services to meet the needs of the Auckland DHB population. Identified investment opportunities are prioritised with the CEO and the Board.

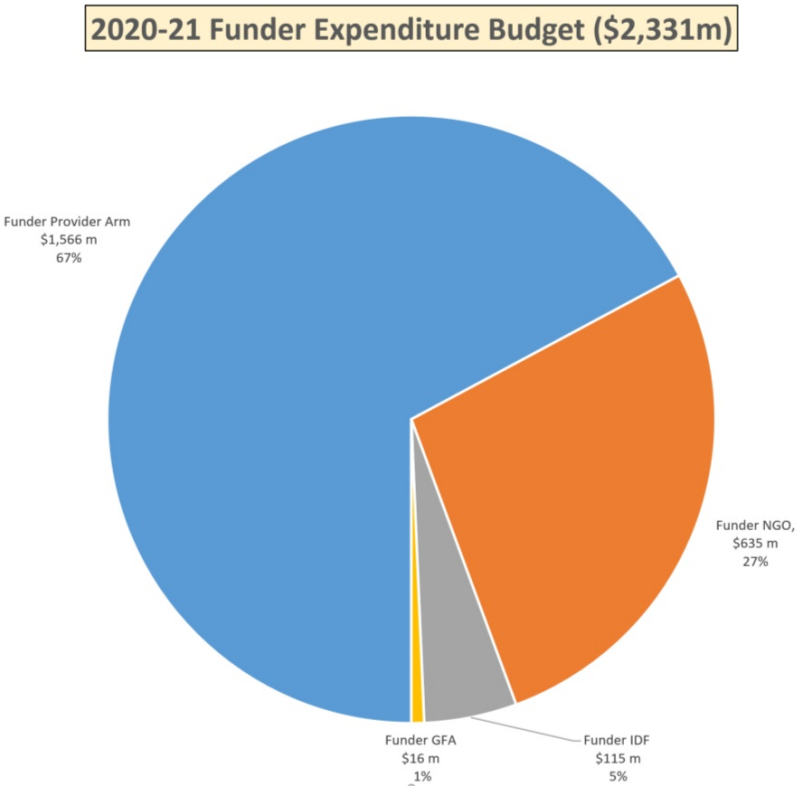
PFO facilitate and support service improvement through community engagement, co-design (working with patients, communities and providers of health services), understanding the provider landscape, capacity, capability and performance and develops and implement services that are responsive to need and that work for those who need to use the services. This approach is applied to existing services and new services. In support of this we continue to develop more sophisticated and robust performance and outcome measurement platforms so we can assess appropriateness and effectiveness of funded interventions.

PFO procure (under Government Procurement Rules) and contract for services, as well as manage relationships and monitor performance of all providers of services, including hospital services.

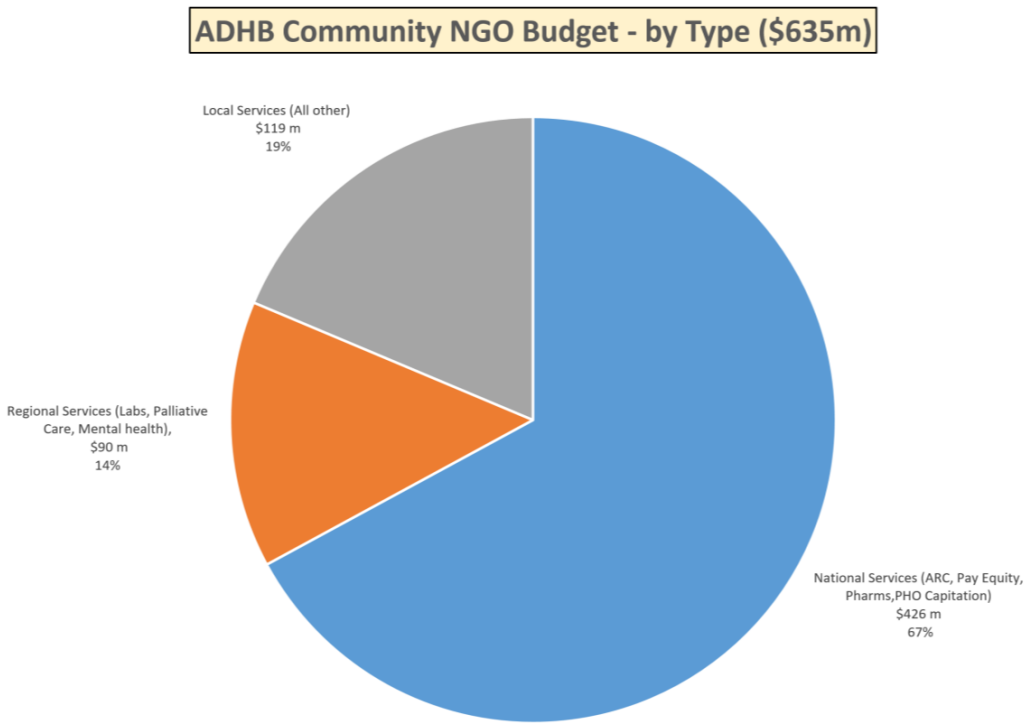
The structure of the New Zealand health and disability sector

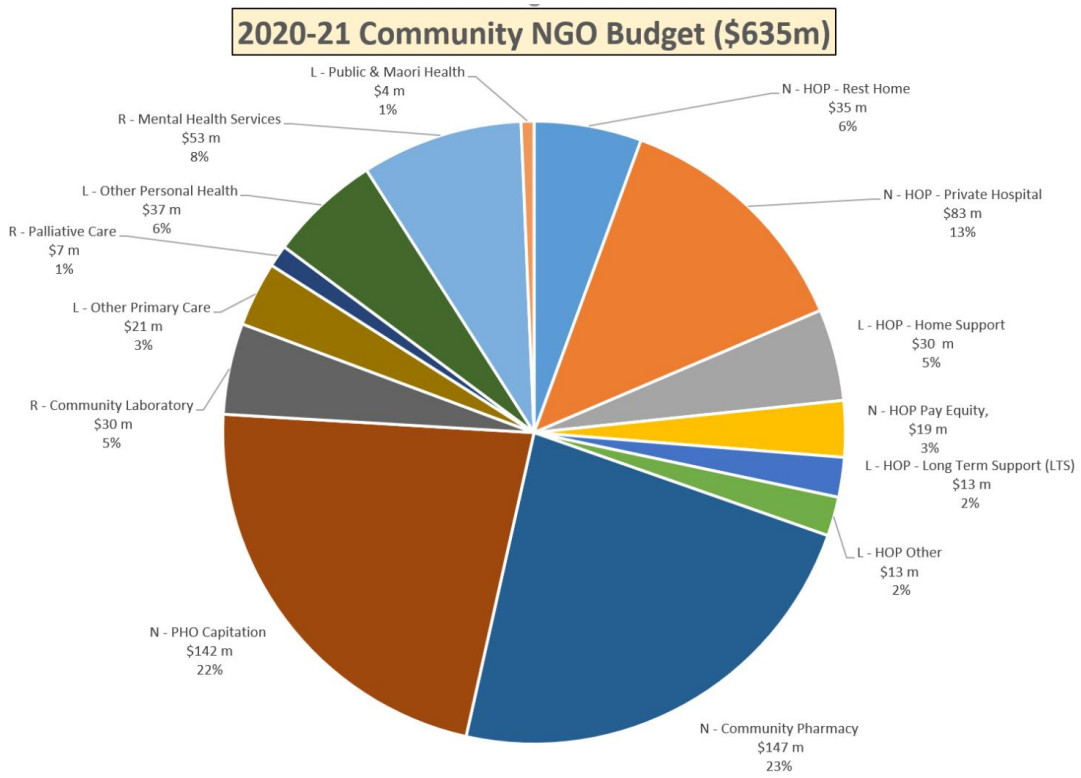


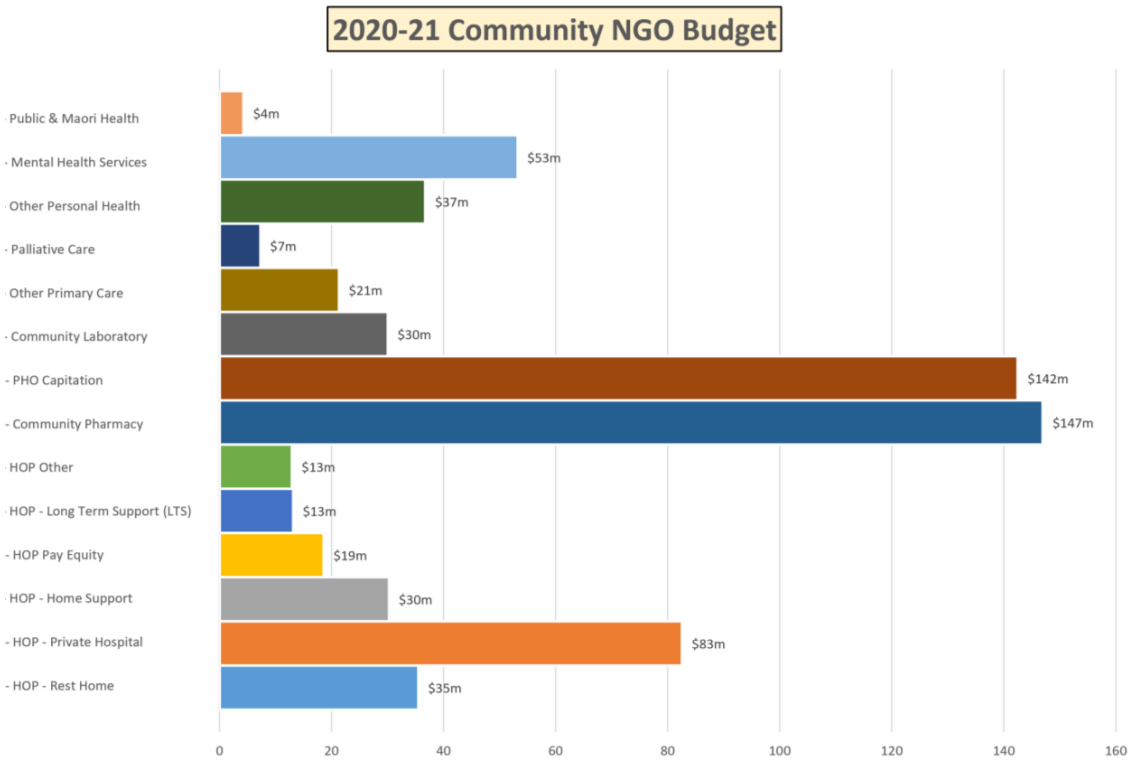
Appendix 2. Funder Allocation of Spend



Note: ADHB Funder spend is on: Own provider ($687M personal health and $114M mental health, and IDF outflow other DHB providers $65M personal health and $16M mental health.




2020-21 Community NGO Budget ($635m)
L - Public & Maori Health
$4 m
1%
N - HOP - Rest Home
$35 m
6%
R - Mental Health Services
$53 m
8%
N - HOP - Private Hospital
$83 m
13%
L - Other Personal Health
$37 m
6%
R - Palliative Care
$7 m
1%
L - HOP - Home Support
$30 m
5%
L - Other Primary Care
$21 m
3%
N - HOP Pay Equity,
$19 m
3%
R - Community Laboratory
$30 m
5%
L - HOP - Long Term Support (LTS)
$13 m
2%
L - HOP Other
$13 m
2%
N - PHO Capitation
$142 m
22%
N - Community Pharmacy
$147 m
23%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$19m
HOP - Home Support
$30m
HOP - Private Hospital
$83m
HOP - Rest Home
$35m
0
20
40
60
80
100
120
140
160

Asian, New Migrant, Former Refugee and Current Asylum Seeker Health Plan 2020-2023, Auckland and Waitematā District Health Boards

Recommendation:

That the Community and Public Health Advisory Committee recommend to the Board that it:

1. **Endorse the Asian, New Migrant, Former Refugee and Current Asylum Seeker Health Plan 2020-2023**

Prepared by: Samantha Bennett (Asian, New Migrant and Former Refugee Health Gain Manager)
Endorsed by: Dr Debbie Holdsworth (Director Funding), Dr Karen Bartholomew (Director Health Outcomes)

Glossary

AHS	Asian Health Services
CALD	Culturally and Linguistically Diverse
DHB	District Health Board
MELAA	Middle Eastern, Latin American and African

1. Executive Summary

Although some Asian groups experience high life expectancy and overall good health status, there are health disparities experienced for priority Asian and Middle Eastern, Latin American and African (MELAA) groups that require targeted effort. The focus of the strategic Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan aims to prioritise effort to:

- Improve health outcomes where there are health inequalities
- Increase equity of access to and utilisation of health services for targeted groups
- Continue to fund equity of access to primary healthcare services for former refugee and current asylum seeker background populations.

The three-year Plan summarises collective business as usual initiatives across Planning, Funding and Outcomes (Waitematā DHB and Auckland DHB) and Waitematā DHB's Asian Health Services (AHS) provider arm that represents existing work specific to Asian, new migrant, former refugee, and current asylum seekers.

This Plan will be managed by the Asian, Migrant and Former Refugee Health Gain Manager, and overseen by the Asian & MELAA Health Governance Group (Waitematā DHB and Auckland DHB). A quarterly Asian scorecard will guide monitoring on progress of the key areas of focus where data is available. Successful implementation of the Plan will require collaboration across the three metropolitan DHBs (where appropriate), and the health and community sectors.

2. Strategic Alignment

The Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan 2020-2023 aligns to the following strategic themes:

	**Community, whanau and patient centred model of care**	The Plan will support inclusion of culturally appropriate responses to service access and utilisation for priority ethnic groups where access is lower or groups who are underserved
	**Emphasis and investment on both treatment and keeping people healthy**	The plan focuses on culturally appropriate planning of health initiatives (and information) that enable targeted groups to make informed decisions about their (and their loved ones) health and access behaviours.
	**Intelligence and insight**	Monitoring of disaggregated ethnicity data will enable planners and service managers to better understand the cultural nuances that impact on access, utilisation and health outcomes for targeted groups

3. Introduction/Background

The Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan focuses on key health areas identified from:

- 2019 Health Needs Assessments (Waitematā DHB and Auckland DHB)
- 2017 International Benchmarking of Asian Health Outcomes for Waitematā and Auckland DHBs
- Asian, Migrant & Refugee Health Plan 2017-2019(Waitematā DHB and Auckland DHB)
- Consultation with the Metro Auckland Asian & MELAA Primary Care Service Improvement Group
- Health service utilisation data
- Feedback from engagement with partners and stakeholders
- Aligning to common Counties Manukau Health's population priorities for health equity.

The following top four higher level areas for action in this Plan are:

1. **Capability and capacity building: Granular data monitoring to level 4.**
   - Making sure our data tells us about the subgroups we're interested in.

2. **Access: Equity of access and utilisation of healthcare services:**
   - Awareness of the New Zealand Health & Disability System
   - PHO enrolment (eligible new migrants, (equity of access) to former refugees, and babies at 3 months) and access to primary health services
   - Better management of long term conditions (equity of access) to cardiovascular disease – Indian and South Asian; diabetes – Chinese and South East Asian (Filipino)
   - Mental health and addictions (youth, and perinatal maternal mental health)
   - Immunisations (HPV, 5 year event, Influenza over 65 years)
   - Preschool oral health (Chinese, Filipino and Middle Eastern).

3. **Health promotion/prevention** including culturally tailored and/or targeted preventive healthy lifestyle activities.

4. **Adopting a partnerships approach** to engage segments of the population i.e. students, former refugees and current asylum seekers in awareness raising of health services and health education; and collaborative work with Asian & MELAA ethnic consumers.

4. Risks/Issues

There are limitations to this Plan largely due to the challenges when needing to plan in a fiscally constrained environment where resource must be applied to those populations with the greatest inequities – ie. Māori and Pacific in the first instance. This necessarily impacts on the activities chosen and the need to work innovatively and collaboratively to improve the health outcomes for 'targeted' Asian and MELAA groups and foreseeable risk factors such as a rapidly growing diverse population, ageing population, and waning 'healthy migrant effect'.

This Plan will be managed by the Asian, Migrant and Former Refugee Health Gain Manager, and overseen by the Asian and MELAA Health Governance Group (Waitematā DHB and Auckland DHB). A quarterly Asian scorecard will guide monitoring on progress of the key areas of focus where data is available.

5. Conclusion

Targeted Asian and MELAA groups from new migrant, former refugee or current asylum seeker backgrounds should be included in the foreground of strategic planning for the Waitematā District Health Board with the aim to improve health outcomes for priority ethnic groups where there are health disparities.

Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan 2020-2023

Waitematā and Auckland District Health Boards

AUCKLAND DISTRICT HEALTH BOARD
Te Toka Tumai

Waitematā District Health Board
Best Care for Everyone

Contents

Foreword

Auckland's population is growing and changing rapidly. More than 180 different ethnicities call this city their home with almost 40 per cent of Aucklanders born outside New Zealand.

The Asian population in particular has experienced rapid growth over the last two decades. Census 2018 data tells us that while there was an increase in the proportion of Asians living in every region in New Zealand, the biggest growth occurred in the metropolitan Auckland region. Over a quarter (28 per cent) of Auckland residents identified with an Asian ethnicity, and Auckland was home to almost two thirds (63 per cent) of all Asian peoples in New Zealand. Closer to home, Asian constitutes 23 per cent in Waitematā DHB and 35 per cent in Auckland DHB, with the greatest population increase principally first from China, India, and more recently the Philippines. Filipinos are now the third largest ethnic group in Auckland DHB and is projected to surpass the total Korean population in Waitematā DHB by the next Census.

Whilst the Asian population contributes a significant share to our districts' diversity, so to do other culturally and linguistically diverse communities such as those from Middle Eastern, Latin American, and African (MELAA) backgrounds. At the 2018 Census, there were 35,838 usual residents living in the metropolitan Auckland region, who identify within the broader MELAA category (2.3% of Auckland's population) – an increase of 10,893 people, or 43.7%, since the 2013 Census. The fastest population growth in the region was from the Latin American communities doubling in population size between 2013 and 2018 and most significantly in the Auckland DHB catchment.

As part of the many new migrants that have arrived in recent years, former refugees and current asylum seekers (and their families) have also made a significant contribution to our diversity. The New Zealand annual refugee quota programme will increase from 1,000 to 1,500 from July 2020 – we will continue to welcome and support those families who engage with our health services in both Waitematā and Auckland DHBs.

As this rapid growth of cultural and ethnic diversity has enriched our districts in a myriad of ways, it also highlights the unique health and wellbeing challenges some of our communities face. Overall the health outcomes of the Waitematā and Auckland DHBs' Asian population - when compared to New Zealand and overseas - are very good and in many areas Asian health status within the two DHBs would make us an international leader in achieving excellent health outcomes.

However, there are some ethnic groups who experience particularly specific health inequities and/or disparities that impact on their health outcomes. Such risk factors include settlement and/or resettlement determinants, equity of access to health services, early and timely access to and utilisation of culturally appropriate health services, burden of lifestyle-associated risk factors, language, and awareness of the health & disability system.

We are highly committed to achieving and maintaining equitable health outcomes for the multiple, varied population groups in Auckland as part of this three-year Health Plan, and look forward to working with our many partners who are passionate about ethnic health and wellbeing in this city.

Dr Dale Bramley,

Chief Executive Officer

Waitematā District Health Board

Introduction

New Zealand and specifically Auckland are experiencing a changing and increasing demography of our culturally and linguistically diverse (CALD) ethnic communities from Asian and Middle Eastern, Latin American and African (MELAA) backgrounds who are very diverse in language, culture, traditions and health needs. This Asian, New Migrant, Former Refugee and Current Asylum Seeker Health Plan 2020-2023 reflects the overarching Government theme 'Improving the well-being of New Zealanders and their families' and summarises collective business as usual initiatives across the "Funder" (Waitematā and Auckland District Health Boards (DHB)) and Waitematā DHB's Asian Health Services (AHS) provider arm that represents existing work specific to Asian, new migrant[1], former refugee[2], and current asylum seekers.

Although some Asian groups experience high life expectancy and overall good health status, there are health disparities experienced for priority Asian & MELAA groups that require targeted effort. The focus of the Plan aims to prioritise effort to:

- Improve health outcomes where there are health inequalities
- Increase equity of access to and utilisation of health services, and
- Continue to fund equity of access to primary healthcare services for former refugee and current asylum seeker background populations.

Our Focus

The Plan focuses on key health areas identified from: i) 2019 Health Needs Assessments (Waitematā[3] and Auckland[4] DHBs), ii) 2017 International Benchmarking of Asian Health Outcomes for Waitematā and Auckland DHBs report[5] (Appendices 1&2), iii) Asian, Migrant & Refugee Health Plan 2017-2019[6] (Waitematā and Auckland DHBs), iv) Consultation with the Metro Auckland Asian & MELAA Primary Care Service Improvement Group, v) Health service utilisation data, vi) Feedback from engagement with partners and stakeholders, and vi) Aligning to common Counties Manukau Health's population priorities for health equity. The following top four higher level areas for action in this Plan are:

i. **Capability and capacity building:** Granular data monitoring to level 4.
   - Making sure our data tells us about the subgroups we're interested in.

ii. **Access:** Equity of access and utilisation of healthcare services:
   - Awareness of the New Zealand Health & Disability System

[1] A new migrant for the purpose of this Plan is considered living in New Zealand less than 2 years.
[2] Information about refugee and protection. Accessible online from https://www.immigration.govt.nz/about-us/what-we-do/our-strategies-and-projects/supporting-refugees-and-asylum-seekers/refugee-and-protection-unit
[3] Accessible online from http://www.waitematadhb.govt.nz/assets/Documents/health-needs-assessments/Health-Needs-Assessment-Waitemata-DHB-2019.pdf
[4] Accessible online from https://adhb.health.nz/assets/Documents/About-Us/Planning-documents/ADHB-Health-Needs-Assessment-2017.pdf
[5] Accessible online from http://www.waitematadhb.govt.nz/dhb-planning/health-needs-assessments/international-benchmarking-of-asian-health-outcomes-for-waitemata-and-auckland-dhbs/
[6] Accessible online from www.waitematadhb.govt.nz/dhb-planning/health-plans/

- PHO enrolment (eligible new migrants, (**equity of access)** to former refugees, and babies at 3 months) and lower access to primary health services
- Better management of long term conditions (**equity of access**) to cardiovascular disease – Indian and South Asian; diabetes – Chinese and South East Asian (Filipino)
- Mental health and addictions (youth, (**equity of access)** to perinatal maternal mental health)
- Immunisations (HPV, 5 year event, Influenza over 65 years), and
- Preschool oral health (Chinese, Filipino and Middle Eastern).

iii. Health promotion/prevention including culturally tailored and/or targeted preventive healthy lifestyle activities.

iv. Adopting a partnerships approach to engage segments of the population i.e. students, former refugees and current asylum seekers in awareness raising of health services and health education; and collaborative work with Asian & MELAA ethnic consumers.

Strategic Approach

We will align our efforts in this Plan to national, regional and local directions (Appendix 3).

Governance

This Plan will be managed by the Asian, Migrant and Former Refugee Health Gain Manager, and overseen by the Asian & MELAA Health Governance Group (Waitematā and Auckland DHBs). Progress updates will be shared with the Community & Public Health Advisory Committee (CPHAC) and Auckland DHB Funder. A quarterly Asian scorecard (Appendix 4) will guide monitoring on progress of the key areas of focus where data is available. Successful implementation of the Plan will require collaboration across the three metropolitan DHBs (where appropriate), and the health and community sectors.

Limitations and risks

There are limitations to this Plan largely due to the challenges when needing to plan in a fiscally constrained environment where funding must be applied to those populations with the greatest need – ie. Maori and Pacific in the first instance. This necessarily impacts on the activities chosen and the need to work innovatively and collaboratively to improve the health outcomes for 'targeted' Asian and MELAA groups and foreseeable risk factors such as a rapidly growing diverse population, ageing population, and waning 'healthy migrant effect'.

Te Tiriti o Waitangi

Waitematā and Auckland DHBs recognise and respect Te Tiriti o Waitangi as the founding document of New Zealand. Te Tiriti o Waitangi encapsulates the fundamental relationship between the Crown and Iwi. The four Articles of Te Tiriti o Waitangi provide a framework for Māori development, health and wellbeing by guaranteeing Māori a leading role in health sector decision making in a national, regional, and whānau/individual context. The New Zealand Public Health and Disability Act 2000 furthers this commitment to Māori health advancement by requiring DHBs to establish and maintain a responsiveness to Māori while developing, planning, managing and investing in services that do and could have a beneficial impact on Māori communicates.

Te Tiriti o Waitangi provides four domains under which Māori health priorities for Waitematā and Auckland DHBs can be established. The framework recognises that all activities have an obligation to honour the beliefs, values and aspirations of Māori patients, staff and communities across all activities.

Article 1 – Kawanatanga (governance) is equated to health systems performance. That is, measures that provide some gauge of the DHBs' provision of structures and systems that are necessary to facilitate Māori health gain and reduce inequities. It provides for active partnerships with mana whenua at a governance level.

Article 2 – Tino Rangatiratanga (self-determination) is in this context concerned with opportunities for Māori leadership, engagement, and participation in relation to DHBs' activities.

Article 3 – Oritetanga (equity) is concerned with achieving health equity, and therefore with priorities that can be directly linked to reducing systematic inequities in determinants of health, health outcomes and health service utilisation.

Article 4 – Te Ritenga (right to beliefs and values) guarantees Māori the right to practice their own spiritual beliefs, rites and tikanga in any context they wish to do so. Therefore, the DHBs have a Tiriti obligation to honour the beliefs, values and aspirations of Māori patients, staff and communities across all activities.

These guiding principles are applicable to our diverse Asian, new migrant, former refugee, current asylum seeker and international student communities as they contribute to cultural safety and in particular, their contribution to positive health outcomes and experience of care.

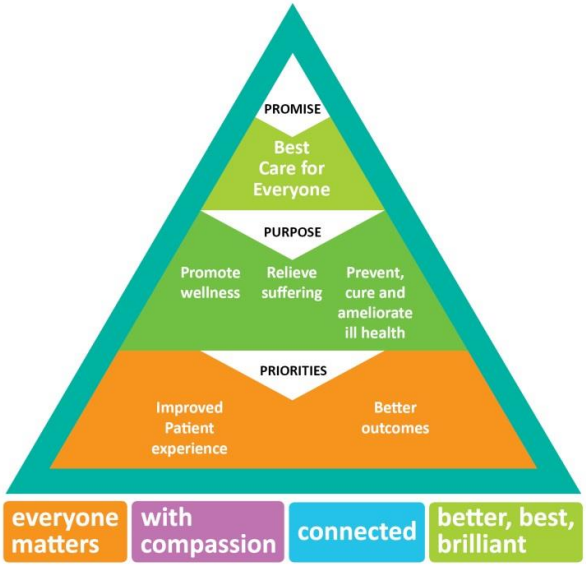
Our Decision Making Kaupapa

Waitemata DHB strategic direction

Best care for everyone

Our promise, purpose, priorities and values are the foundation for all we do as an organisation.

- Our **promise** is that we will deliver the **'best care for everyone'**. This means we strive to provide the best care possible to every single person and their family engaged with our services. We put patients first and are relentless in the pursuit of fundamental standards of care and ongoing improvements enhanced by clinical leadership.
- Our **purpose** defines what we strive to achieve, which is to:
  - Promote wellness
  - Prevent, cure and ameliorate ill health
  - Relieve suffering of those entrusted to our care.



- We have two **priorities**:
  - Better outcomes
  - Patient experience.

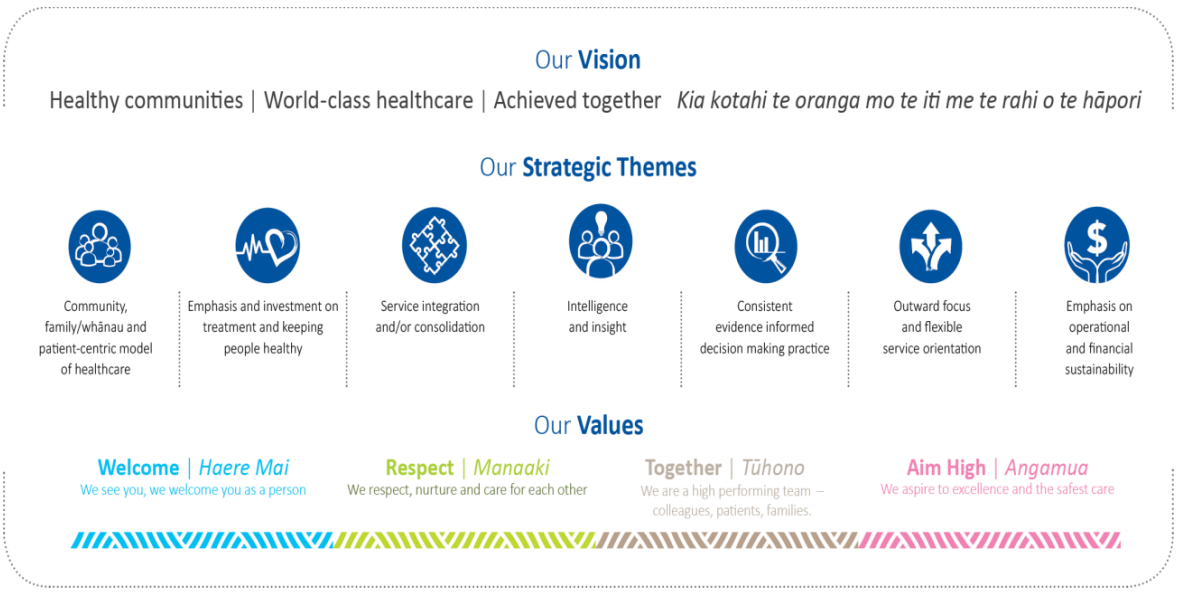
The way we plan and make decisions and deliver services on a daily basis is based on our **values** – **everyone matters; with compassion; better, best, brilliant** and **connected**. Our values shape our behaviour, how we measure and continue to improve.

To realise our promise of providing 'best care for everyone' we have identified seven **strategic themes** outlined below. These provide an overarching framework for the way our services will be planned, developed and delivered.

Auckland DHB strategic direction

Our **vision** is *Healthy Communities, World-class Healthcare, Achieved Together*. This means we are working to achieve the best outcomes for the populations we serve, people have rapid access to healthcare that is high quality and safe, and that we work as active partners across the whole system with staff, patients, whānau, iwi, communities, and other providers and agencies.

Our **strategic themes** outlined below provide an overarching framework for the way our services will be planned, delivered, and developed to deliver our vision. Our **values** shape our behaviour and describe the internal culture that we strive for.



Our Partners

Waitematā and Auckland DHBs acknowledge that maintaining national and international leadership in Asian health requires strong collaborative partnerships. This means a committment to working with with and alongside communities, government agencies, Primary Health Organisations (PHO), Non-Governmental Organisations (NGO), health and social service providers, academia, institutes, associations, and settlement/resettlement agencies; and learning from our regional health colleagues across the Auckland region and nationally.

The Asian, migrant and former refugee health gain team are actively working with Counties Manukau Health and other regional Asian, migrant and former refugee health leaders to learn and share best practice and collaborate where we can to improve targeted disparities collectively. This includes coordinating and leading governance platforms such as the Asian & MELAA Health Governance Group (Waitematā and Auckland DHBs); Metro Auckland Asian & MELAA Primary Care Service Improvement Group; and contributions to other mainstream groups (where appropriate). We also lead and coordinate other key professional groups such as the Metro Auckland Regional Former Refugee Health Network Executive Group; and Metro Auckland PHO Former Refugee Services Operatonal Group.

The Asian Health Services (Waitematā DHB) continues to be an important local partner to support the health of Asian patients and their families within the Waitematā district provider arm services. We will work in partnership with the Asian Health Services.

A significant national service is the eCALD[7](Culturally and Linguistically Diverse) programme of courses and resources to support the health workforce to develop their cultural competence for working with CALD patients, clients, families and colleagues. We will cross-promote cultural competency courses to our health partners.

Engagement with interpreters services is key to enable access to essential language support to CALD patients who use DHB funded health services and primary health services. We will promote access to our in-house interpreter services.

Community engagement with Asian, migrant, former refugee, current asylum seeker and international student partners and communities is essential to enable them to participate in, or provide feedback on planning, policies and services is so that DHB activities are reflective of the community's ethnically and culturally diverse population. We will work with Waitematā DHB's Community Engagement Manager, and other DHB colleagues.

An overarching enabler is patient experience which aims to improve the care our population receives, engage people as partners in their care and provide services that are responsive to the individual and cultural needs of patients and their whānau. We will work with Waitematā DHB's Patient Experience Team, and support Auckland DHB's efforts for Asian and MELAA patients.

[7] Accessible online from http://www.ecald.com/

The People We Serve

‘Asian’ as defined in New Zealand

The New Zealand health and disability sector classifies ethnicity data according to the Ministry of Health protocols. The term ‘Asian’ used in the New Zealand Census and related data sets, refers to people with origins in the Asian continent, from China in the north to Indonesia in the south and from Afghanistan in the West to Japan in the East. This differs from the definition used in other countries such as the United Kingdom or the United States of America.

This definition includes over 40 sub-ethnicities and these communities have very different cultures and health needs. Reviewing health data using this broad ‘Asian’ classification is problematic if the health status of Chinese, Indian and Other Asian communities is averaged. The risk is that averaged results can appear ‘healthy’, but potentially masks true health disparities such as cardiovascular disease and diabetes in sub-ethnicity groups. Furthermore, many people classified as being ‘Asian’ do not identify with the term which may lead to under-utilisation of ‘Asian’ targeted services.

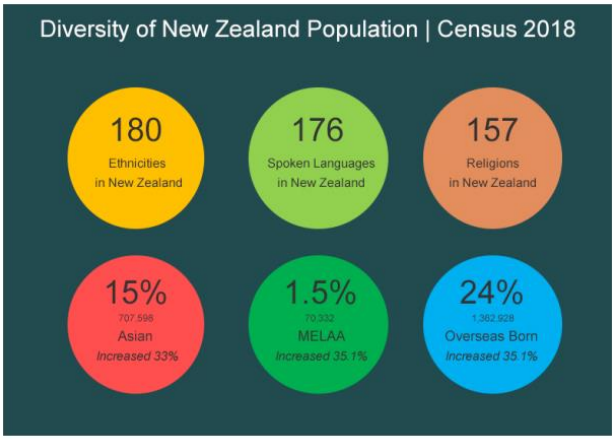
‘MELAA’ as defined in New Zealand

The Middle Eastern, Latin American and African (MELAA) populations ethnicity grouping consists of extremely diverse cultural, linguistic and religious groups. There are two key challenges for planners and funders of services to MELAA groups with respect to collecting and reporting ethnicity, 1. Reports only capture MELAA at level 1 ‘Other’ category, and 2. Reports capture MELAA as a single aggregated ethnic group output at level 2 category which is problematic to inform, plan, and monitor services that target the unique needs of the Middle Eastern, Latin American and African ethnic groups separately.

Changing Demography

Diversity of New Zealand population

Across New Zealand our diverse Asian and new migrant communities are growing faster than any other population group based on the Census 2018. The Asian population is the 3rd largest major ethnic group in New Zealand, making up 15% of the New Zealand population (707,598), which almost doubled in size since 2001.



Source: Ecald, Census 2018

Auckland and Waitematā

Asian

While there was an increase in the proportion of Asians living in every region in the Census 2018, the biggest growth occurred in the metro Auckland region. In 2018, the Asian population was made-up of 28% of the total population across the region and for Auckland and Waitematā Asian constitutes 35% (191,300) (Auckland DHB) and 23% (147,210) (Waitematā DHB)[8].

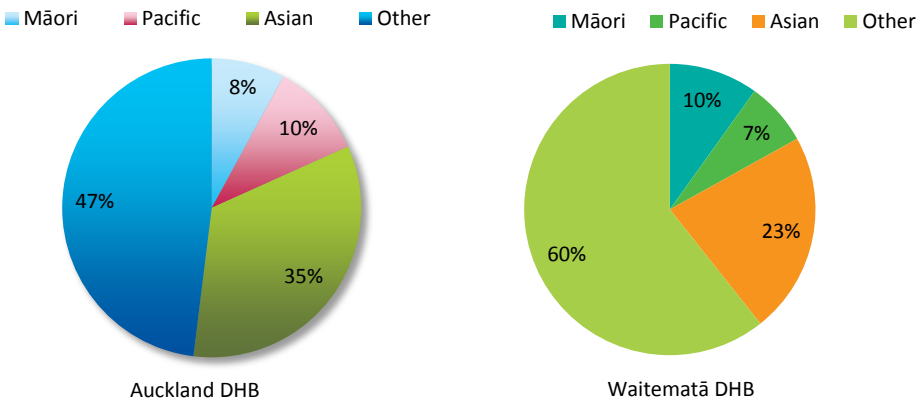


Figure 1: Ethnicity of Auckland DHB and Waitematā DHB populations, 2018/19
Source: Based on Census 2013, '2018 Update' by Stats NZ

Metro Auckland's population is growing and changing with more than 180 ethnicities living in the city, almost 40% of Aucklanders were not born in New Zealand. In the last 15 years the greatest increase of any ethnic group has been in those of Asian origin, principally first from China, India, then Korea, however more recently the Philippines with significant population growth in Waitematā DHB. Filipinos are the third largest ethnic group in Auckland DHB and will soon overtake Korean in Waitematā. The top five in-demand languages in both DHBs in 2018/19 are outlined in table 1. Access to language support and culturally appropriate information and services are key.

Table 1: Top five in-demand languages in Auckland DHB and Waitematā DHB, 2018/19

	Auckland DHB	%	Waitematā DHB	%
1	Mandarin	35	Mandarin	38
2	Cantonese	17	Korean	16
3	Tongan	8	Cantonese	10
4	Samoan	6	NZ Sign Language	5
5	Korean	5	Samoan	3

[8] Projected population by ethnicity (prioritised), 2019/20 financial year. Based on Census 2013, '2018 Update' by Stats NZ

By 2025, Asian is expected to grow to make-up 38% (Auckland DHB) and 26% (Waitematā DHB) of the total population across the metro DHBs. Socio-demographic and health status information tells us that life in New Zealand is changing for these communities.

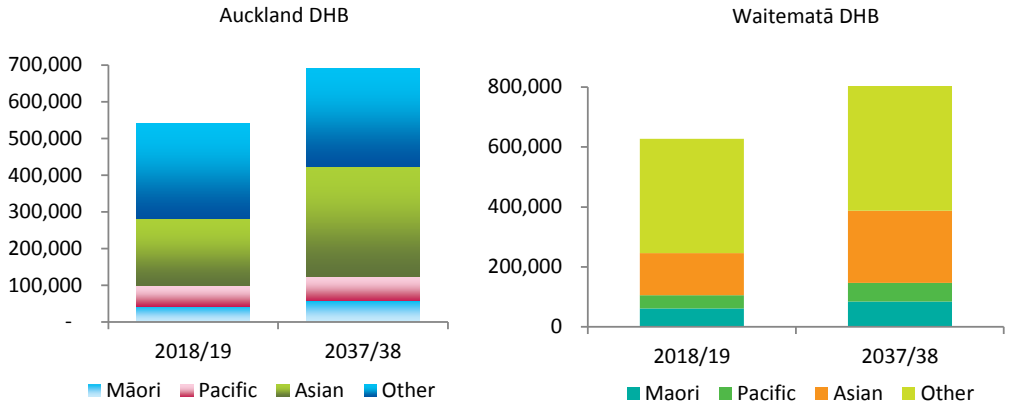
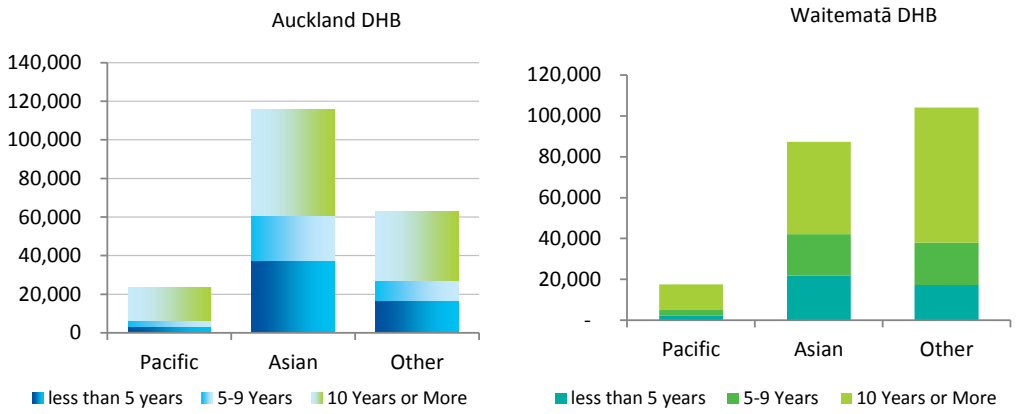


Figure 2: Projected change in Auckland DHB and Waitematā DHB populations by ethnicity, 2037/38
Source: Census 2013

Migrants

We know that New Zealand and Auckland are the destination of choice for many new migrants both permanent and temporary. Both Auckland and Waitematā DHBs have a large migrant population with Filipinos the fastest growing ethnic group. Two out of five (42%) Auckland and over a third (37%) Waitematā residents were born overseas (compared to 25% nationally). In Auckland, this includes 63,113 peoples of European/Other ethnicity, 23,486 Pacific peoples and 115,700 Asian peoples; as a percentage, 82% of Asian peoples, 45% of Pacific peoples and 27% of peoples of European/Other ethnicity. Of these migrants, 28% have lived in New Zealand less than 5 years. Census 2018 highlights that 70% of new migrants live in Auckland DHB.[9]

In Waitematā, this includes 104,077 peoples of European/Other ethnicity, 17,539 Pacific peoples and 87,356 Asian peoples; as a percentage, 81% of Asian peoples in Waitematā were born overseas, 43% of Pacific peoples and 29% of peoples of European/Other ethnicity. Of these migrants, 20% have lived in New Zealand less than 5 years.



[9] Census Usually Resident, CUR

Figure 3: Number of migrants living in Auckland DHB and Waitematā DHB by duration of residence 2013
Source: Census 2013 Usually Resident population

Other than ethnic origins, the people grouped under the generic label of 'Asian' are very diverse in health status, health beliefs and practices, housing, geographical distribution, migration history, English language proficiency and socioeconomic status.[10]

These factors alongside available services and community networks impact how we monitor population health, design and deliver supporting health services. While the three metropolitan Auckland DHBs are committed to collaboration, each will need to complement these activities with a focus on specific health improvement actions that are specific to local population needs.

Former refugees and current asylum seekers

Conversely, although some ethnic groups may have arrived on these shores as a new migrant by 'choice', refugees and current asylum seekers (and their families) have come to New Zealand asking for refuge and protection.[11] Auckland has been home to former refugees from Africa, the Middle East and Asia since the 1980s. Former refugees have come from countries including Cambodia, Vietnam, Laos, Iraq, Iran, Somalia, Ethiopia, Eritrea, Rwanda, Burundi, Sudan, Sri Lanka, Congo, Afghanistan and Burma. More recently, there have been an increasing number of Quota refugees[12] who are Myanmarese (Rakhine, Chin, Kachin, Burmese, Karen, Mon, Karenni, Shan), African (Somali, Eritrean, Ethiopian) and Middle Eastern (Afghani and Persian) who have/are resettling in the Auckland region.

In September 2018, the New Zealand government announced the annual refugee quota would increase to 1,500 from July 2020. The delivery of government funded health services for quota refugees will change from 2020 as a result of this quota increase[13]. A national Quota Refugee Health Services Model will roll out across the country. Auckland and Waitematā DHBs are working closely with Immigration New Zealand (INZ) and Ministry of Health (MoH) to support the implementation of the onshore health services with a key focus on primary care as an enabling setting.

In 2018/19, there were 510 claims for refugee and/or protected person status with INZ's Refugee Status Unit - of which 153 asylum seeker[14] claims were approved largely from Asian and Middle Eastern countries (MBIE, 2019).[15]

[10] Suneela Mehta, *Health Needs Assessment of Asian people living in the Auckland Region* (Auckland: Northern DHB Support Agency, 2012).
[11] Lifeng Zhou and Samantha Bennett, *International Benchmarking of Asian Health Outcomes for Waitemata DHB and Auckland DHB*. (Auckland: Waitemata District Health Board, 2017).
[12] A person who has entered New Zealand under the United Nations High Commissioner for Refugees mandated quota system.
[13] The Refugee Quota Increase Programme (RQIP). Accessible online from https://www.immigration.govt.nz/about-us/what-we-do/our-strategies-and-projects/refugee-resettlement-strategy/rqip
[14] A current asylum-seeker is someone whose request for sanctuary has yet to be processed.
[15] There are over 500 claims for refugee and protected person status per year (INZ, 2019)

Top five claims by nationality are:
1. China, 2. India, 3. Sri Lanka, 4. Iran, and 5. Saudi Arabia (Figure 4).[16]

Top five approvals by nationality were:
1. China, 2. Iran, 3. Saudi Arabia, 4. Egypt, and 5. Russia.

Top five in-demand languages are:
1. Mandarin, 2. Arabic, 3.Spanish, 4.Dari/Farsi, and 5.Turkish.

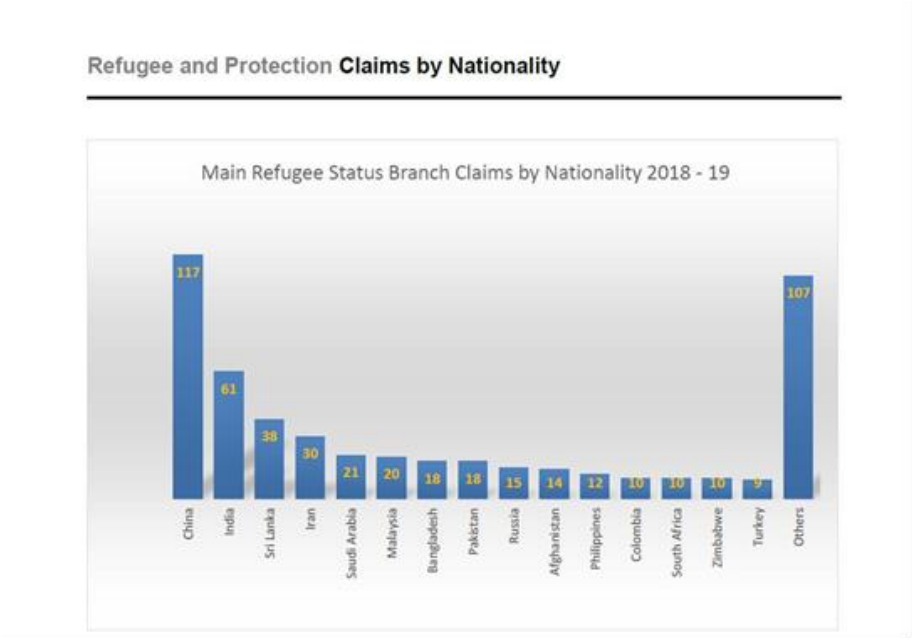


Figure 4: Main Refugee Status Branch Claims by Nationality, 2018/19
Source: Immigration New Zealand, 2019

From what is available, we know that former refugees and asylum seekers arrive with unique health care needs including: musculoskeletal and pain issues; poor oral health; longstanding undiagnosed chronic conditions; infectious diseases; neglected injuries; and mental health problems including Post-Traumatic Stress Disorder (PTSD); depression; and anxiety. Many conditions often require long term management and support at both a primary or secondary care level. Although, the health profile of an asylum seeker may vary from that of a former refugee individual, language support is a key enabler to positive health outcomes for these vulnerable groups.

Furthermore, individuals from transgender, non-binary and gender diverse backgrounds are among those who are seeking refugee and protection status, and require equitable access to primary care services in the first instance. The majority of claimants are living in the Auckland region and require early access to and utilisation of culturally appropriate health services in particular primary care, and language support.

[16] Accessible online from
https://www.immigration.govt.nz/documents/statistics/rsbrefugeeandprotectionstatpak.pdf

International students

In 2018, our International student numbers reached 68,004 in Auckland (INZ & MOE, 2018). The majority of students live in the Auckland CBD and inner fringe suburbs close to city based institutes. A key outcome indicator within the New Zealand International Student Wellbeing Strategy aims to ensure that International students are aware of and can access effective and culturally appropriate healthcare.[17] Areas of concern for students include timely access to health services; mental health and wellbeing; and sexual and reproductive health.[18]

Middle Eastern, Latin American and African populations

According to Census 2018 (Census Usually Residents population, CUR) the MELAA populations was made up of 1.5% of the total population (70,332) in New Zealand, and were the fastest growing ethnic groups increasing by 35.1%. In the metro Auckland region, MELAA constitutes 2.2% of the total population[19] (Tables 2-4) and has increased 0.3% (10,950) between 2013 to 2018. The Middle Eastern population made up close to half of the MELAA group in the metro Auckland region followed by Latin American at over 30% then African over 20%, however the fastest population growth in the region was in the Latin American communities doubling in population size between 2013 (5,835) and 2018 (11,205) and most significantly in the Auckland DHB catchment.

Similar to Asians, MELAA face significant barriers to accessing health care. In addition, areas of focus to improve health outcomes are long term conditions e.g. CVD/Diabetes; oral health, women's health screening, prevention, and management programmes.

Table 2: MELAA Population by Ethnic Group, Metro Auckland Region, Census 2018 (total response ethnicity, CUR)

MELAA Ethnic Group	Total	%
Middle Eastern	17,103	47.5
African	7,794	21.6
Latin American	11,205	31.1
Total L2 MELAA Responses	35,946	100

Table 3: MELAA Population by Ethnic Group, Waitematā DHB, Census 2018 (total response ethnicity, CUR)

MELAA Ethnic Group	Total	%
Middle Eastern	6,375	48.9
African	2,706	20.7
Latin American	3,999	30.7
Total L2 MELAA Responses	13,023	100

Table 4: MELAA Population by Ethnic Group, Auckland DHB, Census 2018 (total response ethnicity, CUR)

MELAA Ethnic Group	Total	%
Middle Eastern	5,511	38.1
African	3,255	22.5
Latin American	5,763	39.8
Total L2 MELAA Responses	14,454	100

[17] Accessible online from https://education.govt.nz/assets/Documents/Ministry/Strategies-and-policies/internationlStudentWellbeingStrategyJune2017.pdf
[18] Student consultations as part of Auckland Agency Group
[19] Accessible online from https://knowledgeauckland.org.nz/media/1446/melaa-2018-census-info-sheet.pdf

Performance Expectations for 2020-2023

To identify key health inequities as a focus for health planning, we require a comparator population group that shows the **true story of inequities and inequalities**, i.e. what is the gap in health outcomes and scale of health gain we plan for? Waitematā and Auckland DHBs along with Counties Manukau Health have chosen the New Zealand 'European/Other' population as our health equity comparator group. For this reason, our baseline measures and related trend graphs in this Plan reflects this as our "local health equity target" in addition to the national targets reflecting government performance expectations. See appendix 5 for definitions of indicators/measures.

Health Priority Area	Indicators[20]	ADHB Baseline Data Total	ADHB Baseline Data European/ Other	ADHB Baseline Data Asian	WDHB Baseline Data Total	WDHB Baseline Data European/ Other	WDHB Baseline Data Asian	Target 2020-2023 Results
Mātua, Pēpi me Tamariki								
Immunisation	Percentage of babies are fully or exclusively breastfed at 3 months[21]	59%	69% (European)	62%	59%	69% (European)	61%	70%
	Percentage of pregnant women receiving pertussis vaccination in pregnancy	58%	61%	68%	54%	53%	66%	50%
	Percentage of five year olds will have their primary course of immunisation on time	88%	88%	90%	86%	83%	91%	95%
	Percentage of two year olds will have their primary course of immunisation on time	93%	92%	97%	91%	89%	96%	95%
	Percentage of eight month olds will have their primary course of immunisation on time	95%	96%	97%	93%	90%	98%	95%
	Percentage of eligible girls fully immunised with HPV vaccine	75%	83%	63%	57%	54%	63%	75%
Oral Health	Percentage of children aged birth – 4 years enrolled in DHB-funded Community Oral Health Services[21]	91%	111%	82%	95%	106%	95%	95%

[20] Data is Q1 2019/20 unless otherwise stated.
[21] June 2019.

Health Priority Area	Indicators[20]	ADHB Baseline Data Total	ADHB Baseline Data European/ Other	ADHB Baseline Data Asian	WDHB Baseline Data Total	WDHB Baseline Data European/ Other	WDHB Baseline Data Asian	Target 2020-2023 Results
	Percentage of children aged 5 years who are caries free – Asian Ethnicity[22]	58%	81% (European) 45% (MELAA) 55% (African) 65% (Latin American) 44% (Mid-Eastern)	55% (Asian Overall) 52% (Chinese) 61% (Indian) 54% (SE Asian) 59% (Other Asian)	58%	77% (European) 63% (MELAA) 62% (African) 58% (Latin American) 29% (Mid-Eastern)	47% (Asian Overall) 44% (Chinese) 59% (Indian) 38% (SE Asian) 46% (Other Asian)	ADHB 61% WDHB 67%
	Average number of DMFT at year 8 – L1 and L2 Asian and MELAA Ethnicity	0.63	0.36 (European) 0.80 (MELAA Overall) 0.69 (African) 0.74 (Latin American) 0.93 (Mid-Eastern)	0.59 (Asian Overall) 0.58 (Chinese) 0.50 (Indian) 1.08 (Southeast Asian) 0.52 (Other Asian)	0.61	0.49 (European) 1.09 (MELAA Overall) 1.12 (African) 0.39 (Latin American) 1.33 (Mid-Eastern)	0.63 (Asian Overall) 0.67 (Chinese) 0.5 (Indian) 0.83 (Southeast Asian) 0.57 (Other Asian)	ADHB <0.65 WDHB <0.59 at year 8
Rangatahi								
Youth Health	Chlamydia test rate of the youth aged 15-24 years[23]	11.3%	27.4 (Females) 7.7 (Males)	8.1 (Females 1.6 (Males)%	12.4%	25.1% (Females) 5.8% (Males)	10.7% (Females) 1.7% (Males)	6%
	Baseline self-harm hospitalisations (10-24 years) (Rate per 100,000 population)	412	448	202	493	553	158	-
Mātua me Whānau								
Cardiovascular Disease[24][25]	Percentage of eligible population who have had their cardiovascular risk assessed in the last five years	93%	94%	92% (Asian) 92% (Indian)	84%	87%	64% (Asian) 90% (Indian)	90%

[22] Dec 2019. Results for this measure will likely continue to deteriorate as ARDS recently changed their recall timeframe for children with caries, who will be seen more often (6-monthly) than those who are caries free (18-monthly).
[23] Q2 2019.
[24] No data going forward.
[25] To align with 2018 Ministry of Health Cardiovascular Disease Risk Assessment and Management for Primary Care Guidelines, South-Asians include: Indian, including Fijian Indian, Sri Lankan, Afghani, Bangladeshi, Nepalese, Pakistani and Tibetan.

Health Priority Area	Indicators[20]	ADHB Baseline Data Total	ADHB Baseline Data European/ Other	ADHB Baseline Data Asian	WDHB Baseline Data Total	WDHB Baseline Data European/ Other	WDHB Baseline Data Asian	Target 2020-2023 Results
	CVD Secondary Prevention: Percentage of enrolled patients with known cardiovascular disease who are on triple therapy (Statin + BP lowering agent + Antiplatelet/Anticoagulant)[26]	62%	61%	62% (Asian NFD) 57% (Chinese) 70% (Indian) 62% (Other Asian) 56% (South East Asian)	61%	61%	59% (Asian NFD) 55% (Chinese) 65% (Indian) 57% (Other Asian) 64% (South East Asian)	70%
	CVD Primary Prevention: Percentage of enrolled patients with cardiovascular risk ever recorded >20%, (aged 35 to 74 years, excluding those with a previous CVD event) who are on dual therapy (statin + BP Lowering agent)[26]	48%	44%	39% (Asian NFD) 43% (Chinese) 54% (Indian) 50% (Other Asian) 68% (South East Asian)	46%	45%	44% (Asian NFD) 34% (Chinese) 48% (Indian) 33% (Other Asian) 55% (South East Asian)	70%
Diabetes	HbA1c Glycaemic control: Percentage of eligible population with HbA1c ≤ 64mmol/mol recorded in the last 15 months (based on PHO enrolled numerator and denominator)[26]	60%	65%	75% (Asian NFD) 75% (Chinese) 67% (Indian) 69% (Other Asian) 67% (South East Asian)	61%	64%	58% (Asian NFD) 73% (Chinese) 65% (Indian) 68% (Other Asian) 65% (South East Asian)	80%
	Blood pressure control: Percentage of enrolled patients with diabetes (aged 15 to 74 years) whose latest systolic blood pressure recorded in the last 15 months is <140mmHg[26]	65%	64%	73% (Asian NFD) 71% (Chinese) 68% (Indian) 68% (Other Asian) 72% (South	62%	62%	54% (Asian NFD) 65% (Chinese) 65% (Indian) 71% (Other Asian) 78% (South	80%

[26] July 2019 (Metro Auckland data).

Health Priority Area	Indicators[20]	ADHB Baseline Data Total	ADHB Baseline Data European/ Other	ADHB Baseline Data Asian	WDHB Baseline Data Total	WDHB Baseline Data European/ Other	WDHB Baseline Data Asian	Target 2020-2023 Results
				East Asian)			East Asian)	
	Management of Microalbuminuria: Percentage of enrolled patients with diabetes (aged 15 to 74 years) who have microalbuminuria in the last 18 months and are on an ACE inhibitor or Angiotensin Receptor Blocker [26]	72%	75%	74% (Asian NFD) 55% (Chinese) 71% (Indian) 71% (Other Asian) 77% (South East Asian)	76%	78%	85% (Asian NFD) 61% (Chinese) 77% (Indian) 71% (Other Asian) 78% (South East Asian)	90%
Cancer	Percentage of women aged 25–69 years who have had a cervical screening event in the past 36 months (Statistics NZ Census projection adjusted for prevalence of hysterectomies)[27]	62%	74%	50%	70%	72%	69%	80%
Immunisation	Percentage of people aged over 65 years receive free flu vaccinations	52%	51%	58%	51%	51%	53%	75%
	Respiratory infection hospitalisation rate, over 65 years (Rate per 100,000)[28]	1,897	1,665	1,364	12,072	1,994	942	-
Self harm and suicide	Decrease in Asian deaths coded as suicides (Ministry of Health) and provisional suicides (Ministry of Justice), by age[29]	40	23	7	51	36	6	-
	Self-harm hospitalisations 65 years and over by ethnicity (Rate per 100,000 population)	89	88	69	67	68	70	-

[27] Sep 2019.

[28] Respiratory infection hospitalisation rate (per 100,000) by prioritised ethnicity, 65+ yrs, combined females and males, Waitematā and Auckland DHBs, 2018/19.

[29] Annual data from the National Mortality Collection 2016. Numbers may differ from preliminary Coroner reports.

Health Priority Area	Indicators[20]	ADHB Baseline Data Total	ADHB Baseline Data European/ Other	ADHB Baseline Data Asian	WDHB Baseline Data Total	WDHB Baseline Data European/ Other	WDHB Baseline Data Asian	Target 2020-2023 Results
Rōhe o Waitematā me Auckland								
Access To Care	Percentage of the population enrolled in a PHO[30]	83%	90%	71%	92%	93%	94%	95%
	98% of newborns are enrolled with a PHO, general practice by 3 months of age	93%	100%	93%	92%	100%	94%	98%
Patient Experience	Percentage of Asians and MELAA[31] rating overall care as 'Very Good' or 'Excellent' in the ADHB Inpatient and Outpatient surveys	**Inpatient** 85%	**Inpatient** 86% (European /Other)	**Inpatient** 82% (Asian) 84% (Chinese) 78% (Indian)	-	-	-	90%
	Net promoter score on WDHB Friends and Family Test for Asians rating 'extremely likely' to 'recommend our ward to friends and family if they need similar care or treatment'[31]	-	-	-	77	79	85 (Asian) 83 (Chinese) 87 (Indian)	65

[30] Sep 2019.
[31] Annual data 2018/19.

Mātua, Pēpi me Tamariki - Parents, Infants and Children

Good child health is important not only for children and family now, but also for good health later in adulthood. A number of the risk factors for many adult diseases such as diabetes, heart disease and some mental health conditions such as depression arise in childhood. In addition, child health, development and wellbeing have broader effects on educational achievement, violence, crime and unemployment. In 2020-2023, our action focus for Asian & MELAA infants, children and family is on **breast feeding, immunisation (human papillomavirus), healthy weight and good oral health.**

Breastfeeding

Why is this a priority?
Research shows that children who are exclusively breastfed for the early months of life are less likely to suffer adverse effects from childhood illnesses such as respiratory tract infections, gastroenteritis, otitis media, etc. Breastfeeding benefits the health of mother and baby, as well as reducing the risk of Sudden Unexpected Death in Infancy (SUDI), asthma, diabetes and obesity.

Where do we want to get to?

- 70% of Asian babies are fully or exclusively breastfed at 3 months.

DHB	European/Other	Asian*	Target
ADHB	69%	62%	70%
WDHB	69%	61%	70%

**Q4 2018/19. Plunket data only.*

What are we trying to do?
Maintain the number of exclusively or fully breastfed Asian & MELAA babies at 3 months of age.

To achieve this we will focus on:
Continue to promote breastfeeding information and support for Asian & MELAA women.

Who will we work with?
Women, Child and Youth team, Well Child Tamariki Ora (WCTO) Providers, Health Babies Healthy Futures (Asian providers), Asian NGOs, midwives, and ethnic partners/communities.

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Continue to support the Healthy Babies Healthy Futures programme which targets Asian mothers to support them to exclusively breastfeed their babies for the first six months: - Promote the benefits of breastfeeding to 6 months and beyond.	70% of babies are fully or exclusively breastfed at 3 months. Coverage rates for Asian equal to European/Other. 95% of Asian and MELAA infants receive all core WCTO contacts in the first year of life.
	YR 1-YR 3 (Q1-Q4): Support the Metro-Auckland Healthy Weight Action Plan for Children 2017-2020.	
	YR 1-YR 3 (Q1-Q4): Support the development and promotion of breast feeding resources to Asian and MELAA communities.	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

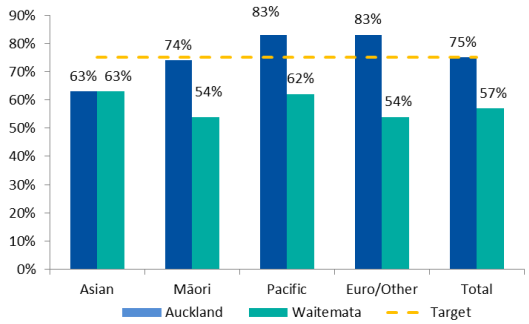
Immunisation - Children

What are we trying to do?

We want up-to-date immunisations for pregnant women and children up to five years. We want MELAA (and Asian) girls and women to be protected against cervical cancer. Screening and immunisation together will offer the most effective protection.

Where are we at and where do we want to get to?

75% of eligible Asian girls are fully immunised with HPV vaccine



** All coverage as at Sep 2019*

Source: MoH Quarterly NIR Report.

Why is this a priority?

Cervical cancer is caused by certain types of HPV.[32] There is no treatment for persistent HPV infections but immunisation is now available to help protect young women against the two common types of high-risk HPV that cause up to 70 percent of cervical cancer.

To achieve this we will focus on:

Ensure MELAA (and Asian) girls and boys (and their families) are aware of availability of the HPV vaccine to support improved uptake of the vaccine.

Who will we work with?

Women, Child and Youth teams, Metro Auckland Asian & MELAA Primary Care Service Improvement Group, WCTO Providers, schools, Asian NGOs, and ethnic partners/communities.

DHB	What are we going to do?	Measures
Auckland/ Waitematā/ Counties Manukau	YR 1-YR 3 (Q1-Q4): Develop and implement the Metro Auckland Asian & MELAA Primary Care Health Action Plan 2020-2023 to engage PHOs and institutes in opportunistic promotion of the HPV vaccination with focus on 'Other' – MELAA groups.	75% of eligible Asian & 'Other' girls are fully immunised with HPV vaccine
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Ensure promotional materials (in priority Asian & MELAA languages) developed by the Ministry of Health are available for the Asian & MELAA communities and promoted in localities where high number of MELAA (and Asian) peoples live.	
	YR 1-YR 2 (Q1-Q4): Explore parent attitudes towards the HPV vaccination for boys and girls amongst African and Middle Eastern groups.	1 report
	YR 1-YR 3 (Q1-Q4): Promote immunisations including five year old event and the pertussis vaccination in pregnancy to Asian & MELAA partners and communities: • Active promotion of culturally appropriate messaging within high enrolled Asian and former refugee general practices • Leveraging on ethnic partner's cultural events, outreach and communication platforms to promote culturally appropriate messaging.	50% of pregnant women receiving pertussis vaccination in pregnancy 95% of eight month olds, two year olds and five year olds will have their

[32] HPV stands for human papillomavirus, a group of very common viruses that infect about four out of five people at some time in their lives. HPV causes cells to grow abnormally, and over time, these abnormalities can lead to cancer.

		primary course of immunisation on time
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

Oral Health

Why is this a priority?

Good oral health practices in the first five years of a child's life are critical for lifelong oral health. Early childhood caries or dental decay remains the most prevalent chronic and irreversible disease in the western world.

In New Zealand, disparities still exist in oral health by ethnicity, deprivation level, and age group. This is evident where South East Asian e.g. Filipino and Chinese children have higher rates of caries and decayed, missing and filled teeth (dmft) at age of 8 years among Asian in both districts. Indian had the best oral health outcomes of all the Asian subgroups in both districts.

For MELAA groups, Latin American have the best oral health outcomes for both dmft and caries free as compared to African and Middle Eastern groups across both districts.

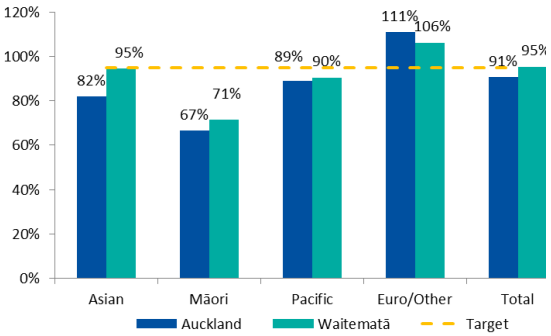
Prevention of oral disease in infants and pre-schoolers reduces the risk of dental, gingival and periodontal disease in permanent teeth and will have positive impact on their long term oral health, general health and well-being.

What are we trying to do?

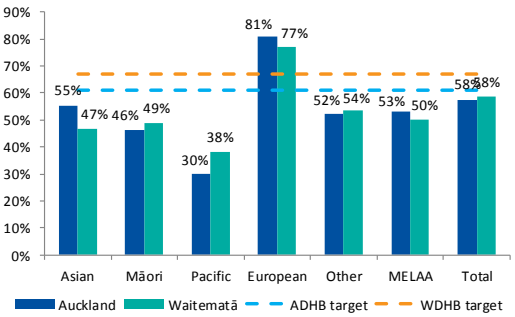
Enable access to health care to reduce inequalities in oral health status for Filipino, Chinese, and Middle Eastern children. This work will also contribute to the Metro-Auckland Healthy Weight Action Plan for Children 2017-2020.

Where are we at and where do we want to get to?

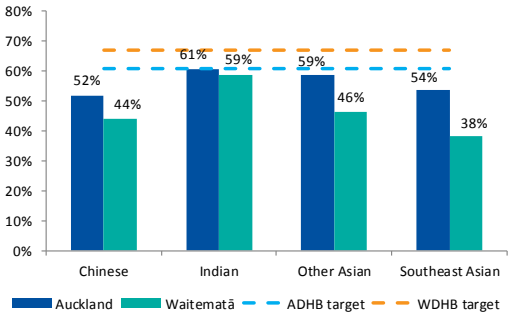
95% of 0-4 year old Asian children enrolled with pre-school oral health services



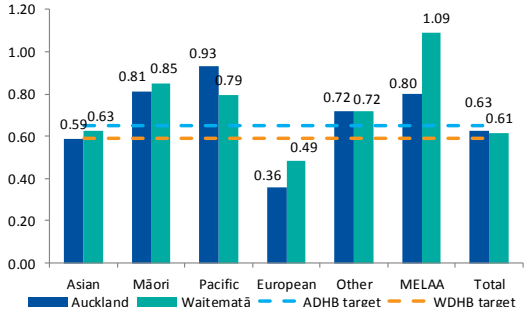
Children caries free at age of 5 years, 2019 – L1 Ethnicity



Children caries free at age of 5 years, 2019 – L2 Asian Ethnicity



Average number of dmft at year 8, 2019 – L1 Ethnicity



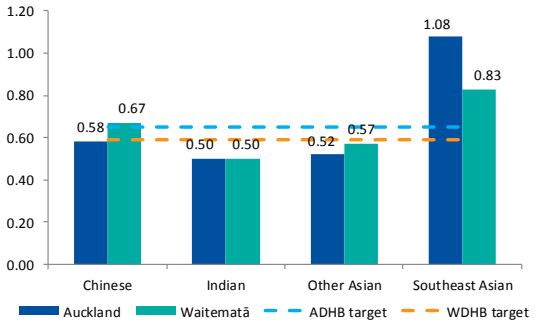
To achieve this we will focus on:

Support the implementation of the Preschool Oral Health Action Plan for Metropolitan Auckland region, and promote oral health messaging to targeted ethnic communities.

Who will we work with?

Auckland Regional Dental Services (ARDS), Women, Child and Youth team, WCTO providers, midwives, Asian NGOs, and ethnic partners/communities.

Average number of dmft at year 8, 2019 – L2 Asian Ethnicity



**All coverage as at June 2019*

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1-YR 3 (Q1-4): Support Asian & MELAA implementation of the: • Preschool Oral Health Action Plan for Metropolitan Auckland region • Metro-Auckland Healthy Weight Action Plan for Children 2017-2020	95% of pre-schoolers enrolled in DHB oral health services 61% (ADHB) and 67% (WDHB) children caries free at the age of 5 years – L2 Asian and Other Ethnicity Average number of dmft at year 8 <0.65 ADHB and <0.59 WDHB – L2 Asian and Other Ethnicity
	YR 1 (Q1-Q4): Publish the study findings from the *Investigating Chinese, Indian, Filipino and Middle Eastern parents' and caregivers' knowledge, attitudes and behaviours towards their child's healthy eating and oral health*	
Auckland/ Waitematā /Counties Manukau	YR 1-3 (Q1-Q4): Work with ARDS to develop or redesign culturally tailored oral health and healthy eating information for Filipino, Chinese and Middle Eastern groups.	
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Engage with ethnic partners and communities to promote culturally appropriate oral health messaging to Indian, Filipino, Chinese and Middle Eastern parents/caregivers and children.	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

Rangatahi – Young People

Good health enables young people to succeed in their studies, opportunities to achieve their dreams and aspirations, and to make meaningful contributions to their families and communities. We are committed to supporting young people living in Waitematā and Auckland DHBs to be healthy, feeling safe and supported. In 2020-2023, our action focus for Asian, new migrant and former refugee young people is on **supporting youth access to - and utilisation of - youth appropriate health services** as part of the System Level Measures Improvement Plan, and other initiatives.

Mental Health & Addictions

Why is this priority?

Findings from the Suicide Mortality Review Committee's *Understanding deaths by suicide in the Asian population of Aotearoa New Zealand report* highlights that suicide is increasing for Asian peoples in Aotearoa New Zealand combined with challenges of their integration and settlement in this country, has implications for social services and the mental health system. The rate of Asian suicide fluctuates but has been slowly rising, from 5.93 per 100,000 in 2007/08 to a high of 8.69 in 2017/18; in 2018/19 the rate was 7.63[33]. Asian self-harm hospitalisations rates (10-24 years) have increased in 2017 (168) and 2018 (202) in Auckland DHB.

Table 5: Self-harm hospitalisations (10-24 years) (Rate per 100,000 population), Auckland and Waitematā DHBs, 2018

Self-harm hospitalisations (10-24 years) (Rate per 100,000 population)						
	ADHB Total	**ADHB Eur/Other**	**ADHB Asian**	**WDHB Total**	**WDHB Eur/Other**	**WDHB Asian**
Rate	412	448	202	493	553	158
Events Number	466	213	77	599	370	39

Those Asian youth are experiencing high rates of mental distress and late presentation for treatment due to a number of factors[3435] such as:

- socio-cultural and familial factors
- stigma and shame to ask for help
- ability to recognise the signs or symptoms of mental distress
- lack of awareness of the health and disability system and not knowing how to access services
- cultural barriers and the need for culturally appropriate services, and
- institutional racism and discrimination, and mental health.

We know that accessing services later can be attributed to level of acculturation and years lived in New Zealand.[36] Edgewalking, substance abuse, discrimination, family pressures about education/study are cited by former refugee youth as reasons for their mental health concerns.

[33] Accessible online from https://www.hqsc.govt.nz/assets/SUMRC/PR/Understanding-deaths-by-suicide-Asian-population.pdf

[34] Accessible online from https://www.asianfamilyservices.nz/uploads/7/5/0/8/75085209/korean_suicide_prevention_resources_development_v8_final_2.pdf

[35] Waitematā DHB, 2019. Asian Youth Suicide Prevention Project #WannaTalk- Asian Youth Life Skills Workshop Evaluation Report.

What are we trying to do?

Reduce self-harm and interpersonal violence amongst Asian & former refugee youth (15-24 years old), and improve their wellbeing through earlier intervention and access to integrated culturally appropriate mental health and additions (MH&A) care.

To achieve this we will focus on:

Support the roll out of the Integrated primary mental health and addiction service, System Level Measures Improvement Plan, and other ethnic targeted initiatives so that young people experience less mental distress and disorder, and are supported in times of need.

Who will we work with?

Northern Regional Alliance, Mental Health & Addictions team, Primary Care team, Asian Health Services (Waitematā DHB), Asian Mental Health Services teams (Waitematā and Auckland DHBs), Metro Auckland Asian & MELAA Primary Care Service Improvement Group, NGO Mental Health Providers, Refugees As Survivors New Zealand, Asylum Seeker Service Trust, Asian NGOs, Auckland Agency Group, Rainbow health services/partners, institutes, student associations, youth agencies, and ethnic partners/communities.

<table>
<tr><th>DHB</th><th>What are we going to do?</th><th>Measures</th></tr>
<tr><td>Auckland/
Waitematā/
Counties Manukau</td><td>YR 1-YR 3 (Q1-Q4): Work with the Metro Auckland Asian & MELAA Primary Care Service Improvement Group to support the:
Roll out of the Integrated primary mental health and addiction service to ensure the initiatives are culturally appropriate.</td><td rowspan="2">Baseline self-harm hospitalisations (10-24 years)

Reduction in suicide rates across ‘at risk’ populations including Asian youth</td></tr>
<tr><td>Auckland/
Waitematā</td><td>YR 1-YR 3 (Q1-Q4): Support the youth-specific actions of the:
Every Life Matters - He Tapu te Oranga o ia Tangata: Suicide Prevention Strategy 2019–2029
Suicide Prevention Action Plan 2019–2024 for Aotearoa New Zealand
Waitematā and Auckland DHB Suicide Prevention and Postvention Action Plan 2020-2023.
Raise awareness of the cultural barriers and nuances that influence low uptake of youth-based mental health services.</td></tr>
<tr><td>Auckland/
Waitematā/
Counties Manukau</td><td>YR 1-YR 3 (Q1-Q4): Support the Auckland Agency Group to provide guidance, from an Auckland perspective, for health initiatives which support achievement of the outcomes of the International Education Strategy regarding international student experience and wellbeing.</td><td></td></tr>
<tr><td>Auckland/
Waitematā</td><td colspan="2">Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.</td></tr>
</table>

[36] Accessible online from https://www.hqsc.govt.nz/assets/SUMRC/PR/Understanding-deaths-by-suicide-Asian-population.pdf

Sexual and Reproductive Health

Why is this priority?

Sexual and reproductive health is a taboo subject among many Asian cultures. Religious, cultural, financial, language, embarrassment, stigma, shame, confidentiality issues and lack of health education are often barriers preventing Asian young peoples accessing sexual and reproductive health services. These issues extend out to gender identity and transgender needs for young people who are more likely to have limited family understanding and support for their needs.

In relation to international students, host countries have a degree of pastoral responsibility to their students. It is well documented that international students have a higher need for mental health and sexual health due to the change in environment and the limited exposure some students have to sex and relationship education in their country of origin. To compound this issue, travel and medical insurance products to international students - in relation to coverage for sexually transmitted infections (STI) testing and treatment in general practice - is limited. This results in the underutilisation and late access to treatment.[37]

What are we trying to do?

Young people are less likely to see a family doctor (GP) each year than older adults. Promote opportunistic preventive care at every family doctor (GP) visit and STI testing in sexually active young people, irrespective of symptoms in settings such as universities.

To achieve this we will focus on:

Support monitoring of trends in STIs such as chlamydia, gonorrhoea, syphilis and HIV. Work with partners to support gender diverse youth and families through a Community Engagement approach. We hope to increase understanding within these communities of the needs of young people and to reduce the social stigma and isolation experienced by them.

Who will we work with?

Auckland DHB's Transgender Health Worker, Primary Care team, Auckland Sexual health Services Metro Auckland Asian & MELAA Primary Care Service Improvement Group, Auckland Agency Group, Asian NGOs, Body Positive, NZ Aids Foundation, Rainbow Youth, Transgender groups and networks, student associations, institutes, youth agencies, and ethnic partners/communities.

DHB	What are we going to do?
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Monitor STI trends for Asian (and if possible by visa/immigration status) via: • Syphilis Weekly IMT Report • ESR STI Surveillance Dashboard[38]
	YR 1-YR 3 (Q1-Q4): Support engagement with Auckland DHB's Transgender Health Worker, and Transgender groups and

[37] Accessible online from https://www.health.govt.nz/new-zealand-health-system/eligibility-publicly-funded-health-services/guide-eligibility-publicly-funded-health-services/eligibility-limited-range-publicly-funded-health-services-0/people-receiving-treatment-infectious-diseases

[38] Accessible online from https://www.esr.cri.nz/our-services/consultancy/public-health/sti/

DHB	What are we going to do?
	networks.
	YR 1-YR 3 (Q1-Q4): Support the Auckland Agency Group to provide guidance, from an Auckland perspective, for health initiatives which support achievement of the outcomes of the International Education Strategy regarding international student experience and wellbeing.
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.

Mātua me Whānau– Adults and Family Group

Adults and older people face different health issues than younger people. Diabetes, heart disease, cancer, and mental health and addictions are some of the conditions adults experienced. We are committed to supporting adults and older people living in our districts to be healthy, and managing their health conditions well. This supports them to look after their loved ones, enjoy lives with them, succeed in careers, and see their grandchildren grow up. In 2020-2023, our action focus for Asian & MELAA adults and their families is on **cardiovascular disease management, diabetes management, mental health and addictions, health of older people and immunisation (over 65 years).**

Long Term Conditions – Cardiovascular Disease and Diabetes

Why is this a priority?

Equity of health outcomes and improved health outcomes for people with diabetes including Asian is a priority for the Diabetes Service Level Alliance.

Cardiovascular disease is one of the leading causes of death among Asian peoples. In particular, Indian people have a higher prevalence of risk factors associated with CVD, and Indian aged 35 to 74 years had higher CVD hospitalisation rates as compared to the European/Other group in Auckland and Waitematā DHBs.[39]

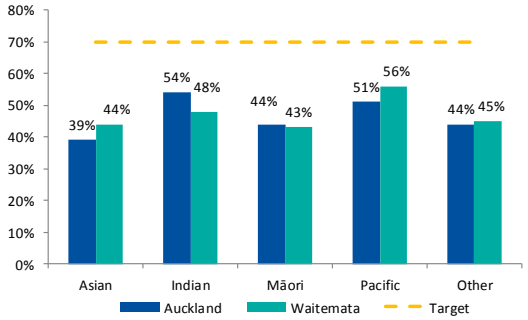
Maintaining the number of eligible Indians who receive a CVDRA, improving management for Indian with CVD and diabetes management for Other Asian and South East Asian are areas of focus in this Plan.

What are we trying to do?

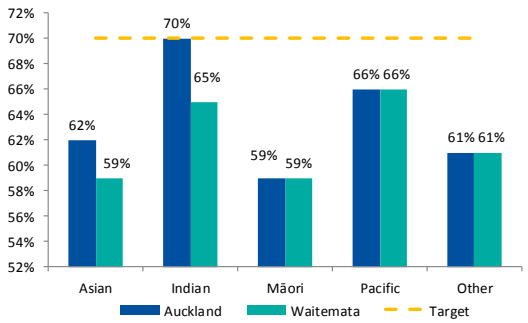
Reduce cardiovascular disease related morbidity and mortality among Indian people via improved access to quality cardiovascular and diabetes care. Improve diabetes management for Other Asian and South East Asian.

Where are we at and where do we want to get to?

CVD Primary Prevention: Percentage of enrolled patients with cardiovascular risk ever recorded >20%, (aged 35 to 74 years, excluding those with a previous CVD event) who are on dual therapy (statin + BP Lowering agent)



CVD Secondary Prevention: Percentage of enrolled patients with known cardiovascular disease who are on triple therapy (Statin + BP lowering agent + Antiplatelet/Anticoagulant)



**All coverage as at July 2019 (prescribed)*

[39] Mehta S, Health needs assessment of Asian people living in the Auckland region. Auckland: Northern DHB Support Agency, 2012.

To achieve this we will focus on:

The Auckland and Waitematā DHBs have an established Alliance agreement with the PHOs across both districts and the two Memorandum of Understanding partners. Diabetes and cardiovascular disease have been identified by the Alliance Leadership Team as the priority areas in the Alliance Work Plan.

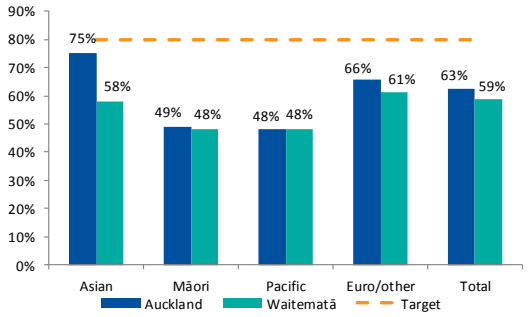
Cardiovascular disease management includes both secondary prevention (active triple therapy prescription in the past 6 months to patients who have had a CVD event – excluding haemorrhagic stroke) and primary prevention (prescribed dual therapy in the past 6 months to patients aged 35 – 74 years with a CVD risk score > 20%). Supporting the Transforming Diabetes Care Roadmap 2018 with the aim of equity of health outcomes and improved health outcomes for people with diabetes.

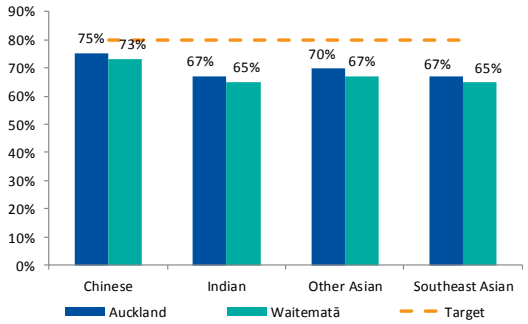
Who will we work with?

Northern Regional Alliance, Primary Care team, Metro Auckland Asian & MELAA Primary Care Service Improvement Group, Asian Health Services (Waitematā DHB), Asian NGOs, Green Prescription providers, and ethnic partners/communities.

Where are we at and where do we want to get to?

HbA1c Glycaemic control: Percentage of eligible population with HbA1c ⩽ 64mmol/mol recorded in the last 15 months (based on PHO enrolled numerator and denominator) 29





All coverage as at July 2019 (prescribed)

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1-YR 3 (Q1-4): Improve Heart Health: • Continue to perform CVDRA checks with eligible South-Asian[40] and Asian groups. • Implementation of updated CVDRA guidelines to ensure best practice, including lifestyle and exercise guidance.	90% CVDRA coverage for South-Asian and Asian 70% of CVD patients on triple therapy 70% of CVD risk patients on dual therapy
	YR 1-YR 3 (Q1-4): Support the Transforming Diabetes Care Roadmap 2018:	1 report

[40] To align with 2018 Ministry of Health Cardiovascular Disease Risk Assessment and Management for Primary Care Guidelines, South-Asians include: Indian, including Fijian Indian, Sri Lankan, Afghani, Bangladeshi, Nepalese, Pakistani and Tibetan. -Eligible age range change for Maori, Pacific or South Asian peoples: Men - Age 30 yrs (previously 35 yrs); Women – Age 40 yrs (previously 45 yrs)

DHB	What are we going to do?	Measures
	• Coordinate and facilitate one Asian focus group to better understand the experiences of people who live with Type 2 Diabetes.	80% of diabetes patients have good HbA1c glycaemic control 80% of diabetes patients have good blood pressure control 90% of diabetes patients with microalbuminuria are under management
	YR 1-YR 3 (Q1-4): Support the recommendations from the retinal screening review consistently across Auckland and Waitemata DHBs.	
	YR 1-YR 3 (Q1-4): Support the implementation of the Metro Auckland Foot Screening and Community Foot Protection Service Standards- 2019 across Auckland and Waitemata DHBs	
	YR 1-YR 3 (Q1-4): Ensure Asian peoples are accessing podiatry, dietetics and health psychology at the same rates as other ethnicities by providing these services in community based settings.	% of Asian peoples accessing podiatry, dietetics and health psychology* **Waitematā only*
	YR 1-YR 3 (Q1-4): Increase the proportion of South Asian participants enrolled with Green Prescription services.	2% of clients engaged with Green[41] Prescriptions - 9% Waitematā - 18% Auckland
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

[41] As at June, 2019, Auckland (17.2%, 758 people); Waitematā (6%, 332 people).

Mental Health & Addictions

Why is this a priority?

Asian peoples in Auckland have significantly lower rates of access to Perinatal Maternal Mental Health services (PMMH), and Mental Health & Addiction services compared to other ethnic groups, despite a high and increasing burden of mental health issues.

What are we trying to do?

Improve early access rates to PMMH services, and MH&A services.

In Waitematā DHB, there is an Asian Mental Health Work Stream Plan 2017-2020 which has been developed in alignment to the Waitematā Stakeholder Network Mental Health and Addiction Strategic Plan 2015-2020.

The Asian Mental Health Work Stream Plan includes initiatives that enable Waitematā DHB mental health services to demonstrate cultural capability and improve the equity and wellbeing of Asian peoples through better access to MH&A Services.

To achieve this we will focus on

Support the Regional Perinatal and Infant Mental Health Clinical Governance Group, Collaborative Primary Mental Health and Addictions Nurse Credentialing Programme Governance Group, Waitematā Stakeholder Network Mental Health and Addiction Strategic Plan, and Auckland DHB's Mental Health and Addictions Commissioning Board.

Who will we work with?

Northern Regional Alliance, DHBs, Mental Health & Addictions team, Primary Care team, Asian Health Services (Waitematā DHB), Asian Mental Health Services teams (Waitematā and Auckland DHBs), Metro Auckland Asian & MELAA Primary Care Service Improvement Group, Metro Auckland Collaborative Group, NGO Mental Health Providers, Refugee As Survivors New Zealand, Asian NGOs, eCALD services, and ethnic partners/communities.

DHB	What are we going to do?	Measures
Auckland/ Waitematā / Counties Manukau	YR 1-YR 3 (Q1-Q4): Develop an action plan to include activities to promote wellbeing, respond to suicide distress, respond to suicidal behaviour and support people after a suicide.	Decrease in Asian deaths coded as suicides (Ministry of Health) and provisional suicides (Ministry of Justice), by age
	YR 1-YR 3 (Q1-Q4): Work with the Metro Auckland Asian & MELAA Primary Care Service Improvement Group to: • Support the roll out of the Integrated primary mental health and addiction service to ensure the initiatives are culturally appropriate. • Link with the Metro Auckland Collaborative Group on the implementation of the Integrated primary mental health and addiction service.	
	YR 1-YR 3 (Q1-Q4): Support the Regional Perinatal and Infant Mental Health Clinical Governance Group:	

DHB	What are we going to do?	Measures
	• Research on *'Supporting Equitable Perinatal Mental Health Outcomes (Asian communities)'.*	
	YR 1-YR 3 (Q1-Q4): Support the Collaborative Primary Mental Health and Addiction Nurse Credentialing Programme Governance Group.	
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Support the: • Every Life Matters – He Tapu te Oranga o ia Tangata: Suicide Prevention Strategy 2019–2029 and Suicide Prevention Action Plan 2019–2024 for Aotearoa New Zealand. • Waitematā and Auckland DHB Suicide Prevention and Postvention Action Plan 2020-2023 ○ Raise awareness of the cultural barriers and nuances that influence low uptake of mental health services.	
Waitematā	YR 1-YR 3 (Q1-Q4): Implement the [Asian Mental Health] Work Stream Plan 2017-2020.	
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Support early engagement with mental health services for current asylum seeker claimants.	
Auckland/ Waitematā	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group; and Asian Mental Health & Addictions Stakeholder Network Group (Waitematā DHB).	

Sexual and Reproductive Health

Why is this priority?

Reported cases of infectious syphilis have steadily increased in New Zealand since 2013, with most cases reported from areas with large cities. This is reflective of the global increase in reported syphilis cases. There is an increasing proportion of syphilis cases reported in heterosexual males and females, and the rise in cases of congenital syphilis, suggest increasing transmission in groups not considered as high risk in recent years.[42] 'Based on surveillance data from the Syphilis outbreak, we see high numbers from the Asian community and when broken down by specific Asian communities such as the Indian community, the rates are even higher. At least two thirds of the Indian community affected by Syphilis were from men who have sex with men (MSM) background and some from quite complex social environments (Appendix 6).

The Ministry of Health has confirmed that testing costs as well as treatment costs for HIV, syphilis and gonorrhoea (section C diseases) are covered by the public health act for non-eligible individuals including those who get tested and the result is not positive.[43]

Two Long Acting Reversible Contraceptions (LARC) - Mirena® and Jaydess® intrauterine systems (IUS) are now fully funded for eligible publically funded women who are seeking long-term contraception.

[42] ESR Dec 19 data

[43] Accessible online from https://www.health.govt.nz/new-zealand-health-system/eligibility-publicly-funded-health-services/guide-eligibility-publicly-funded-health-services/eligibility-limited-range-publicly-funded-health-services-0/people-receiving-treatment-infectious-diseases

What are we trying to do?

Gain insight into the needs of the Asian communities in areas such as Syphilis (which can be different to that of the general population) to guide culturally appropriate planning and delivery of sexual health services.

To achieve this we will focus on:

Support monitoring of trends in Syphilis. Provide culturally appropriate information to women about DHB women's health services.

Who will we work with?

Primary Care, sexual health services, Metro Auckland Asian & MELAA Primary Care Service Improvement Group, Gynaecology Day Stay Clinics, Asian NGOs, Body Positive, NZ Aids Foundation, Auckland Sexual Health Services, Transgender groups and networks, and ethnic partners/communities.

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Monitor STI trends for Asian (and if possible by visa/immigration status) via: • Syphilis Weekly IMT Report • ESR STI Surveillance Dashboard[44]	
	YR 1-YR 3 (Q1-Q4): Promote culturally appropriate information about Epsom Day Unit and LARC information to ethnic women.	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

Health of Older People

Why is this a priority?

The Healthy Ageing Strategy recognises that inequities in health status need to be reduced, in particular for Māori, Pacific peoples, migrant and refugee communities, and people with disabilities. People age in different ways, and our population is diverse. We must recognise and respect the range of ways older people access and interact with services for Asian and MELAA populations. The foreseeable risk to migrant Asian groups is the waning 'healthy migrant effect', intergenerational issues, language, financial and the significant population size living in metro Auckland that is ageing (7.8%, Auckland; 9.0% ,Waitematā).[45] Older people interacting in our health system should experience culturally appropriate care that meets the health and support needs of an increasingly ethnically diverse population.

What are we trying to do?

Improve the health outcomes and independence of older Asian & MELAA peoples by supporting the national Healthy Ageing Strategy's vision that Older people live well, age well and have a respectful end of life in age-friendly communities, and key strategic themes.

[44] Accessible online from https://www.esr.cri.nz/our-services/consultancy/public-health/sti/

[45] Population projections based on '2018 Update' based on Census 2013

To achieve this we will focus on:

Activities that include Asian and MELAA older peoples' health and support needs and voice in the planning, implementation and monitoring of projects and/or groups .

Who will we work with?

Health of Older People's team, Disability Advisor, NGOs e.g Age Concern, Aged Care providers, Asian DHB geriatricians.

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1 (Q1-Q4): Supporting the work on models of care and services for people with dementia and their carers.	
	YR 1 (Q1-Q4): Review current resources available to older adults and families about aged residential care services.	1 report
	YR 1-YR 3 (Q1-Q4): Increase the quality of service provision to Asian residents in Aged Residential Care: • Coordinate the Facility Owners Group meeting (including Chinese and Korean) run bi-monthly (6).	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

Immunisation against Influenza

Why is this a priority?

Asian & MELAA peoples 65 years and over may not be aware they are eligible for free Seasonal Influenza vaccines. They often are staying at home looking after infants and children, thus may increase the chances of spreading the flu with family members.

What are we trying to do?

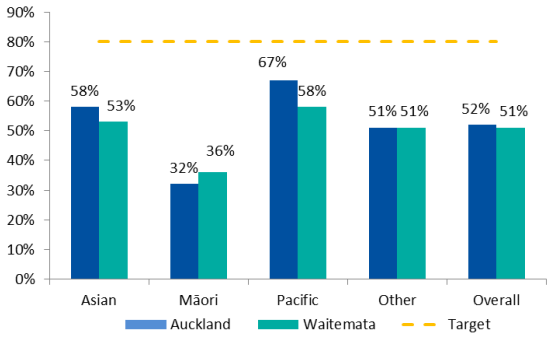
Increase the number of Asian & MELAA older peoples who received Seasonal Influenza vaccines.

To achieve this we will focus on:

Promotion of Seasonal Influenza vaccines through culturally appropriate activities and communication.

Where are we at and where do we want to get to?

Rate of seasonal influenza immunisation of eligible 65+ years population, Auckland and Waitematā DHBs (January - September 2019)



**Jan-Sep 2019*

Who will we work with?

Primary Care team, Metro Auckland Asian & MELAA Primary Care Service Improvement Group, WCTO providers, Asian NGOs, and ethnic partners/communities.

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Work with PHO Immunisation Coordinators to ensure general practices are recalling and providing the Influenza vaccine for those eligible.	75% of people aged over 65 receive a flu vaccine Respiratory infection hospitalisation rate, over 65 years (per 100,000)
Auckland/ Waitematā /Counties Manukau	YR 1-YR 3 (Q1-Q4): Starting 1 April 2020: • Targeted activities as part of CMH's Community Flu Fighters programme in Asian communities • Active promotion of culturally appropriate messaging within high enrolled Asian and former refugee general practices • Leveraging on Asian and migrant partner's cultural events, outreach and communication platforms to promote culturally appropriate messaging • Leveraging on mainstream services/activities e.g. community pharmacies to promote culturally appropriate messaging.	
Auckland/ Waitematā	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

Rōhe o Waitematā me Auckland

There are health systems that are potential barriers to health gain for Asian and MELAA peoples in our districts. In 2020-2023, our action focus is on regional planning and reporting, data quality, primary care enrolment, former refugee and current asylum seeker health.

Regional Asian Health Gain Planning and Reporting

Why is this a priority?
In order to maintain or improve Asian health status we must address the disparities within Asian 'high-risk' subgroups associated with access to and utilisation of health and disability services for newcomers, distribution of health determinants and risk factors, and a diminishing protective 'healthy migrant effect'.

Former refugee communities continue to resettle across the metropolitan districts under the Refugee Quota Programme; Family Reunion Refugees; Convention Refugee or Protected Person (Asylum Seeker),

A regional response is necessary to achieve best value from available resources, experience and skills by working collaboratively (where possible) to make a positive change in health outcomes for Asian, migrant, former refugee and current asylum seeker populations.

What are we trying to do?
The metropolitan Auckland DHBs have a common goal to improve or maintain health gain in their respective Asian populations. Together, we aim to review and learn from our health gain activities, insights and outcomes so we can benefit from our collective knowledge and relationships with community and health leaders.

What will we focus on?
Collectively work towards the areas of focus in the Metropolitan Auckland Asian & MELAA Primary Care Action Plan 2020-2023, share available Asian health status data, and leverage respective Asian health oversight, advisory and governance forums.

Where do we want to get to?
We will aim to develop a Metropolitan Auckland Asian & MELAA Primary Care Action Plan 2020-2023.

Who will we work with?
Northern Regional Alliance, PHOs, and Counties Manukau Health.

DHB	What are we going to do?	Measures
Auckland/ Waitematā/	YR 1-YR 3 (Q1-Q4): Support coordination of a Northern Region COVID-19 cultural response for our diverse ethnic communities across key functions	

DHB	What are we going to do?	Measures
Counties Manukau	(when needed): • Communications: Develop and promote translated COVID-19 resources to communities, and content for the ARPHS communities webpage[46] • Intelligence: Provide cultural advice and planning to the Intelligence team • Welfare: Provide advice and support to Welfare case management.	
	YR 1-YR 3 (Q1-Q4): Develop and implement a Metro Auckland Asian & MELAA Primary Care Action Plan 2020-2023.	1 Plan
	YR 1-YR 3 (Q1-Q4): Explore potential opportunities to work regionally to raise Asian and former refugee health equity awareness: • Input into the planning of Counties Manukau Health Asian initiatives to avoid duplication of effort and streamline resources (where possible).	
	YR 1-YR 3 (Q1-Q4): Continue to streamline the '*Improving Access to General Practice for Former Refugees and Current Asylum Seekers Agreements'* across the metropolitan Auckland region: • PHO Refugee Services Operational Group.	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group; Metro Auckland Asian & MELAA Primary Care Service Improvement Group; Metro Auckland PHO Refugee Services Operational Group; and Counties Manukau's Asian Advisor.	

Data Quality

Why is this a priority?
Accurate data is imperative for policy, planning and monitoring of many indicators important for Asian Health. A key area of interest is to establish complete and accurate breakdown data on level 2 Asian subgroups to identify 'at risk' subgroup population health outcomes.

What are we trying to do?
Advocate to improve the quality of ethnicity data collected by Auckland and Waitematā DHBs.

To achieve this we will focus on:
Implement the Standard of Ethnicity Data Protocols and action plans to improve ethnicity data collection.

Who will we work with?
Primary Care team, Health Intelligence team, Metro Auckland Asian & MELAA Primary Care Service Improvement Group, and Waitematā and Auckland DHBs provider arm services.

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Continue to develop a quarterly Asian performance scorecard to monitor trends in health outcomes	Asian Scorecard (4)
	YR 1-YR 3 (Q1-Q4):Promote via the Metro Auckland Asian & MELAA Primary Care Service Improvement Group accuracy of ethnicity reporting	Standard of Ethnicity Data Protocols[47]

[46] Accessible at https://www.arphs.health.nz/public-health-topics/covid-19/covid-19-information-for-our-communities/

DHB	What are we going to do?	Measures
	in PHO registers as measured by Primary Care Ethnicity Data Audit Toolkit.	implemented.
	YR 1-YR 3 (Q1-Q4): Identify services where there are gaps in collecting and reporting of level 1 'Asian' and 'Other' and level 2 categories subgroups ('Other Asian', 'Chinese', 'Indian', 'South East Asian' and 'Asian NFD').	
	YR 1-YR 2 (Q1-Q4): Work with identified services to ensure accurate collecting and reporting of level 2 'Asian' ethnicity subgroups (at a minimum).	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

Primary Healthcare Enrolment

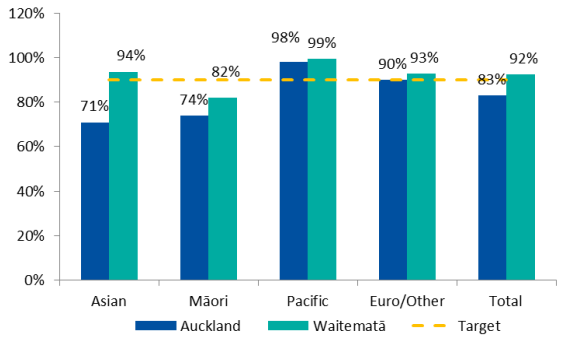
Why is this a priority?

Asian peoples have disproportionately lower PHO enrolment rates compared to European/Other in Auckland DHB (71% (Asian), 90% (European/Other).

The Auckland DHB's Asian PHO enrolment rate continues to remain significantly lower than the other Metro Auckland DHBs largely due to the high number of international students and transient temporary migrant population living in the Auckland district. [48]

Where are we at and where do we want to get to?

90% of patients are enrolled with a PHO



**Sep 2019*

Awareness of the New Zealand Health & Disability System is a key enabler to timely access and appropriate use of health services. The National Migrant Consultations 2018 report[49] highlighted that for new migrants -particularly those on working visas and skilled migrant visas - understanding how the health system works and addressing misconceptions is imperative to settlement experiences. Similarly, ethnicities from Chinese, Indian, Filipino and Middle Eastern backgrounds also expressed a lower level of awareness of the health system as part of the oral health study findings conducted in 2018.

Equitable access to timely primary care services and language support for newly arrived migrants, former refugee and current asylum seekers in general practice is essential. The role of primary care and access to a family doctor (GP) is critical to resettlement experiences for former refugees and current asylum seekers. The new national Quota Refugee Health Services Model will require greater engagement and support at the general practice level, and increasingly, the majority of current

[47] Accessible online from http://www.health.govt.nz/publication/hiso-100012017-ethnicity-data-protocols

[48] International students and temporary migrants domiciled in a district for 1 year are included in the denominator when calculating a DHB's PHO enrolment rate even though they are ineligible to enrol with a PHO. The Auckland DHB's PHO enrolment rate appears to be diluted as a result of a high ineligible healthcare population unable to enrol with a family doctor (PHO) yet included in the denominator.

[49] Accessible online from https://www.immigration.govt.nz/documents/about-us/national-migrant-consultations-2018.pdf

asylum seeker claimants live in Auckland during their claim process and require ongoing mental health support as part of their determination process.

What are we trying to do?
Deliver a suite of initiatives to increase newcomers' awareness of the New Zealand health & disability system; role and commensurate benefits of enrolling with or seeing a regular family doctor (GP) for holistic care including timely health checks, immunisations, family health services, integrated wrap around services; and knowing where to go for healthcare to get help when you're fee – for urgent, less serious conditions, injury and when it's an emergency.

To achieve this we will focus on:
Implement the Metropolitan Auckland Asian & MELAA Primary Care Action Plan 2020-2023, and support the health & wellbeing outcome areas for the: New Zealand Refugee Resettlement Strategy; New Zealand Migrant Settlement and Integration Strategy; and New Zealand International Student Wellbeing Strategy.

Who will we work with?
Uri Ririki - Child Health Connection Centre Service, Women, Child and Youth team, Primary Care team midwives, Ministry of Health, Ministry of Business, Innovation and Employment, , Metro Auckland Asian & MELAA Primary Care Service Improvement Group, Auckland Agency Group, New Zealand Red Cross, WCTO Providers, ARDS, institutes, settlement agencies, student associations, and ethnic partners/communities.

DHB	What are we going to do?	Measures
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Work with the Metro Auckland Asian & MELAA Primary Care Service Improvement Group and Primary Care to implement the Action Plan 2020-2023.	95% of the population enrolled in a PHO

	YR 1-YR 3 (Q1-Q4): Promote the suite of multilingual interventions, such as podcast videos, Healthcare – where should I go?, health literate materials, and the Your Local Doctor websites (English, Chinese and Korean):
	• NZ health system podcast videos:
	  ○ Refresh English and Mandarin videos
	  ○ Develop Korean video
	• Develop online New Zealand Health & Disability System materials for Rohingya, Karen, Kayah, Amharic, Cambodian/Khmer, Farsi, Punjabi, Somali, Swahili, Tamil, Thai, Tigrinya, and Urdu.
	• Develop online Healthcare – where should I go? flyer for Rohingya, Karen, Kayah, Amharic, Cambodian/Khmer, Farsi, Punjabi, Somali, Swahili, Tamil, Thai, Tigrinya, and Urdu.
	• Deliver the NZ Health & Disability System presentations to universities, Private Training Establishments (PTE), settlement partners, ethnic associations/communities and libraries.	

	YR 1-YR 3 (Q1-Q4): Increase the proportion of Asian & MELAA newborn infants enrolled with a PHO at 3 months of age: • Work with the Uri Ririki - Child Health Connection Centre (CHCC) service to identify gaps and trends to late PHO enrolment, and identify solutions in partnership with the Service and Sector to increase early enrolment • Promote culturally appropriate PHO enrolment messaging to	98% of newborns are enrolled with a PHO, general practice at 3 mths of age

DHB	What are we going to do?	Measures
	Asian & MELAA newcomers • Work with the PHO Newborn Enrolment Coordinators to support access to Under 5 services and culturally responsive service provision.	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group.	

Former Refugee & Current Asylum Seeker Health

Why is this a priority?

Available evidence suggest that both former refugee and current asylum seekers including those from transgender, non-binary and gender diverse backgrounds face significant barriers to accessing primary care, mental health and addiction, pharmacy, oral health and maternity services. Key barriers to accessing health services (including maternity services), include varied levels of resettlement support, difficulty accessing language services, financial and transport stressors, lack of knowledge of the health system, cultural competence of the health workforce, discrimination and lack of awareness within health services of refugee and current asylum seeker unique needs and experiences. Financial constraints mean individuals are generally not able to access private services and depend on public or community-based services.[50]

Former refugee and/or current asylum seeker families have low access to and utilisation of primary health services in New Zealand and thus require equity of access to general practice.[51]

What are we trying to do?

Enable equitable access to mainstream primary care (affordable or no-cost options) for former refugee and current asylum seeker patients in general practice; monitor health service access and utilisation (and long-term outcomes); and support the national Quota Refugee Health Services Model implementation and monitoring.

To achieve this we will focus on:

Fund the PHOs to manage the delivery of the '*Improving Access to General Practice for Former Refugees and Current Asylum Seekers Agreements'* with their participating general practices in the metropolitan Auckland region, promote the Service among former refugee and/or current asylum seeker communities, improve cultural competency among primary care practices, promote the use of language support, and deliver professional development to the primary health workforce.

Who will we work with?

Primary Care team, DHBs, Metro Auckland PHO Refugee Services Operational Group, Metro Auckland Asian & MELAA Primary Care Service Improvement Group, PHOs, community health workers, New Zealand Red Cross, Mangere Refugee Resettlement Centre, Immigration New Zealand, Asylum Seeker Support Trust, asylum seeker lawyers/barristers, settlement agencies, Rainbow health services/partners, and ethnic partners/communities.

[50] Accessible online from https://www.racp.edu.au/docs/default-source/default-document-library/refugee-and-asylum-seeker-health-position-statement.pdf?sfvrsn=2

[51] Accessible online from https://www.ncbi.nlm.nih.gov/pubmed/28379739

DHB	What are we going to do?	Measures
Auckland/ Waitematā/ Counties Manukau	YR 1-YR 3 (Q1-Q4): Fund and manage the Improving Access to General Practice for Former Refugees and Current Asylum Seekers Agreements	Increase in number of former refugees enrolled with the Refugee Primary Care Services[52]
	YR 1-YR 3 (Q1-Q4): Strengthen pathways to PHO enrolment for former refugees: • Support the roll out of the Quota Refugee Health Services Model in primary care. • Promote pathways to primary care for Family Reunion Refugees (Refugee Quota Family Reunification Category and Refugee Family Support Category), and Convention Refugee or Protected Persons	
	YR 1-YR 3 (Q1-Q4): Coordinate bimonthly meetings with the Metro Auckland PHO Refugee Services Operational Group: • Minimum data sets to enable monitoring of service access and health outcomes.	
	YR 1-YR 3 (Q1-Q4): Raise awareness within former refugee and current asylum seeker communities of Service availability: • Work with our stakeholders, outreach services and community leaders to increase awareness, access to and uptake of the Services.	
Auckland/ Waitematā	YR 1-YR 3 (Q1-Q4): Q4: Lead and coordinate professional development to the primary health workforce: • Metro Auckland Refugee Health Network Executive Group • Metro Auckland Refugee Health Network (ARRHN) Forums • Cross Cultural Frontline Training.	
Auckland/ Waitematā / Counties Manukau	YR 1-YR 3 (Q1-Q4): Encourage and promote CALD training with the participating practices of this Service.	
	YR 1-YR 3 (Q1-Q4): Encourage and promote the use of interpreting services such as the DHBs' Primary Health Interpreting services in participating general practices of this Service.	
	Quarterly: Progress of activities and performance against health targets will be monitored and reported to the Asian & MELAA Health Governance Group; and Metro Auckland PHO Refugee Services Operational Group.	

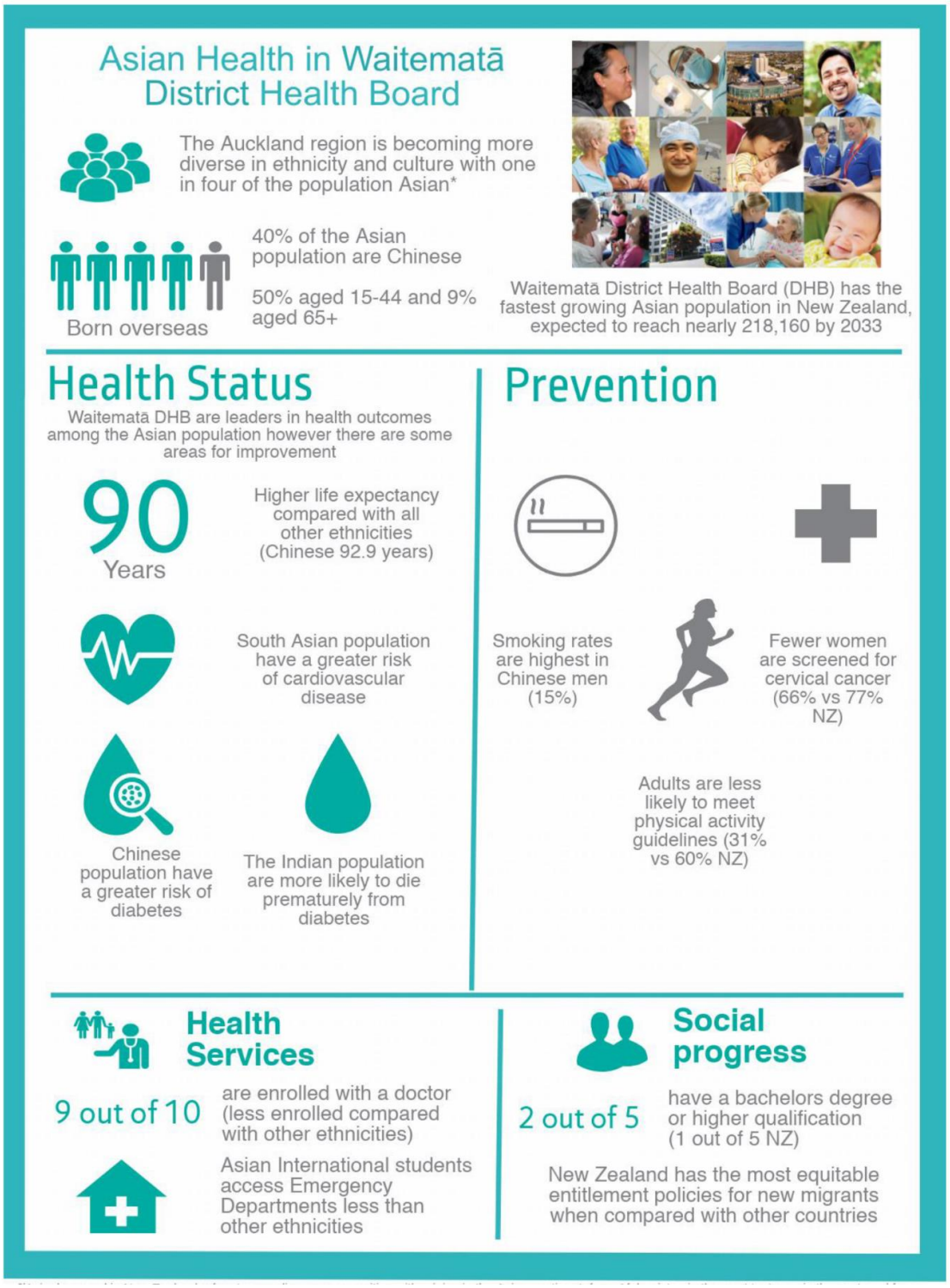
[52] As at 1 March, 68 practices participating

Glossary

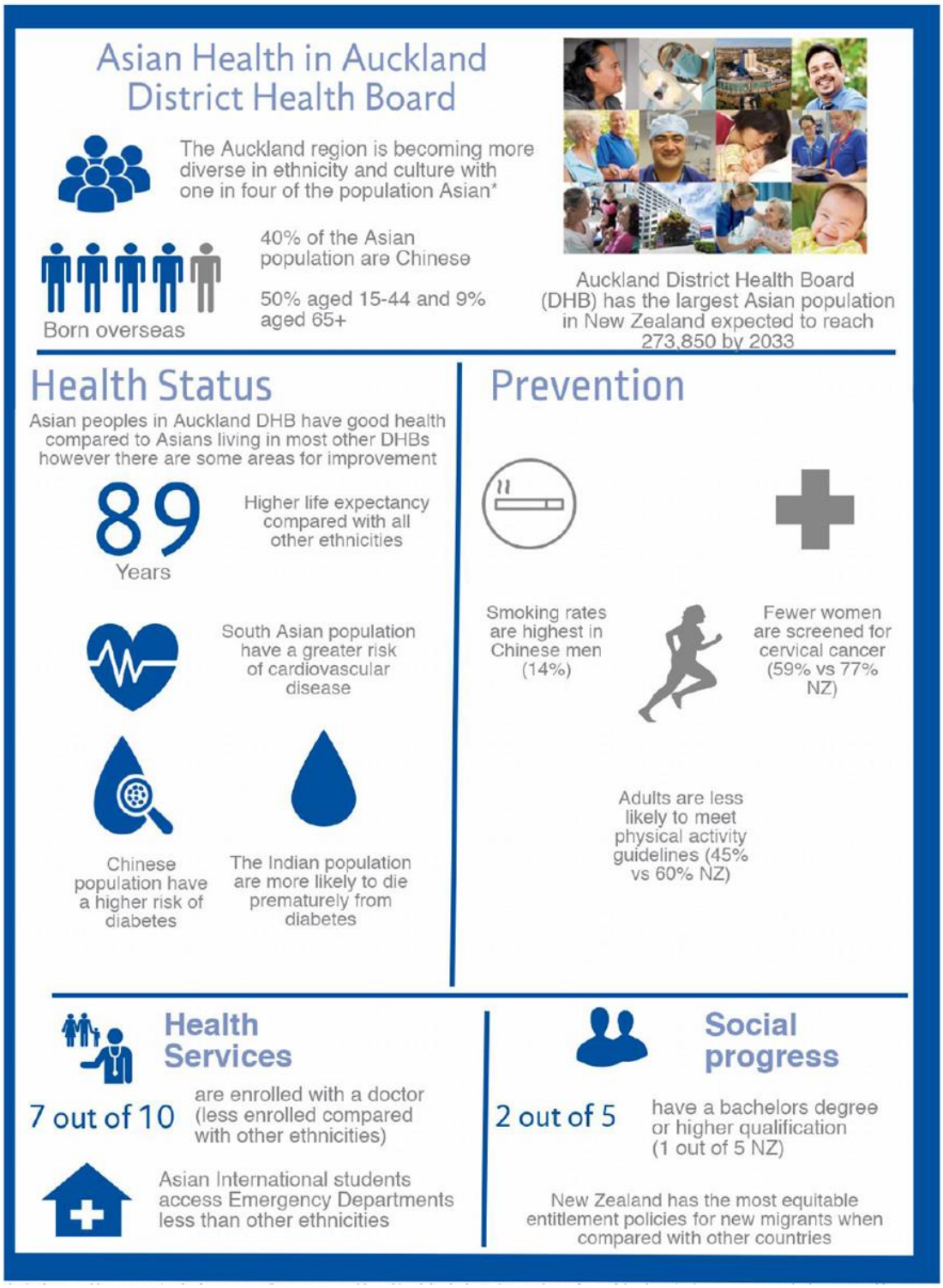
ASH	Ambulatory sensitive hospitalisations
CALD	Culturally and linguistically diverse
CBD	Central business district
CHCC	Child Health Connection Centre
CPHAC	Community & Public Health Advisory Committee
CUR	Census Usually Residents population
CVD	Cardiovascular disease
CVDRA	Cardiovascular disease/cardiovascular disease risk assessment
DHB	District health board
dmft	Measure of children's oral health (Decayed/Missing/Filled/Teeth)
GP	General practitioner
HPV	Human papilloma virus
INZ	Immigration New Zealand
IUS	Intra uterine system
LARC	Long acting reversible contraceptions
MELAA	Middle Eastern, Latin American or African
MH&A	Mental health and addictions services
MoH	Ministry of Health
MSM	Men who have sex with men
NGO	Non-government organisation
PHIS	Primary health interpreting services
PHO	Primary health organisation
PMMH	Perinatal maternal mental health
PTE	Private training establishment
SLM	System level measure (national set of six health indicators)

Appendices

Appendix 1: Asian Health Benchmarking in Waitematā District Health Board, 2017



Appendix 2: Asian Health Benchmarking in Auckland District Health Board



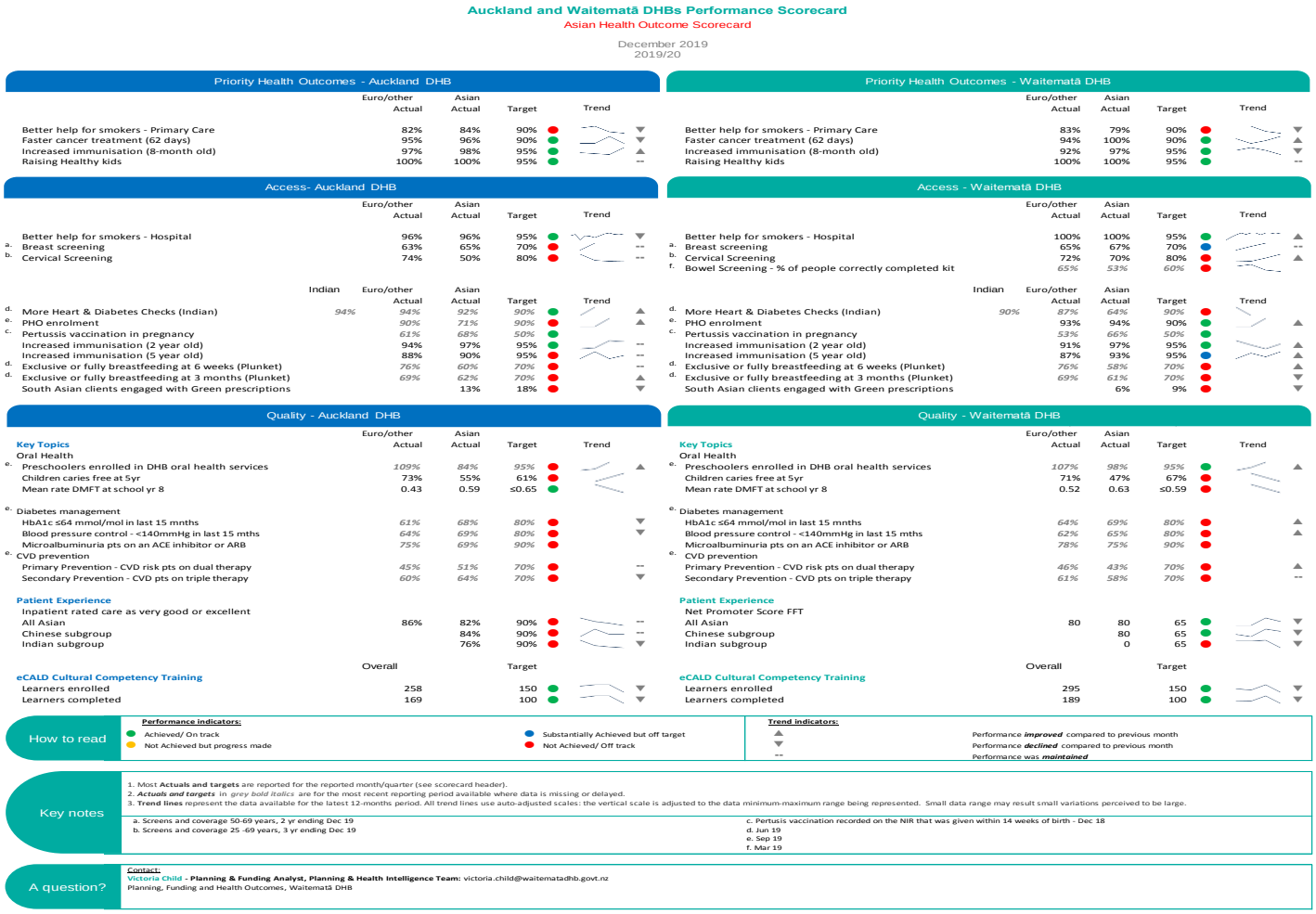
Appendix 3: Strategic Directions

- New Zealand Health Strategy: Future direction[53]
- New Zealand Migrant Settlement and Integration Strategy's - Outcome 5: Health and Wellbeing[54]
- New Zealand Refugee Resettlement Strategy - Health Outcome[55]
- New Zealand Community Engagement Framework[56]
- New Zealand International Student Wellbeing Strategy Outcomes Framework - Outcome 3: Health & Wellbeing[57]
- Plunket Asian Peoples Strategy
- All of Government (AoG) contracting
- Northern Region Health Plan
- Waitematā DHB Health Services Plan 2015-2025
- Waitematā DHB Primary and Community Care Plan
- Waitematā DHB Asian Mental Health & Addiction Governance Group's Asian Mental Health Work Stream Plans 2015-2020
- Auckland DHB Strategy
- Auckland Regional Public Health Service Strategic Plan 2017-2022
- Counties Manukau Health 2018/19-2019/20 Asian Health Outcome Priorities
- Counties Manukau Health 2018/19-2019/20 Asian Health Action Roadmap
- Auckland Metro Regional System Level Measures Improvement Plan.

Note, within the timeframe of this Plan, these Strategies/Plans below may be refreshed.

[53] Accessible online from https://www.health.govt.nz/system/files/documents/publications/new-zealand-health-strategy-futuredirection-2016-apr16.pdf
[54] Accessible online from https://www.immigration.govt.nz/about-us/what-we-do/our-strategies-and-projects/how-we-support-migrants
[55] Accessible online from https://www.immigration.govt.nz/about-us/what-we-do/our-strategies-and-projects/refugee-resettlement-strategy
[56] Accessible online from https://www.immigration.govt.nz/about-us/what-we-do/our-strategies-and-projects/refugee-resettlement-strategy/rqip
[57] Accessible online from https://www.education.govt.nz/our-work/overall-strategies-and-policies/international-student-wellbeing-strategy/

Appendix 4: Auckland and Waitematā DHBs Asian Performance Scorecard (Dec 2019)



Auckland and Waitematā DHBs Performance Scorecard

Asian Health Outcome Scorecard

December 2019
2019/20

Priority Health Outcomes - Auckland DHB

	Euro/other Actual	Asian Actual	Target	Trend
Better help for smokers - Primary Care	82%	84%	90%	
Faster cancer treatment (62 days)	95%	96%	90%	
Increased immunisation (8-month old)	97%	98%	95%	
Raising Healthy kids	100%	100%	95%	

Priority Health Outcomes - Waitematā DHB

	Euro/other Actual	Asian Actual	Target	Trend
Better help for smokers - Primary Care	83%	79%	90%	
Faster cancer treatment (62 days)	94%	100%	90%	
Increased immunisation (8-month old)	92%	97%	95%	
Raising Healthy kids	100%	100%	95%	

Access- Auckland DHB

	Euro/other Actual	Asian Actual	Target	Trend
Better help for smokers - Hospital	96%	96%	95%	
a. Breast screening	63%	65%	70%	
b. Cervical Screening	74%	50%	80%	

Indian	Euro/other Actual	Asian Actual	Target	Trend
d. More Heart & Diabetes Checks (Indian) 94%	*94%*	*92%*	*90%*	
e. PHO enrolment	*90%*	*71%*	*90%*	
c. Pertussis vaccination in pregnancy	*61%*	*68%*	*50%*	
Increased immunisation (2 year old)	94%	97%	95%	
Increased immunisation (5 year old)	88%	90%	95%	
d. Exclusive or fully breastfeeding at 6 weeks (Plunket)	*76%*	*60%*	*70%*	
d. Exclusive or fully breastfeeding at 3 months (Plunket)	*69%*	*62%*	*70%*	
South Asian clients engaged with Green prescriptions		13%	18%	

Access - Waitematā DHB

	Euro/other Actual	Asian Actual	Target	Trend
Better help for smokers - Hospital	100%	100%	95%	
a. Breast screening	65%	67%	70%	
b. Cervical Screening	72%	70%	80%	
f. Bowel Screening - % of people correctly completed kit	*65%*	*53%*	*60%*	

Indian	Euro/other Actual	Asian Actual	Target	Trend
d. More Heart & Diabetes Checks (Indian) 90%	*87%*	*64%*	*90%*	
e. PHO enrolment	93%	94%	90%	
c. Pertussis vaccination in pregnancy	*53%*	*66%*	*50%*	
Increased immunisation (2 year old)	91%	97%	95%	
Increased immunisation (5 year old)	87%	93%	95%	
d. Exclusive or fully breastfeeding at 6 weeks (Plunket)	*76%*	*58%*	*70%*	
d. Exclusive or fully breastfeeding at 3 months (Plunket)	*69%*	*61%*	*70%*	
South Asian clients engaged with Green prescriptions		6%	9%	

Quality - Auckland DHB

Key Topics	Euro/other Actual	Asian Actual	Target	Trend
Oral Health				
e. Preschoolers enrolled in DHB oral health services	*109%*	*84%*	*95%*	
Children caries free at 5yr	73%	55%	61%	
Mean rate DMFT at school yr 8	0.43	0.59	≤0.65	
e. Diabetes management				
HbA1c ≤64 mmol/mol in last 15 mnths	*61%*	*68%*	*80%*	
Blood pressure control - <140mmHg in last 15 mths	*64%*	*69%*	*80%*	
Microalbuminuria pts on an ACE inhibitor or ARB	*75%*	*69%*	*90%*	
e. CVD prevention				
Primary Prevention - CVD risk pts on dual therapy	*45%*	*51%*	*70%*	
Secondary Prevention - CVD pts on triple therapy	*60%*	*64%*	*70%*	
Patient Experience				
Inpatient rated care as very good or excellent				
All Asian	86%	82%	90%	
Chinese subgroup		84%	90%	
Indian subgroup		76%	90%	

	Overall	Target	Trend
eCALD Cultural Competency Training			
Learners enrolled	258	150	
Learners completed	169	100	

Quality - Waitematā DHB

Key Topics	Euro/other Actual	Asian Actual	Target	Trend
Oral Health				
e. Preschoolers enrolled in DHB oral health services	*107%*	*98%*	*95%*	
Children caries free at 5yr	71%	47%	67%	
Mean rate DMFT at school yr 8	0.52	0.63	≤0.59	
e. Diabetes management				
HbA1c ≤64 mmol/mol in last 15 mnths	*64%*	*69%*	*80%*	
Blood pressure control - <140mmHg in last 15 mths	*62%*	*65%*	*80%*	
Microalbuminuria pts on an ACE inhibitor or ARB	*78%*	*75%*	*90%*	
e. CVD prevention				
Primary Prevention - CVD risk pts on dual therapy	*46%*	*43%*	*70%*	
Secondary Prevention - CVD pts on triple therapy	*61%*	*58%*	*70%*	
Patient Experience				
Net Promoter Score FFT				
All Asian	80	80	65	
Chinese subgroup		80	65	
Indian subgroup		0	65	

	Overall	Target	Trend
eCALD Cultural Competency Training			
Learners enrolled	295	150	
Learners completed	189	100	

How to read

Performance indicators:
- Achieved/ On track
- Substantially Achieved but off target
- Not Achieved but progress made
- Not Achieved/ Off track

Trend indicators:
- Performance ***improved*** compared to previous month
- Performance ***declined*** compared to previous month
- Performance was ***maintained***

Key notes

1. Most **Actuals and targets** are reported for the reported month/quarter (see scorecard header).
2. ***Actuals and targets*** *in grey bold italics* are for the most recent reporting period available where data is missing or delayed.
3. **Trend lines** represent the data available for the latest 12-months period. All trend lines use auto-adjusted scales: the vertical scale is adjusted to the data minimum-maximum range being represented. Small data range may result small variations perceived to be large.

a. Screens and coverage 50-69 years, 2 yr ending Dec 19
b. Screens and coverage 25 -69 years, 3 yr ending Dec 19
c. Pertusis vaccination recorded on the NIR that was given within 14 weeks of birth - Dec 18
d. Jun 19
e. Sep 19
f. Mar 19

A question?

Contact:
Victoria Child - **Planning & Funding Analyst, Planning & Health Intelligence Team:** victoria.child@waitematadhb.govt.nz
Planning, Funding and Health Outcomes, Waitematā DHB

Appendix 5: Definitions of scorecard indicators/performance measures

Better help for smokers – Primary Care - % of PHO enrolled patients who smoke and are seen by a health practitioner in General Practice are offered brief advice and support to quit smoking. Quarterly report from MOH.

Faster Cancer treatment - % of patients referred urgently with a high suspicion of cancer whose first treatment (or other management) occurred within the last 6 months and the treatment was within 62 days of the referral being received by the hospital.
Quarterly report from NRA.

Immunisation (8-month old, 2, 5-year old) – % of children who turned the milestone age in the reporting quarter who have completed their age appropriate immunisations by the time they turn the milestone age. Quarterly report from MOH.

Raising Healthy kids - % of children who had a B4 School Check and were identified as obese (BMI>98th percentile) and were referred to a registered health professional and acknowledged within 30 days or were already under care or declined the referral. Quarterly report from MOH.

Better help for smokers – Hospital – % of hospitalised smokers provided with advice and help to quit. Reported monthly from internal reporting.

Breast screening - Breast screen Aotearoa coverage (%) 50-69 years, 2 years ending at current quarter. Quarterly report from NSU website.

Cervical screening - National Cervical Screening Programme coverage (%) 25 -69 years, 3 years ending at current quarter. Based on statistics NZ census population projection adjusted for prevalence of hysterectomies. Quarterly report from NSU website.

Bowel Screening - % 60-74 year olds, 2 years ending at reported quarter who return correctly completed kits.

More Heart and Diabetes Checks/Cardiovascular Disease (CVD) risk assessment - % of the eligible PHO enrolled population who have had their cardiovascular risk assessed in the last five years. Quarterly report from MOH.

CVD Primary Prevention: Percentage of enrolled patients with cardio-vascular risk ever recorded >20%, (aged 35 to 74 years, excluding those with a previous CVD event) who are on dual therapy (statin + BP Lowering agent).

CVD Secondary Prevention - Percentage of enrolled patients with known cardio-vascular disease who are on triple therapy (Statin + BP lowering agent + Antiplatelet/ Anticoagulant).

PHO enrolment – % of population (latest census based projections) who are enrolled with a PHO. Quarterly enrolment figures from MOH and latest census population projections.

Pertussis vaccination in pregnancy - % of pregnant women receiving pertussis vaccination in pregnancy. Pertussis vaccination recorded on the NIR that was given within 14 weeks of birth. Reported quarterly from NIR and NMDS records.

HPV vaccination - Percentage of eligible girls fully immunised with HPV vaccine. Final dose: The dose that completes HPV immunisation. For people aged under 15 years of age, two HPV vaccine doses are required to complete immunisation provided that the second dose is given more than 21 weeks after the first dose. For those aged 15 years and older, or those in whom the second dose was given less than 21 weeks after the first dose, three HPV vaccine doses are required to completeimmunisation.* Estimated HPV eligible population includes 12yrs female, male and total (includes female,male and indeterminate) on each tab and is based on the selected denominator. 2018/19, the national target is 75% of girls born in 2005 are fully immunised for HPV.

Flu vaccination – Percentage of individuals within the age band 65+yrs at the date of the report run date who have completed their annual influenza immunisation using Census estimated population projection denominator for the given vaccination year. MOH annual report.

Respiratory infection hospitalisation rate – Rate per 100 000 population of male and female 65+ year olds hospitalised for respiratory infections . Conditions include acute upper respiratory infections, influenza and pneumonia, and other acute lower respiratory infections.

Breastfeeding at 6 weeks, 3 months – % of newborn babies who are exclusively or fully breastfed at 6 weeks or 3 months as determined at WCTO contact. Quarterly data from Plunket report.

Clients engaged with Green prescriptions – Number of adults engaged in Green prescriptions. Data provided by Harbour Sport for WDHB, Sport Auckland for ADHB. South Asian data only available currently.

Oral Health

Pre-schoolers enrolled in DHB oral health services – % of 0-4 year olds enrolled with ARDS (Auckland regional dental service). Reported quarterly from ARDS enrolment data and Census population projections. High enrolment figures for the "other" ethnicity group is due to the mismatch of the census population projection and ARDS database ethnicity categorisations and the nature of projections based on census data from 2013.

Children caries free at 5 yr – % of children examined that are caries free at five years of age. Reported quarterly from ARDS data. Asian subgroup information not regularly available, masking trends in these subgroups..

Mean rate DMFT at school year 8 – Ratio of mean decayed, missing, filled teeth (DMFT) of children examined at year 8. Reported quarterly from ARDS data. Asian subgroup information not regularly available, masking trends in these subgroups.

Diabetes Glycaemic control: Percentage of eligible population with HbA1c ≤ 64mmol/mol recorded in the last 15 months (based on PHO enrolled numerator and denominator).

Diabetes Blood pressure control: Percentage of enrolled patients with diabetes (aged 15 to 74 years) whose latest systolic blood pressure recorded in the last 15 months is <140mmHg.

Diabetes Management of Microalbuminuria: Percentage of enrolled patients with diabetes (aged 15 to 74 years) who have microalbuminuria in the last 18 months and are on an ACE inhibitor or Angiotensin Receptor Blocker.

Inpatient rated care ADHB KPI = Patient Experience survey results ADHB - quarterly results for the % of patients who rate their overall stay in hospital as excellent or very good. Quarterly results calculated from monthly internal reports.

WDHB Net promoter score – The friends and family test is a patient feedback survey that produces the Net Promoter Score. The proportion of responses that are promoters and the proportion that are detractors are calculated and the proportion of detractors is then subtracted from the proportion of promoters to provide an overall 'net promoter' score. Those that say they are 'extremely likely' are counted as promoters. 'Likely' is neutral, 'neither unlikely nor likely', 'unlikely' and 'extremely unlikely' are all counted as detractors. Quarterly results from monthly internal reporting.

eCALD cultural competency training - Number of learners enrolled and learners that have completed eCALD cultural competency training in the previous quarter (online course participants are given 6 weeks to complete the course).
Quarterly report provided by Sue Lim (WDHB).

Deaths coded as suicides - Annual data from the National Mortality Collection 2016. Numbers may differ from preliminary Coroner reports

Traffic light criteria as per the Hospital Advisory Committee (HAC) report methodology:

Variance from target		Interpretation	Traffic light
On target or better		Achieved	
95-99.9%	0.1% - 5% away from target	Substantially Achieved	
90-94.9%*	5.1% - 10% away from target AND improvement from last month NB. The trend indicator in this case should always be ▲	Not achieved, but progress made	
<94.9%	5.1% - 10% away from target, AND no improvement, OR >10% away from target	Not Achieved	

Appendix 6: Ethnic groups with 10 or more Syphilis cases (2017-2020), as at 28 February, 2020

Ethnicity	2017	2018	2019	2020*	Total	Rank
New Zealand European	97	112	98	15	322	1
Maori	65	59	52	9	185	2
Indian	24	27	25	5	81	3
Latin American	13	22	16	3	54	4
Other European	26	22	25	4	77	5
Southeast Asian	10	14	19	1	44	6
Other Asian	7	12	8	2	29	7
Samoan	13	12	17	4	46	8
Cook Island Maori	2	10	7	1	20	9
Fijian	8	9	13	4	34	10
Chinese	8	8	16	2	34	11
European NFD	1	6	3	2	12	12
Middle Eastern	2	5	6	0	13	13
Tongan	1	4	8	2	15	14
African	4	3	4	1	12	15
Niuean	1	3	5	1	10	16

* *year in progress*

AUCKLAND DISTRICT HEALTH BOARD
Te Toka Tumai

Waitematā District Health Board
Best Care for Everyone

Overview

Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan 2020-2023

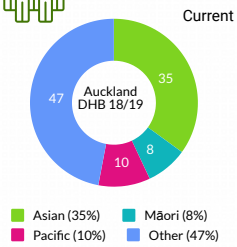
Auckland and Waitematā District Health Boards

Aim

- ✓ Improve health outcomes where there are health inequalities
- ✓ Increase access and utilisation
- ✓ Continue to support equitable access to primary health care for our targeted populations

Our population

Current 2018/19

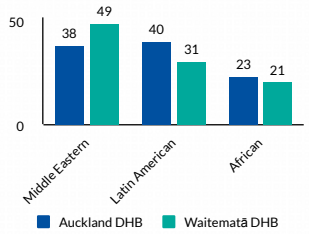


- Over **180 ethnicities** in Metro-Auckland
- **Asian fastest** growing group
- **Top 3** Asian groups:
  1. Chinese
  2. Indian
  3. Filipino in Auckland DHB, will soon surpass Korean (3) in Waitematā DHB

- By **2025** Asian expected to reach 38% in Auckland DHB and 26% in Waitematā DHB

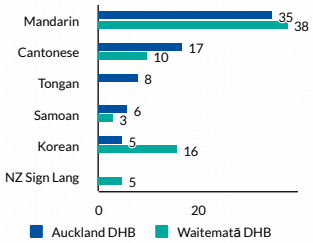
Middle Eastern Latin American and African (MELAA)

MELAA population by ethnic group, Census 2018 (%)



- Auckland DHB has the **largest** MELAA population in the country
- Latin American population **doubled** in Auckland DHB between 2013 and 2018

Top five in-demand languages, 2018/19 (%)



- 12% Asian and 8% MELAA speak 'no english'

68,000 (2018) international students in Metro-Auckland

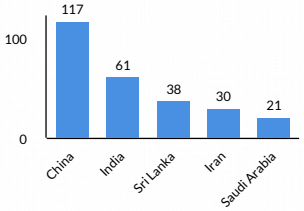
70% new migrants (<5years) live in Auckland DHB

Quota refugees:

- Quota increase from 1000 to 1500 from July 2020
- Approx 100 resettling in Metro-Auckland each year

Asylum seekers: 510 claims (2018/19) - **153** approved

Top 5 Refugee & Protection **Claims** by Nationality 2018/19



Top 5 Refugee & Protection **Approvals** by Nationality 2018/19

1. China
2. Iran
3. Saudi Arabia
4. Afghanistan
5. Egypt

Focus of the Plan

1. **Capability and capacity building:** Granular data monitoring to level 4.

2. **Access:** Equity of access and utilisation of healthcare services:
   - Awareness of the New Zealand Health & Disability System
   - PHO enrolment (eligible new migrants, (**equity of access)** to former refugees, and babies at 3months) and lower access to primary health services
   - Better management of long term conditions (**equity of access**) to cardiovascular disease – Indian and South Asian; diabetes – Chinese and South East Asian (Filipino)
   - Mental health and addictions (youth, (**equity of access)** to perinatal maternal mental health)
   - Sexual and reproductive health
   - Immunisations (HPV, 5 year event, Influenza over 65 years), and
   - Preschool oral health (Chinese, Filipino and Middle Eastern).

3. **Health promotion/prevention** including culturally tailored and/or targeted preventive healthy lifestyle activities.

4. Adopting a **partnerships approach** to engage under-served segments of the population.

To know more about the **Asian, New Migrant, Former Refugee & Current Asylum Seeker Health Plan 2020-2023** and list of references please visit (insert weblink)

Oral Health in the Auckland Region

Recommendation:

That the Community and Public Health Advisory Committee:

1. **Notes that oral health is a vital component of general health and that there are persistent inequities for Pacific and Māori children.**
2. **Notes that some good progress had been made against the equity focused 2017 Preschool Oral Health Action Plan, but gains have been lost due to COVID-19 outbreaks and on-going requirements placed by the Dental Council of New Zealand.**
3. **Notes that there are significant delays in time to treatment for hospital-based (secondary) dental care that have led this to be identified as a vulnerable service in the regional services plan.**
4. **Notes that Auckland DHB has used $650k of the Ministry of Health Planned Care COVID-19 catch up activity funding to fund additional secondary dental capacity to address these delays in three above.**
5. **Notes the need for urgent additional targeted approaches to improve access to oral health services for Māori and Pacific children and adolescents, cognisant of the on-going risk of COVID-19 and Dental Council of New Zealand requirements. Further work will be undertaken within the Regional Vulnerable Services Framework.**

Prepared by: Ruth Bijl (Funding & Development Manager, Child, Youth & Women's Health), Deepa Hughes (Programme Manager, Oral Health and Youth Health)
Endorsed by: Dr Debbie Holdsworth (Director Funding) and Dr Karen Bartholomew (Director Health Outcomes)

Glossary

ARDS	-	Auckland Regional Dental Service
ARHSD	-	Auckland Regional Hospital and Specialist Dentistry
CDA	-	Combined Dental Agreement
CMH	-	Counties Manukau Health
DCNZ	-	Dental Council of New Zealand
DHB	-	District Health Board
dmft	-	decayed, missing or filled teeth (a measure of severity of dental disease) in deciduous teeth
DMFT	-	Decayed, Missing or Filled Teeth in permanent teeth
ECE	-	Early Childhood Education Centre
EDS	-	Emergency Dental Service
FSA	-	First Specialist Appointment
GA	-	General Anaesthesia
HSD	-	Auckland Regional Hospital and Specialist Dentistry
MoH	-	Ministry of Health
WCTO	-	Well Child Tamariki Ora

1. Executive Summary

This information paper describes the current state of oral health and funded dental services for children, adolescents and adults. There are significant and persisting inequities in access and outcomes most noticeably for Pacific children and for Māori tamariki. Effects are enduring and life-long. While gains were being made in oral health following the development of the 2017 Oral Health Action Plan and service improvement initiatives at the Auckland Regional Dental Service (ARDS); the impact of COVID-19 and the new ongoing requirements of the Dental Council of New Zealand (DCNZ) on the delivery of dental services has substantially impacted the sector, reversed many of these gains and set services back to concerning levels.

Auckland Regional Dental Service (ARDS) had implemented a number of equity focused strategies over the last few years to address known issues, however, the onset of COVID-19 has had a significant and will have an enduring impact on the delivery of oral health service. There is also currently an urgent need to address the large number of children awaiting dental treatment at the Auckland DHB-led Hospital and Specialist Dental service. Planned Care COVID-19 catch up activity funding has been applied to purchasing additional capacity to address these unacceptable waits by June 30, 2021.

Good oral health is everyone's business, not just that of dental services. Achieving better oral health outcomes requires a concerted effort at the environmental and policy level (eg. Fluoridation of water; poverty) and across health provider groups from health promoters, primary care, and primary and secondary dental services. Services had been taking steps to improve oral health overall, and address longstanding inequities in oral health, however, the situation is now urgent. In light of the ongoing COVID-19 risk and restrictions placed by the DCNZ, there is a need for urgent, additional, targeted approaches to improve access to oral health services particularly for Māori and Pacific children. The inclusion of the oral health services within the Regional Vulnerable Services framework has been agreed and the Committee will be provided regular updates as this work is progressed.

2. Introduction

Good oral health is vital to general health and wellbeing across all ages. Poor oral health affects general health by causing considerable pain and suffering, limiting what people can eat, and affecting overall quality of life and well-being. There is also a growing body of evidence linking poor oral health to specific medical conditions, including heart disease, diabetes, and pre-term and low birth-weight babies. Poor oral health can be particularly devastating for children, significantly affecting their physical, psychological and social development. Dental decay in infants and children can lead to pain and infection in teeth and gums, poor nutrition, difficulty sleeping, speech impairments and delayed language development, and low self-esteem and confidence.

Dental caries is one of the most prevalent health issues that affect both children and adults in New Zealand. There are marked ethnic inequities in the oral health of children in the Auckland region. Māori children, Pacific children and those living in most deprived areas have significantly higher levels of dental caries. Treatment alone cannot achieve good oral health in the long term. Adoption of preventive practices and early interventions are necessary from a young age to achieve good oral health over the course of life.

Oral health is a complex issue that reflects the impacts associated with the social determinants of health, with marked inequities in outcomes seen across all age group. These are most marked for Pacific peoples and for Māori. To address these known and longstanding inequities the Preschool

Oral Health Action Plan was developed in 2017, focused on prevention, promotion and intervening early. The main service provider, the Auckland Regional Dental Service (ARDS), also undertook a significant change programme. Unfortunately, what progress had been made has been largely reversed by the impact on services of COVID-19 lockdowns and service disruptions. There are now serious delivery issues which are outside of the service's control.

The Auckland Regional Hospital and Specialist Dentistry (HSD) provides secondary and tertiary (inpatient services) oral health care services to the metro Auckland region. Work is being progressed to reduce the significant wait to treatment time, under the auspices of the vulnerable services programme. In 20/21, Auckland DHB plans to invest $650k of the Ministry of Health Planned Care COVID-19 catch up activity funding to fund additional secondary dental capacity to address these delays.

Private dental providers in the community who hold a contract, (the Combined Dental Agreement (CDA)), with the DHB, provide oral Health Services for Adolescents. In 2019 Auckland DHB coverage for adolescents was 69%. There is also a significant disparity in dental coverage for Māori teenagers with only 52% coverage for the same time period. In 2020, estimates are that, in total, less than half of the adolescents will be seen by a dentist and even lower numbers of Māori rangatahi will be seen.

Emergency dental services required for the immediate relief of pain and infections are provided for low-income adults aged 18 years and older who hold a valid community services card. Untreated infections can result in hospital admissions for sepsis and may contribute to heart disease and other medical conditions. Treatment is restricted to the current problem and does not include any preventative or maintenance treatment. Treatment under this service commonly comprises dental extractions and provision of painkillers and antibiotics. Patients are also required to pay a $40 co-pay.

Auckland DHB also funds a new oral health service for 300 pregnant women/new mothers in the Tamaki area. The aim of the service is to restore pregnant women's oral health, improve mothers and babies overall health and wellbeing, and reduce inequities in preschool oral health outcomes. This service has a focus on Māori, Pacific and low-income pregnant women. Uptake of the service has been lower than anticipated.

Dental disease is one of the leading causes of potentially preventable admissions to hospital for young children, as well as a significant source of inequity for Māori and Pacific populations. These admissions also come at a significant cost. In the 2019/20 financial year, 1,609 children under the age of 15 years received dental extraction or restoration under general anaesthesia (GA) in metro Auckland.

3. Oral Health Outcomes

A number of health outcomes are highlighted below, with a full description provided in Appendix 1. All oral health services have been significantly disrupted throughout 2020. Consequently, the available outcome data from 2019 can be expected to show a very much more positive picture than will be seen in the 2020 data. Based on the 2019 data, there are access issues across all oral health services, and persistent inequity. This is demonstrated across all age groups. While oral health is not solely influenced by access to oral healthcare, low access contributes to the poor outcomes seen.

3.1. Children under 2 years of age – 2020 data

Only 17% of Auckland DHB children aged under two years have been seen by ARDS this year, including through virtual consultations. The table below shows the percentage of children, by ethnicity, who are under two years of age and have attended an appointment with the service.

DHB	Māori	Pacific	Asian	Other	Total
Auckland	13%	14%	17%	18%	17%
Counties Manukau	7%	9%	14%	12%	11%
Waitematā	10%	8%	13%	13%	12%
Not yet allocated	7%	14%	29%	23%	20%
ARDS Total	9%	10%	14%	14%	13%

The preventative strategy, applying fluoride varnish as measured at 2 years of age, shows very low uptake with only 10.7% of those *attending* in Auckland DHB receiving fluoride varnish according to ARDS records, resulting in only 2.95% of Auckland DHB children in 2020.

Ethnicity	Auckland DHB 2020			Waitematā DHB 2020		
	Of the population	***Of those enrolled***	***Of those who have attended***	***Of the population***	***Of those enrolled***	***Of those who have attended***
Māori	2.71%	3.80%	15.10%	0.49%	0.70%	3.30%
Pacific	4.90%	5.40%	18.50%	0.83%	0.90%	5.10%
Total ARDS	2.95%	3.60%	10.70%	0.49%	0.50%	2.20%

3.2. Children aged 5 – 12 years – 2019 data

Oral health status for children is measured at age 5 years through two outcomes:

(i) Caries-free rates measures the proportion of children with no evidence of dental decay (higher caries-free rates are better).

(ii) Mean number of decayed, missing or filled teeth (dmft) measures the severity of disease (lower mean dmft is better).

In 2019, the Auckland Regional Dental Service (ARDS):

- Examined approximately 53% (11,554) of 5-year-old children. Among those 5-year-old children examined by ARDS:
  - 57% of Māori and 70% of Pacific children have dental decay, compared to 38% of non-Māori non-Pacific children.
  - Māori and Pacific children have more severe dental disease at examination, with an average of 2.6 to 3.7 decayed, missing or filled teeth by the age of five, compared to 1.6 for non-Māori non-Pacific children.
- These inequities are still evident at school Year 8. ARDS examined 71% (15,073) of School Year 8 (ages 12 – 13) children. Among those Year 8 students examined by ARDS:
  - 39% of Māori and 45% Pacific children had dental decay in their teeth at examination, compared to 27% of non-Māori non-Pacific children.

These statistics are likely to underestimate the true prevalence of dental disease and the extent of inequities in our population, as they do not include children not examined by ARDS.

Other access and outcome disparities seen in the 2019 data include:

- Caries-free rates at age five has not changed significantly since 2010, though it appears that there was a decline in the number of children who were caries-free among Pacific and Other

ethnic group in 2019. There appears to be a slight increase in caries-free rates for Māori children at age five (Figure 1).

- The rates of dmft appear to show an increase in severity of dental disease among Pacific and for Other ethnic groups, but some improvements for Māori children (figure 2).
- Dental admission rates for children aged 0-4 years are highest in Pacific children with the childhood dental admission rate for Pacific increasing in 2019. Dental admission rates for Māori children are higher than for other children.

Figure 1: Caries-free rates at age five for the Auckland Region, by ethnicity

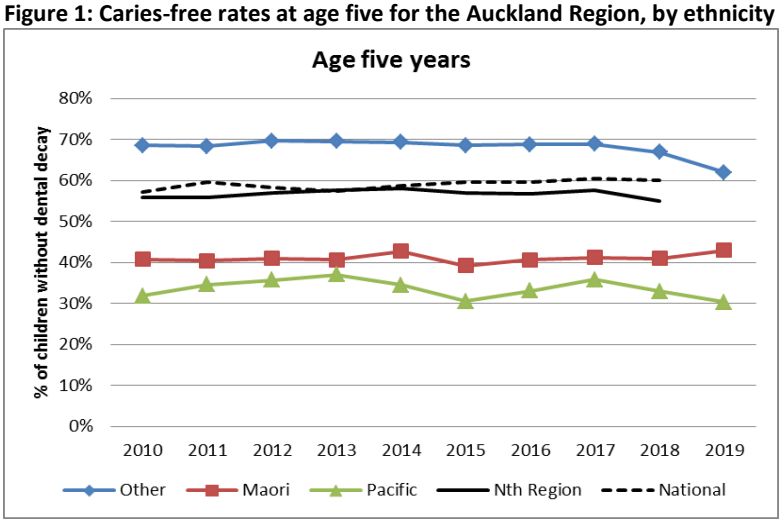
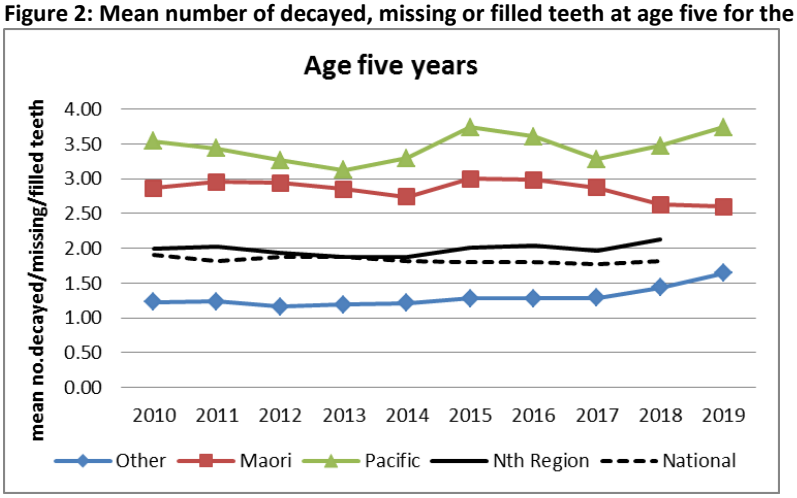


Figure 2: Mean number of decayed, missing or filled teeth at age five for the Auckland Region, by ethnicity



4. Dental Services in the Auckland Region

In New Zealand, dental services are publicly funded for children from birth until their 18th birthday. Until School Year 8, children primarily receive dental care from dental therapists and some dentists within the Community Oral Health Service. In Auckland, this service is referred to as the Auckland Regional Dental Service (ARDS). From School Year 9 until a person's 18th birthday, dental care is provided by private dental practices contracted under the Combined Dental Agreement (CDA). Once a person turns 18, there is a very limited range of publicly funded dental services available for adults. These services include dental treatment due to an accident or injury and specialist oral health care for people with needs that prevent them from accessing community-based dental care. In the

Auckland region, the regional Hospital and Specialist Dentistry provide these services. All metro Auckland DHBs also fund limited emergency dental care for low-income adults, which provide treatment for the immediate relief of pain and infection but no preventative or basic dental care. Auckland DHB also funds a new oral health service for 300 pregnant women/new mothers in the Tamaki area to receive free maternal oral health care.

4.1. Auckland Regional Dental Service (ARDS)

A description of ARDS is provided in Appendix 2. Following the 2016 review, ARDS developed a service improvement programme to guide the achievement of improved patient experience, improved oral health outcomes and improved service performance. In response to marked ethnic inequities in preschool oral health outcomes the Preschool Oral Health Action Plan for the Auckland Region was also developed. The Plan's actions were broadly divided into

i. oral health promotion, and
ii. the prevention, early detection and treatment of caries.

Oral health promotion activities include the delivery of oral health promotion messages in the community and primary care. These activities are the responsibility of multiple organisations and providers, including ARDS, primary care and Well Child Tamariki Ora (WCTO) providers. Preventive and treatment activities are mostly within the scope of ARDS.

Since 2018, ARDS has driven several key initiatives to address ethnic inequities and improve oral health outcomes. This is further detailed in Appendix 2. Some key activities included:

- Automatic enrolment of infants at birth and working collaboratively to locate children not attending appointments.
- A centralised whānau focused booking and scheduling process.
- Introduction of a supportive treatment pathway, resulting in a reduction of non-attendance.
- Increasing productivity with improvement in utilisation of dental chairs and focusing on reducing arrears and wait times.

As part of its focus on prevention, ARDS introduced a policy in 2018 to apply topical fluoride to all children at their recall appointment. A programme of topical fluoride application to pre-schoolers in high-needs ECEs was being systematically rolled out across the metro Auckland region. In 2019, the service was being provided in 39 early childhood centres across metro Auckland (eight in Waitematā DHB, 16 in Auckland DHB and 15 in Counties Manukau DHB). The programme was prioritised for delivery in Te Kohanga Reo, Pacific language nests and centres with a high number of Māori and Pacific children enrolled. All children received a toothbrush and oral health promotion pack. This programme was suspended in March 2020 due to COVID-19.

ARDS was the only Community Oral Health Service in the country offering Saturday clinics for families unable to access services during the working week. After an intitial trial, Saturday clinics were offered in Browns Road (Manukau), Puinuhi Road (Papatoetoe), Botany, Point England, Glenfield and Glen Eden. They were well attended although preliminary data from these clinics show that only one-third of those who attended were Māori or Pacific. These Saturday clinics have partly re-opened.

4.2. Dental Care for Adolescents: The Combined Dental Agreement

Dental care services for adolescents are described in detail in Appendix 3. Dental care for adolescents is funded via a nationally standardised CDA. The agreement also covers special dental services for children in Year 8 and younger who have been referred from ARDS due to treatment requirements beyond the scope of a dental therapist. There are 321 dental providers across three

metro Auckland DHBs. As well as fixed dental practices in the community, three large private mobile providers take mobile dental clinics into some secondary schools to provide adolescent dental care.

Feedback received by dental providers at the hui organized by combined Auckland DHBs in 2019 highlighted the need to increase the awareness of the availability of free oral health service and effective collaboration with schools, and other key stakeholders.

4.3. The Auckland Regional Hospital and Specialist Dentistry

The Auckland Regional Hospital and Specialist Dentistry (HSD) is the metro Auckland hospital dental service, providing secondary and tertiary oral health care services. The service is managed by Auckland DHB. HSD provide clinical services to a large and growing group of medically complex and special care patients; children requiring care under GA, and; patients who require dental or oral health services as an essential part of in- and out-patient hospital medical and surgical treatment.

The HSD service currently has 2,157 children on the waiting list for a first specialist appointment (FSA) or dental treatment under General Anaesthetic (GA). The demand for dental treatment for children at hospital currently exceeds capacity. The HSD service receives approximately 200 new referrals per month for specialist paediatric assessment and a significant proportion of these children are subsequently placed on the waiting list for dental treatment under GA. Approximately 150 children can receive dental treatment under GA per month. Many children with severe dental problems wait more than eight months, from the time of referral to completion of definitive treatment. Work is being progressed under the Vulnerable Services work stream to assist HSD to reduce waiting times and ensure children's needs are met in a timely manner. More detail about HSD is provided in Appendix 4. The significant health burden and the impacts of COVID-19 have made oral health the primary focus for the regional Vulnerable Services in the Equity Planned Care work programme.

4.4. Emergency Dental Services for Low income adults

Emergency dental services (EDS) are services for the immediate relief of pain and infections for low-income adults. The HSD and a limited number of dentists in the community who hold a 'Relief of Pain' contract with the DHB provide these services. To access this service, adults need a Community Service Card and to pay a $40 co-payment for this service. More detail about EDS is provided in Appendix 5.

4.5. Maternal Oral Health Project - Hapu Māmā Oranga Niho Ki Tamaki (AKLD ONLY)

Auckland DHB also funds for a new oral health service for 300 pregnant women/new mothers in the Tamaki area to receive free maternal oral health care. The service commenced in February 2020 and since then 82 women have been accepted into the service. Of these women, five have completed their episode of care, 49 are currently undergoing their episode of care, and 28 are yet to be examined. The majority of these women are Pacific (54%) and Māori (40%), with a small percentage (6%) of women from other ethnic groups. More detail about the ADHB Maternal Oral Health Service is provided in Appendix 6.

5. Impacts of COVID-19

The onset of COVID-19 has had a significant impact on the delivery of dental services for all ages. During Alert Levels 4 and 3, routine oral health services were suspended in line with the Dental Council of New Zealand (DCNZ) and Ministry of Health (MOH) directives. Dental care providers are at high risk due to the nature of their profession, which necessitates close proximity to the patient's oropharyngeal region and the use of droplet and aerosol-generating procedures.

Between 23 March and 14 May 2020 all oral health providers were directed to postpone all routine dental treatment and only provide essential dental services (urgent and emergency treatment). Essential dental services were defined as:

- Severe pain that cannot be controlled by medication;
- Fractured teeth or pulpal exposure, if pain not able to be managed;
- Oro-facial swelling that is serious and worsening despite taking antibiotics;
- Post-extraction bleeding that the patient is not able to control with local measures;
- Dental conditions that have resulted in acute systemic illness or raised temperature as a result of dental infection; or
- Acute infections that is likely to exacerbate systemic medical conditions such as diabetes.

In addition, DCNZ also issued guidelines for enhanced infection prevention and control, and additional PPE requirements. PPE was supplied to 50 dental practices in the community that have a Combined Dental Agreement.

For patients who were high risk (eg. COVID-19-positive, suspected to be COVID-19 positive and awaiting results or a close contact) the DHBs were expected to provide emergency dental treatment in a hospital or tertiary care facility with a negative pressure room and full PPE.

As part of regional response, the Buckland Road Community Dental facility was made ready to see patients with high-risk profile needing emergency treatment. This facility was also used to provide relief of pain services for low income adults.

5.1. Impacts on the Auckland Regional Dental Service

COVID-19 has had a significant and enduring impact on the service delivery of ARDS. Only 24 children met the DCNZ essential care criteria for an appointment in the March and April COVID-19 Alert Level 4 and 3 lockdown, and only three children met the emergency essential care criteria in the August Level 3 lockdown.

With the move to Alert Level 2 and 1, the service has re-started routine appointments, however, there are on-going DCNZ requirements that are impacting service productivity and access (eg. enhanced Infection controls and pre-screening). This reduced productivity from around eleven children per day per chair to seven. This has significantly affected the current level of arrears for ARDS. Some of the other contributing factors reported by ARDS are:

- Increased time taken to complete documentation about pre-screening), as well as apply PPE measures (e.g. wiping surfaces, wearing gowns for every appointment).
- Many schools have been reluctant to have additional staff (including ARDS staff) on site and have imposed other restrictions such as to after-school appointments, bringing in other children, and not allowing parents on-site.
- Reduced school hours as school trips, examinations, essential learning have been condensed into a shorter period of time, due to the lockdown.
- Reduced school attendance post lock-downs, with some schools reporting only 45% attendance.
- Workforce impacts from leave to care for sick children unable to attend school with COVID restrictions.

Arrears

Arrears is a timeliness indicator that measures the proportion of children who are overdue for their scheduled examination. The national target is that 10% or less children are in arrears. While the national target for arrears has not been met for any ethnic group in recent years, COVID-19 has

significantly increased the percentage of children in arrears across metro Auckland. The table below outlines the percentage of children in arrears by ethnicity and DHB of domicile as of 31 August 2020.

Table 4: Children in Arrears – 2020 data

DHB	Māori	Pacific	Asian	Other	Total
Auckland	59%	61%	54%	54%	56%
Counties Manukau	64%	65%	58%	59%	62%
Waitematā	60%	62%	57%	57%	58%
Not yet allocated*	69%	69%	62%	57%	62%
TOTAL	**62%**	**64%**	**57%**	**57%**	**59%**

*There are about 7,000 children who do not have a DHB of domicile recorded and ARDS is manually reviewing their records to ensure they have an allocated DHB of domicile by end of 2020.

Significantly overdue

While there has been a reduction of 453 significantly overdue children over the last month, there are a further 17,332 children in the Auckland region who last attended an appointment prior to 2018. ARDS is monitoring the progress reducing the number of significantly overdue children weekly and is using a supportive treatment pathway to ensure all avenues are being explored to locate and support children to attend an appointment.

The table below outlines the number of significantly overdue children (last attended prior to 2018) by ethnicity and DHB of domicile as of 31 August 2020.

Table 5: Long waiting Children – 2020 data

DHB	Māori	Pacific	Asian	Other	Total
Auckland	307	570	659	1,198	2,734
Counties Manukau	2,179	2,768	1,414	2,192	8,553
Waitematā	787	630	1,203	3,074	5,694
Not yet allocated	48	73	72	158	351
TOTAL	**3,321**	**4,041**	**3,348**	**6,622**	**17,332**

Utilisation by Children under age 2 years – 2020 data

Only 13%of children aged under 2 years have been seen by ARDS. The table below shows the percentage of children, by ethnicity, who are under 2 years and have attended an appointment with the service.

DHB	Māori	Pacific	Asian	Other	Total
Auckland	13%	14%	17%	18%	17%
Counties Manukau	7%	9%	14%	12%	11%
Waitematā	10%	8%	13%	13%	12%
Not yet allocated	7%	14%	29%	23%	20%
ARDS Total	9%	10%	14%	14%	13%

The majority of children under age two have not been seen by the service due to COVID-19. Due to the implementation of the Telehealth Oral Health Promotion Pēpi Programme in August 2020, the service delivered approximately 2,000 appointments. During the appointment the therapist introduces the service, ensures that the child's correct contact details are recorded, delivers key oral health messages and talks with whānau about any concerns they may have about their child's teeth. However, the service has found it more challenging to contact Māori and Pacific whānau. Strategies to address this are currently being explored.

School Year 8 Students

ARDS provides care to all children from birth to the end of School Year 8. Following this, young people are transferred to private contracting providers, where they continue to receive free dental care up until their 18th birthday under the CDA. Before transferring these children, ARDS is required to examine all Year 8 students and complete their treatment. Prior to the onset of COVID-19, ARDS were tracking to achieve the completions of Year 8 students. However, the restrictions instituted by DCNZ on service provision under alert levels 3 and 4 have greatly impacted the service's ability to meet its requirements to examine all Year 8 children before the end of the year. Only 24% of Year 8 children have been seen by ARDS this year.

At present, given the level of disruption across the service and the current number of children with overdue appointments, prioritisation is based on clinical need rather than age alone. This means ARDS will no longer be able to complete examination and transfer of all Year 8 students. Only 24% of Year 8 children have been seen by ARDS this year.

The table below details the percentage of school year 8 students seen by the service as at 31 August 2020.

Table 6: percentage of School Year 8 Students Seen by ARDS – 2020 data

DHB	Māori	Pacific	Asian	Other	Total
Auckland	25%	28%	27%	22%	25%
Counties Manukau	24%	26%	29%	29%	27%
Waitemata	21%	21%	22%	20%	21%
Not yet allocated	30%	26%	37%	17%	25%
TOTAL	**23%**	**26%**	**26%**	**23%**	**24%**

5.2. ARDS Recovery Plan

ARDS is currently prioritising appointments for children who are currently under treatment and those waiting the longest for their routine examination. In addition, there is a focus on children living in the highest need communities by focusing on schools that are low decile (1-4) and/or rural locations, and have:

- high Māori and Pacific enrolments
- high number of children under treatment
- most delayed service.

For those schools that meet the above criteria and have on-site clinics, these clinics are open. For schools that meet the above criteria and do not have on-site clinics, mobile facilities are provided in order of highest need. The majority of ARDS sites are now open with at least one chair operating.

Three Saturday clinics (Browns Road, Point England and Glenfield) have re-started. Other facilities that previously offered Saturday clinics (Puhinuhi Road in Papatoetoe, Botany, Wesley, and Glen Eden) will re-open in Term 4. High needs children continue to be the priority group offered appointments at the Saturday clinics.

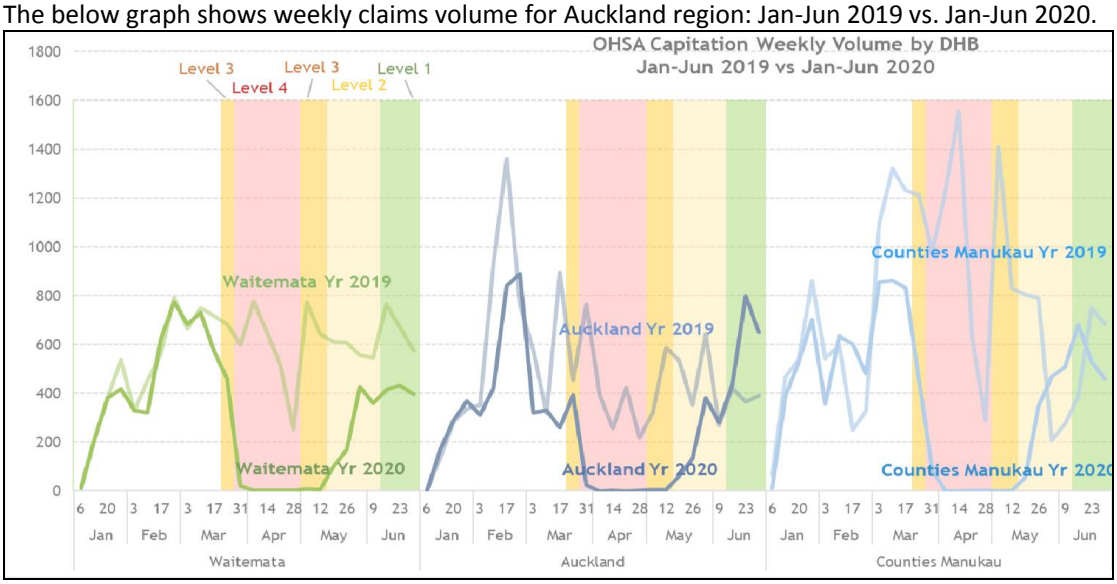
During COVID-19 Alert Levels 3 and 2, kohanga reo, language nests and early childhood centres were reluctant to have ARDS staff into their centres to complete oral health assessments and fluoride varnish applications on children's teeth. However, during Level 2, some centres in Waitematā and Counties Manukau DHBs invited ARDS to attend, so the service re-commenced in these areas. Centres in Auckland DHB have asked to wait until Alert Level 1, so ARDS Community Engagement Coordinators will re-engage with these centres to re-commence the service during Term 4.

5.3. Impacts on the Adolescents Oral Health Service

The onset of COVID-19 has also had a significant impact on the delivery of adolescent oral health service. During COVID-19 Alert Level 4 and 3, dental providers were only able to provide urgent and emergency dental care to all age groups including adolescents.

Between January to June 2020, based on Ministry of Health interim claims data for DHB of contract, about 20% adolescents have utilised funded dental care in Auckland DHB. As some dental claims are made a few months after completion of treatment, the number of claims for this period may increase slightly. There has been a 22% decrease in payments made to CDA providers in Auckland DHB providers due to COVID-19. Based on claims and payments data, the projected utilisation for adolescents' dental service for 2020 is expected to be somewhere between 40 to 50%. This will result in a reduction of 30 to 40% coverage for adolescents in this calendar year, compared to 2019.

The below graph shows weekly claims volume for Auckland region: Jan-Jun 2019 vs. Jan-Jun 2020.



Work is currently underway to look at the development of a regional Adolescent Oral Health Coordination Service Plan. The plan will outline a range of actions to improve the uptake and on-going participation of adolescents in publically funded oral health services. The plan will be developed with input from range of stakeholders particularly for Māori.

6. Conclusion

There are persistent inequities in oral health across all ages. In metro Auckland, Māori and Pacific children experience poorer oral health outcomes than non-Māori and non-Pacific children. Over 60% of Māori and Pacific children enrolled with ARDS are now overdue for their examination. Very few young children have received a preventative therapy (fluoride varnish). In addition, ARDS also has high numbers of children that are very overdue. Dental admission rates for children at hospitals are highest in Pacific children followed by Māori children. The demand for dental treatment for children at Hospital and Specialist Dentistry currently exceeds capacity. The HSD service currently has 2,157 children on the waiting list for a first specialist appointment (FSA) or dental treatment under GA. The Planned Care COVID-19 catch up activity funded has provided the opportunity for Auckland DHB to allocate $650k which will fund sufficient capacity to address the current waiting times.

There is also a significant disparity in dental coverage for Māori teenagers in the Auckland region. There is a high prevalence of dental disease, particularly for Māori and Pacific adolescents and adults and those living in more deprived neighbourhoods. For low-income adults treatment is restricted to relief of pain and does not include any preventative or maintenance treatment.

Across metro Auckland, several actions were taken to eliminate long-standing inequities particularly for preschool children under the equity focused Preschool Oral Health Strategy. However, with the impacts of COVID-19, including total cessation of the majority of ARDS services and the ongoing DCNZ requirements, there now needs to be concerted, additional efforts to address service disruption and the persistent inequity for all funded services, particularly for Māori and Pacific children and adolescents. Given these restrictions are likely to be longstanding, oral health services are now included within the Regional Vulnerable Services Framework.

Appendix 1: Oral Health Outcomes

Oral Health Outcomes for Children

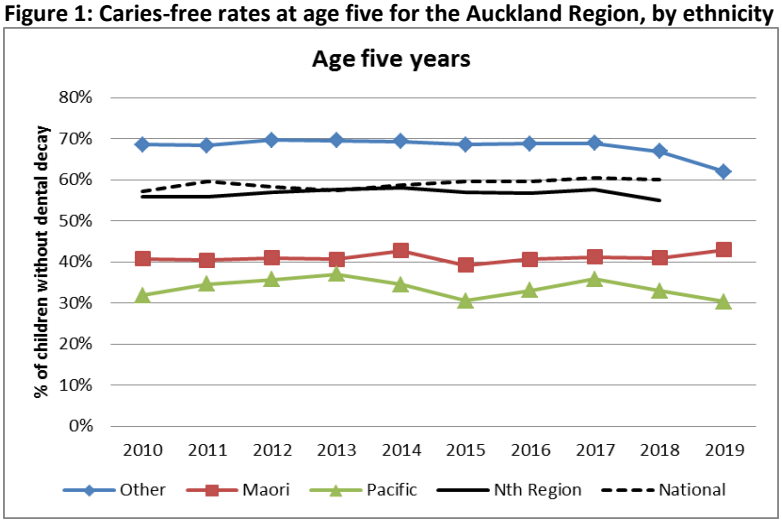
Results for 2020 will see a significant decline across all access and outcome measures, with poor quality outcome data available due to the small number of children actually examined.

The Auckland Regional Dental Service (ARDS) is the provider of universal oral health services for pre-school and primary school age children across the metro Auckland. Oral health status for children is measured through two: (i) caries-free rates (i.e. the proportion of children with no evidence of dental decay) and (ii) mean number of decayed, missing or filled teeth (dmft).

Caries-free rates reflect the prevalence of dental decay in the community (higher caries-free rates are better) and mean dmft the severity of disease (lower mean dmft is better). However, these rates are likely to underestimate the true prevalence of dental disease and the extent of inequities in our population, as they do not include children not examined by ARDS. In 2019 (our most recent data), approximately 53% (11,554) of 5-year-old children and 71% (15,073) of School Year 8 (ages 12 – 13) children were examined. Children who have been unable to access this free dental service are likely to have poorer health outcomes than those who have been examined and/or received treatment (although the numbers accessing private dentists is unknown).

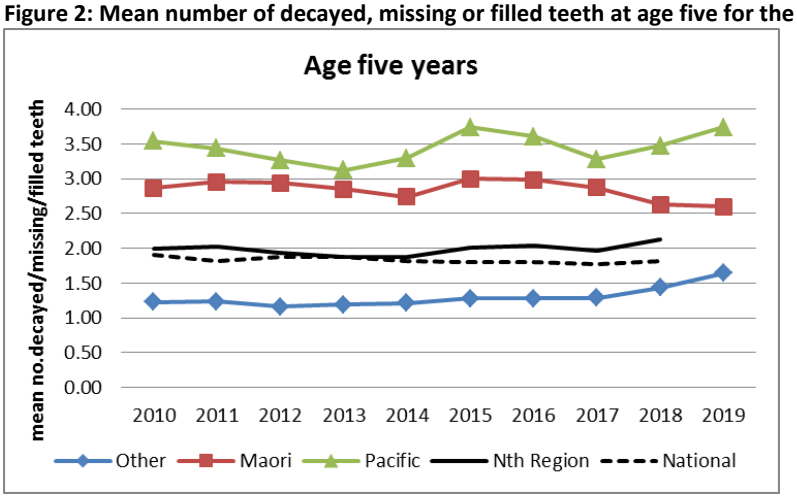
Figures 1 and 2 show caries-free rates and the mean dmft at the age of five years in the Auckland region, by ethnicity from 2010-2019. These figures also include data up to 2018, for the Northern Region (including Northland DHB) and National rates for comparison. Caries-free rates at age five years has not changed significantly since 2010, though it appears that there is a decline in the number of children who are caries-free among Pacific and Other ethnic group in 2019. There does however, appear to be a slight increase in caries-free rates for Māori children at age five.

Figure 1: Caries-free rates at age five for the Auckland Region, by ethnicity



The rates of dmft appear to show an increase in severity of dental disease among Pacific and for Other ethnic groups, but some improvements for Māori children.

Figure 2: Mean number of decayed, missing or filled teeth at age five for the Auckland Region, by ethnicity



Figures 3 and 4 below show caries-free rates and the mean dmft at school Year 8 for children in the Auckland region by ethnicity from 2010-2019. Caries-free and mean dmft rates for children at School Year 8 continue to improve suggesting that school dental services in general have made progress in improving the oral health outcomes of school-aged children, but more work needs to be done to reduce persistent inequities seen at all ages for Māori and Pacific children.

Figure 3: Caries-free rates at age school Year 8 for the Auckland Region, by ethnicity

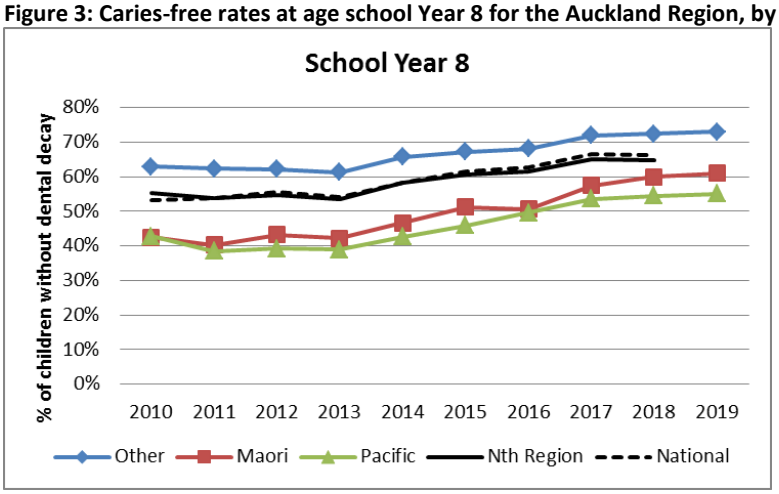
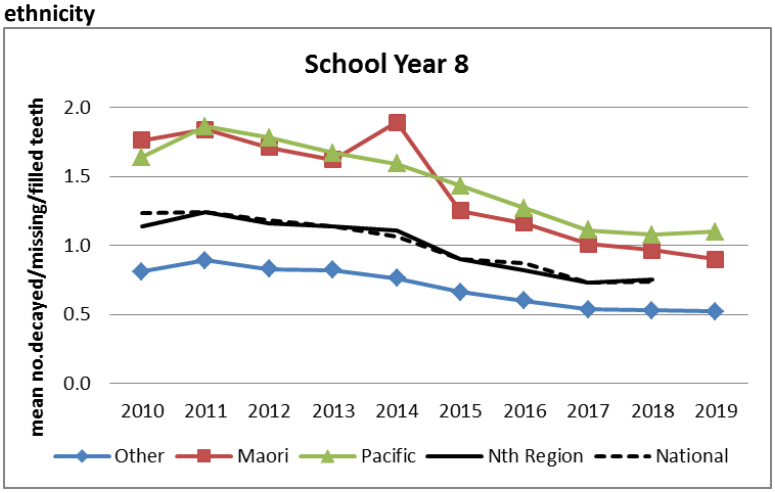


Figure 4: Mean number of decayed, missing or filled teeth at school Year 8 for the Auckland Region, by ethnicity



Dental admission rates for children aged 0-4 years are highest and also above the national average in Pacific children in the Auckland region. Dental admissions, mainly for dental extractions under GA are an important cause of ambulatory sensitive hospitalisations (i.e. hospitalisations considered potentially reducible through preventive or treatment strategies deliverable in a primary care setting), and the childhood dental admission rate for Pacific has increased further in 2019 for Auckland and Waitemata DHB. Dental admission rates for Māori children are higher than for other children, but not as high as expected, given caries-free and mean dmft rates, suggesting that there may be issues with access to secondary care.

Figure 5: Dental admission rates for children aged <5 years in Auckland DHB, 2015-19

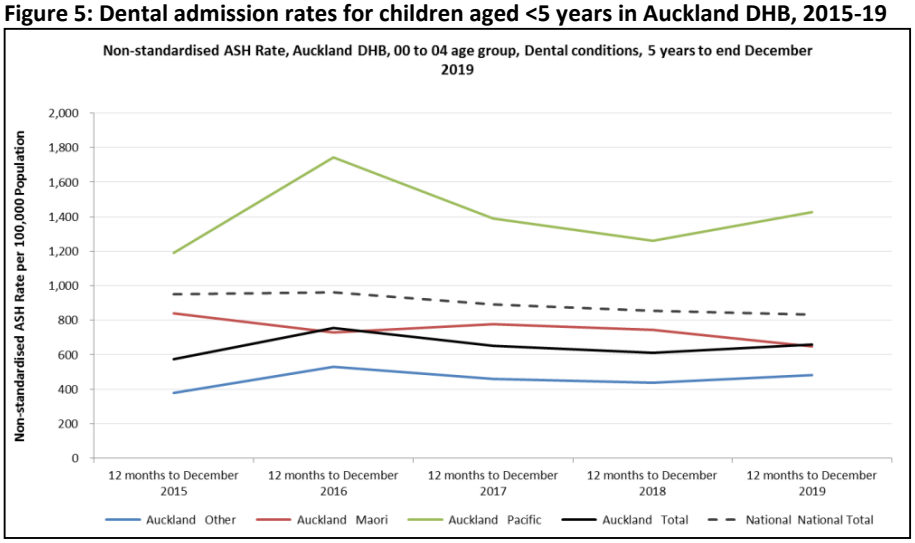
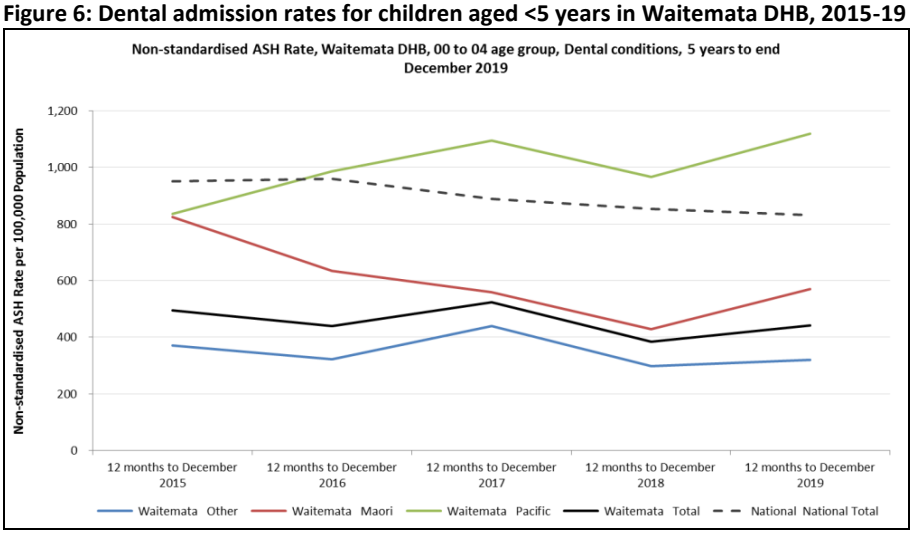
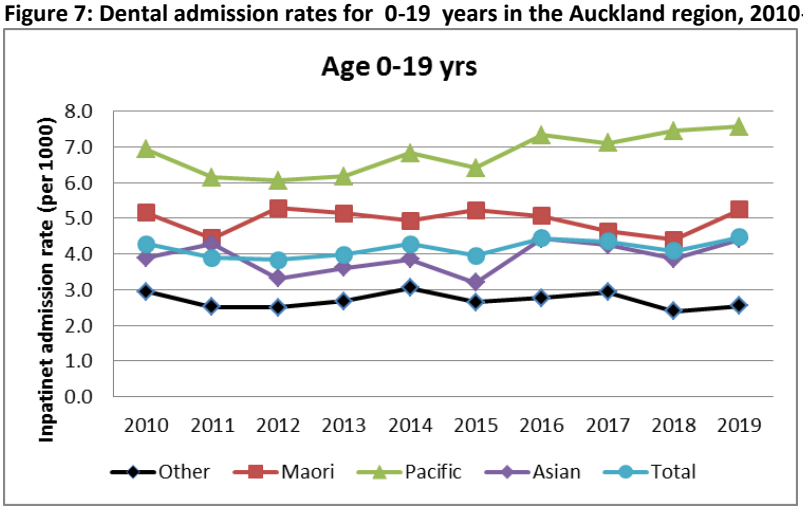


Figure 6: Dental admission rates for children aged <5 years in Waitemata DHB, 2015-19



Dental admission rates for those aged under 19 years and younger are also highest in Pacific children follwed by Māori children demonstrating that the inequities from childhood persist into adulthood.

Figure 7: Dental admission rates for 0-19 years in the Auckland region, 2010-2019



Oral Health Outcomes for Adolescents

Oral health services for Adolescents are provided by private oral health providers with a Combined Dental Agreement (CDA) with the DHB. As well as fixed dental practices in the community, three large private mobile providers take mobile dental clinics into some secondary schools to provide adolescent dental care. In Auckland DHB, these providers provide services to three quarters of adolescents seen (within the publicly funded system). In Waitemata DHB, two providers see nearly half (46%) of the adolescents. Students are eligible for services regardless of whether they are attending a school, training institute or working.

Unlike children, there are no standardised outcome indicators (such as caries-free or dmft) available for adolescents. The Ministry of Health has set an utilisation target of 85% of adolescents from school year 9 – 17 years to receive annual dental care. This is measured by identifying unique individuals using the claims data from contracting dentists and adding a small number of high risk adolescents seen by seen by Community Oral Health Services (ARDS in the Auckland region).

Auckland DHB coverage for adolescents' oral health in 2019, was 69% and in Waitematā DHB 71%. Both DHBs utilisation rates for adolescents' oral health are below the national target of 85%. While there is an increase in overall utilisation rates over the years, there is also a significant disparity in dental coverage for Māori teenagers with only 52% and 54% coverage for Auckland and Waitematā DHBs respectively. While Māori teenagers utilisation rate is above the national average of 48%, more work is needed to increase the uptake of dental service by Māori teenagers.

Figure 8: Adolescents dental utilisation in Auckland DHB, 2017-2019

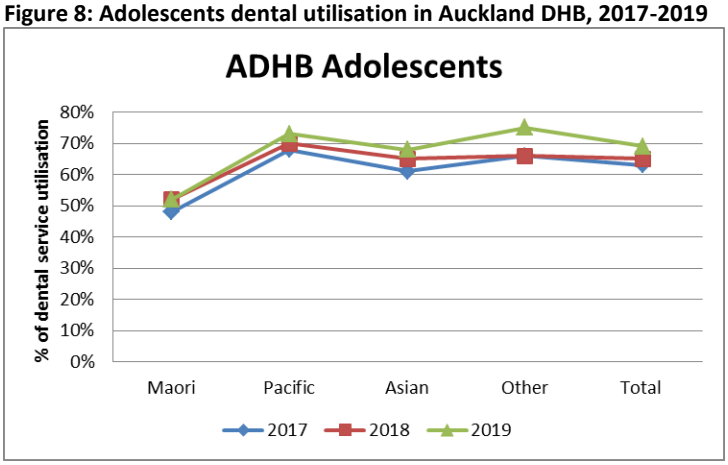
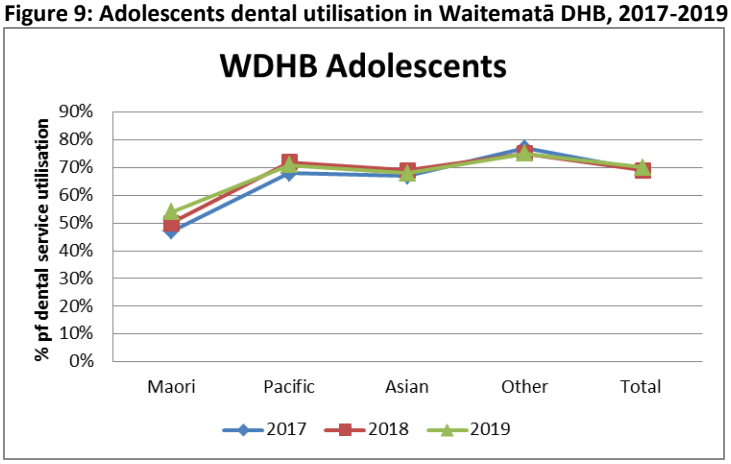


Figure 9: Adolescents dental utilisation in Waitematā DHB, 2017-2019



Oral Health Outcomes for Adults

Dental care for adults is mostly not covered by the publicly funded health system. Adult oral health care makes up a small portion of the Government's health spending, less than 0.5% of Vote Health in 2018/19, of which more than half is spent on secondary services and ACC.[1]

Data from national surveys indicates that ethnic and socioeconomic inequities in oral health outcomes persist into adulthood. Data from recent New Zealand Health Survey (2019) show that there is a high prevalence of dental disease, particularly for Māori and Pacific adults and those living in more deprived neighbourhoods. In that dataset, 11% of Pacific, 10% of Māori and 9% of adults living in quintile 5 reported having one or more teeth removed due to decay, infection or gum

[1] Access to Oral Health Services for Low Income Adults (2020). New Zealand Dental association. URL: https://www.nzda.org.nz/assets/files/Access_To_Oral_Health_Services_For_Low_Income_Adults.pdf

disease in the previous 12 months, compared to 5% of quintile 1 adults and 6% of adults overall.[2] In addition, about 348,000 (51.5%) people in quintile 5 had avoided dental care in the previous year due to cost, compared to about 0ne-third of adults living in quintile 1.

There is also evidence of significant unmet need for dental care in adults, with more than half of adults reporting that they have never visited a dental health worker or only visited for toothache or problems. Māori and Pacific adults are significantly more likely to report unmet need for dental care than other adults, as are those living in the most deprived neighbourhoods. Even after adjusting for age, sex and ethnicity, those living in quintile 5 neighbourhoods are twice as likely as those living in quintile 1 neighbourhoods to have not visited a dentist. In the New Zealand Oral Health Survey, conducted in 2009, nearly half of adults reported that they felt they currently needed dental care, but had avoided it due to cost.[3]

[2] Ministry of Health (2019). Annual Data Explorer 2019: New Zealand Health Survey [Data File]. URL: https://minhealthnz.shinyapps.io/nz-health-survey-2018-19-annual-data-explorer/_w_deeee4aa/#!/home

[3] Ministry of Health (2010). Our Oral Health: key findings of the 2009 New Zealand Oral Health Survey. Wellington: Ministry of Health.

Appendix 2: The Auckland Regional Dental Service (ARDS)

ARDS provides screening, early detection, preventive and restorative dental services for preschool and school-aged children. Children requiring treatment outside the scope of ARDS clinicians are referred to either HSD (if treatment is required by a paediatric specialist including the use of GA) or a private dentist with a Combined Dental Agreement.

ARDS is managed by Waitemata DHB on behalf of all three metro Auckland DHBs. There are approximately 280,000 children enrolled with the service. Service provision extends from Wellsford to the Bombay Hills and is delivered in 83 facilities, including fixed, mobile and transportable dental units across all three DHBs with 188 patient chair capacity.

Table 1: Dental facilities owned by metro Auckland DHBs

Auckland DHB	Waitematā DHB	CMH
No TDU's	15 TDU's	6 TDU's (CMH are using 2 x TDU's owned by Waitematā DHB)
6 vans	8 vans	5 vans Plus 1 sponsored mobile vehicle
14 Fixed clinics	11 Fixed Clinics	17 Fixed Clinics

ARDS has undergone a significant upgrade in facilities and equipment since 2008 as part of a national reconfiguration of Community Oral Health Services across New Zealand. Prior to this time, the free children's dental service was based in schools and primarily focused on dental treatment in school-aged children. The new vision required services to be re-oriented to focus on prevention and the promotion of good oral health. Addressing oral health inequities, particularly in relation to Māori and Pacific children, was a priority for the new model of care. To improve access, the new model of service delivery used a hub and spoke model, in which services were provided for preschool and school-aged children from a range of fixed and mobile clinical units. However, a formal evaluation of the national dental service reorientation by ESR in 2014 reported that equity was still an issue. Many dental therapists had concerns that those with the most need (including Māori and Pacific children) were still less likely to access clinical services due to the unavailability of transport or parents being unable to take time off work to bring their children.[4]

In 2016, a service review of ARDS was undertaken by Waitematā DHB to better understand whether the service was meeting Ministry of Health and District Annual Plan targets and deliverables, and to identify areas of improvement, particularly in terms of equity.[5] The review reported examination rates of 64-78% of the enrolled population, but treatment completion rates of 54-70% and non-attendance rates consistently above 20%, particularly for Māori and Pacific children and those living in Counties Manukau DHB. Furthermore, chair utilisation was found to be lower than that recommended by the Ministry of Health (eight appointments per day per chair, compared to the recommended eleven appointments per day per chair).

Pre-school Enrolment

Ensuring that all children are enrolled in ARDS is a crucial first step in ensuring that all children are able to access the service. Figure 8 show the percentage of children in the metro Auckland region enrolled in ARDS by the age of four. Percentages for Asian and Other ethnic groups exceed 100% at

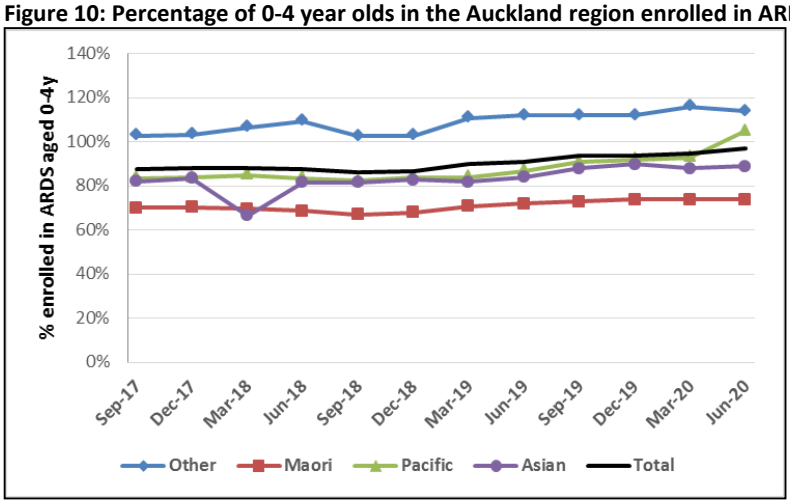
[4] Institute of Environmental Science and Research Limited (ESR). *An Evaluation of the Reorientation of Child and Adolescent Oral Health Services*. Wellington: Ministry of Health; 2014.
[5] Harun L. *Auckland Regional Dental Service Review Report.* ARDS; October 2016.

some points because of a mismatch in ethnicity data between the Census (used for the denominator) and health data (used for the numerator). Work is being done to ensure ethnicity is being reported correctly within the Titanium system that is used by ARDS.

The number of Pacific 0-4 year old children enrolled with ARDS has increased in the last two years due to the introduction of automatic enrolments from birth lists. A data matching process has occurred with the Auckland and Waitematā Well Child Tamariki Ora providers. This has supported ARDS to identify many high needs children who were not enrolled with the service. It has also allowed the services to work together to identify current contact details and improve oral health service utilisation. ARDS are also working closely with the newly established National Child Health Information Platform to ensure they will receive the information to help ensure all children are enrolled with ARDS.

Māori children continue to have lower enrolment rates than children of other ethnicities. Approximatley 26% of 0-4 year old Māori children are not enrolled in the Auckland region. The reasons for these lower enrolment rates are unclear, and work is currently underway to ensure ethnicity data in the ARDS system is accurate. Community Engagement Co-ordinators are working closely with Māori providers to conduct a data-matching process to identify children enrolled with a Māori health provider not currently enrolled in ARDS and/or have not received an examination. ARDS datasets are reconciled against school lists to ensure children who were previously discharged due to non-attendance and/or no contact are identified and re-enrolled.

Figure 10: Percentage of 0-4 year olds in the Auckland region enrolled in ARDS



Further breakdown of the percentage of children enrolled in ARDS by the age of two show similar results with approximatley 27% of Māori children not enrolled in ARDS.

Figure 11: Percentage of children in Auckland DHB enrolled in ARDS by the age of 2 years

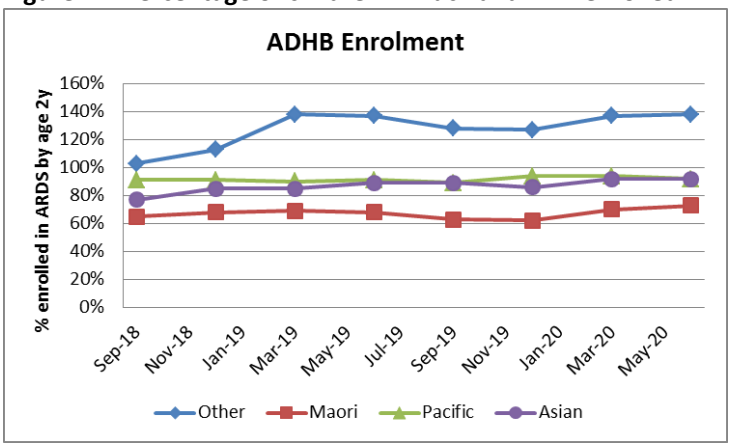
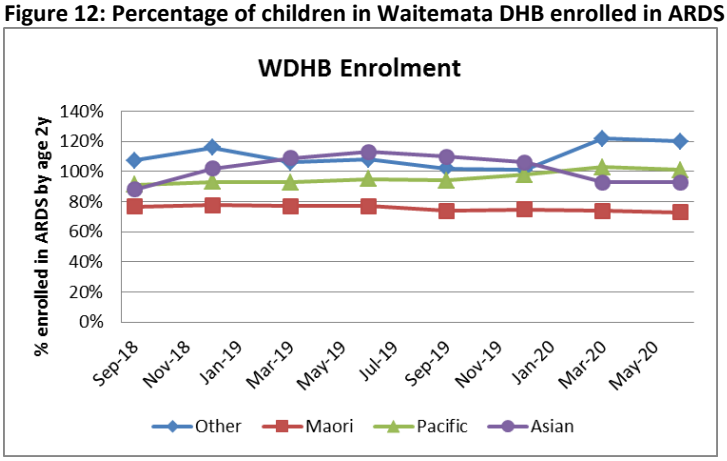


Figure 12: Percentage of children in Waitemata DHB enrolled in ARDS by the age of 2 years



Access to care

Improving access to care has been a particular focus for ARDS, particularly for Māori and Pacific families. While the percentage of children seen by age two remained steady in Auckland DHB in 2019, there was a marked decrease in utilisation of the service for all ethnic groups in Waitematā DHB in 2019. Access plumeted in 2020 with service cessation and disruption caused by COVID-19.

The utilisation rates in 2019 continue to remain lower in Māori and Pacific children across both DHBs when compared to other children. An ongoing focus on increasing access for these children is necessary to close the equity gap.

Workforce

Though overall vacancies across ARDS were reduced, the recruitment and retention of dental and oral health therapists remains a challenge for the service. Activities undertaken to support staff recruitment and retention include:

- A review of the new graduate programme was completed and the recommendations identified have been implemented. The revised programme commenced in January 2019.

- Two new clinical coach roles have been implemented. These roles are primarily focused on supporting new graduates transition to practice, but also provide support to therapists with identified learning needs.
- Dental assistants were supported to complete CareerForce training.
- Staff are actively engaged in service improvement initiatives and changes in models of care
- The service continues to support flexible working conditions including flexibility in location, hours of work and working part time across private practices and ARDS. The service recruited 24 new graduate therapists for 2020.

Appendix 3: Dental Care for Adolescents: The Combined Dental Agreement

Dental care for adolescents is funded via a nationally standardised CDA. The agreement also covers special dental services for children in Year 8 and younger who have been referred from ARDS due to treatment requirements beyond the scope of a dental therapist (for example, some treatments of oral disease, the restoration of dental tissue, or extractions). There are 321 dental providers across three metro Auckland DHBs - Auckland DHB 104, CMH 92 and WAITEMATĀ DHB 125. As well as fixed dental practices in the community, three large private mobile providers take mobile dental clinics into some secondary schools to provide adolescent dental care. A small number of high-risk adolescents continue to receive services from ARDS.

There are two components of service for adolescents:

- A standard (capitated) package of care for all adolescents which covers an annual examination and all other necessary consultations, diagnostic services, single surface restorations and preventative treatment within the 12-month period.
- Services outside of the capitated package are paid on a fee for service basis.

A small review of the agreement occurs annually focusing on small amendments and price increases. A major review occurs every three years allowing more significant changes to the agreement. A broader national landscape review scheduled by the National Oral Health Group and the Ministry of Health is proposed to establish how well the CDA provides equitable access to dental care and recommend improvements to future contracting years.

Locally the three Metro Auckland DHBs are working together to track adolescent use of the service from transfer from ARDS after school year 8, to where adolescents are being seen each year. Some key activities include;

- Data matching the children who have been transferred out of ARDS to locate the school the children are attending and requesting the mobile dental service to offer an appointment for them.
- Trialling data matching the children transferred to private dental providers and working with them to find out why students have not attended.
- Alternative Education students dental visit history is checked by the adolescent coordination service and a list of local providers are sent to the centres for the staff to book an appointment for them if they are due to be seen.
- Gateway Adolescents given dental background check and retained in ARDS if deemed necessary or enrolled directly with an adolescent provider.

In addition, about 15,000 adolescents who were not receiving care in the past two years have been identified. The plan to use the Ministry of Health's NHI level data to match their NHI with their current contact details to re-engage with these adolescents was delayed due to COVID-19. Individual follow up at provider level has proven unsuccessful for these adolescents due to incorrect addresses and disconnected phone numbers obtained at the time of transfer from ARDS in Year 8.

Adolescent Oral Health Coordination Service

More work is required to increase utilisation for our young people most at risk of poor oral health outcomes. This requires district and regional approaches. The adolescent oral health coordination service is one of the key mechanisms currently available for increasing utilisation. This is a community based, population targeted service that is intended to coordinate the various groups that influence the delivery of adolescent oral health services (e.g. dentist, community oral health services, Māori health service providers).

The purpose of the service is “to improve the health and wellbeing of all adolescents, particularly those in at risk groups, by providing coordinated services that will enhance the uptake and on-going participation rates of adolescents in oral health care services”. The intention is that the service plans, implements and maintains a population-based service to improve the uptake and on-going participation of adolescents in publically funded oral health services. The service does not directly deliver oral health assessment or treatment services. Currently, the service consists of one coordinator across Metro Auckland (1FTE) who is based within ARDS. The focus of this long standing position is to support the transition of adolescents in year 8 between ARDS and private contracted dental providers. The coordinator also supports a limited amount of communications activity.

There is a strong need for health promotion and education focused on young people including creating awareness of the availability of free publically funded oral health service. Effective collaboration with high schools, alternative education providers, Teen Parent Units, Māori and Pacific providers, youth groups and other key stakeholders is needed to promote the availability of free service. Regular liaison and communications with contracted dental providers is also needed to strengthen recall systems and follow up appointments.

Work is currently underway to look at the development of a regional Adolescent Oral Health Coordination Service Plan. The plan will outline a range of actions to improve the uptake and on-going participation of adolescents in publically funded oral health services. Given the marked inequity in accessing the service, particularly by Māori adolescents, the plan need to be developed with input from range of stakeholders.

Feedback received by dental providers at hui organized by combined Auckland DHBs in 2019 also highlight the need for support and coordinated efforts to increase the awareness of the availability of free oral health service and effective collaboration with schools, and other key stakeholders

Appendix 4: The Auckland Regional Hospital and Specialist Dentistry

The Auckland Regional Hospital and Specialist Dentistry (HSD) is the regional hospital dental service, providing secondary and tertiary oral health care services to people living in Auckland, Waitematā and Counties Manukau DHBs. It is funded by the three metro Auckland DHBs, and is managed by Auckland DHB.

HSD provide clinical services to a large and growing group of medically complex and special care patients, children requiring care under General Anaesthetic (GA), and patients who require dental or oral health services as an essential part of in- and out-patient hospital medical and surgical treatment. HSD also provide very limited emergency dental care for low-income adults service, as do dentists in the community who hold a contract with the DHB.

HSD provide outpatient services from clinics at Greenlane Clinical Centre, Auckland City Hospital, Starship Children's Hospital, Buckland Road Community Clinic (relief of pain service) and Middlemore Hospital. No outpatient oral health services are provided from North Shore or Waitakere Hospitals.

Day-stay and inpatient operating sessions are provided from Greenlane, Starship, Auckland and Middlemore Hospitals, Quay Park Surgical Centre and, at times Waitakere Hospital.

Children requiring care under GA are treated mainly at Greenlane and Quay Park. Medically complex children requiring GA are treated as inpatients or via daystay at Starship Hospital

The demand for dental treatment for children at hospital currently exceeds capacity. The HSD service receives approximately 200 new referrals per month for specialist paediatric assessment and a significant proportion of these children are subsequently placed on the waiting list for dental treatment under GA. With operating theatres working under full capacity, approximately 140 -150 children can receive dental treatment under GA per month. The demand for children requiring dental treatment under GA has caused significant challenge for the service in achieving compliance with ESPI requirements that specifies all children receive their first specialist appointment within four months of referral and treatment within four months after FSA. This means that many children with severe dental problems wait more than eight months, from the time of referral to completion of definitive treatment in Auckland region. Work is currently being done under Vulnerable Services work stream to assist HSD to reduce waiting times and ensure these children are managed in a timely manner.

Appendix 5: Emergency Dental Services for Low income adults

Emergency dental services are services that are required for the immediate relief of pain and infections for low-income adults. Under the service coverage schedule, DHBs are required to provide emergency dental services where funding and capacity allows. Both Auckland and Waitematā DHB have historically allocated funding for emergency dental treatment. The HSD and a limited number of dentists in the community who hold a 'Relief of Pain' contract with the DHB provide these services. In order to access this service, adults must hold a valid Community Service Card. There is a $40 co-payment for this service. Treatment is restricted to the current problem and does not include any preventative or maintenance treatment.

Appendix 6: Maternal Oral Health Project - Hapu Māmā Oranga Niho Ki Tamaki

Auckland DHB also funds for a new oral health service for 300 pregnant women/new mothers in the Tamaki area to receive free maternal oral health care. The service commenced in February 2020 and since then 82 women have been accepted into the service. Of these women, five have completed their episode of care, 49 are currently undergoing their episode of care, and 28 are yet to be examined. Majority of these women are Pacific (54%) and Māori (40%), with a small percentage (6%) of women from other ethnic groups.

In consultation with the Hapu Māmā Oranga Niho Ki Tāmaki Steering Group and Clinical Governance Group, the eligibility criteria for this service have been extended to increase the volume of referrals into the service. This was because health professionals who refer pregnant women into this service were confident all women who met the original criteria had been offered the opportunity to be referred, to the best of their knowledge. The suburbs in which women reside now include Mt Wellington and St Johns, in addition to the existing Point England, Panmure and Glen Innes. In addition, women with pēpi aged under 6 months old may also partake, in addition to women being more than 12 weeks pregnant. The volume of referrals continues to be monitored to ensure the service has enough accepted referrals to maximise chair utilisation.

Auckland Regional Public Health Service (ARPHS) Briefing

Recommendation:

That the Community and Public Health Advisory Committee recommend to the Board:

That the Board receive this update from the Auckland Regional Public Health Service (ARPHS) on key areas of work that are underway and/or have been completed between January and September 2020.

Prepared and submitted by Dr William Rainger, Director and Jane McEntee, General Manager; Auckland Regional Public Health Service (ARPHS).
Endorsed by: Dr Debbie Holdsworth, Director Funding, Dr Karen Bartholomew Director Health Outcomes, Dr Margaret Wilsher, Auckland DHB Chief Medical Officer.

1. Purpose

The Auckland Regional Public Health Service (ARPHS) is providing this update to Waitematā DHB's Community and Public Health Advisory Committee (CPHAC) on key areas of work contributing to ARPHS' long-term outcomes that are underway and/or have been completed between January and September 2020. This report provides the following updates:

1. People are protected from the impact of notifiable infectious diseases:
    1.1. COVID -19
    1.2. Other notifiable diseases (Tuberculosis and Vaccine Preventable Diseases)
2. People are protected from the harms associated with harmful commodities:
    2.1. Alcohol
    2.2. Smokefree
3. The environments in which people live, learn, work and play promote health and wellbeing:
    3.1. Healthy Auckland Together
4. People are protected from the impact of environmental hazards
    4.1. Drinking Water
5. Public health leadership, workforce development and organisational sustainability
    5.1. Policy submissions

As part of this update, ARPHS is providing a description of the services it delivers to people residing in the Auckland DHB, Waitematā DHB and Counties Manukau Health. See Appendix A.

Appendix B provides an update on surveillance of other infectious diseases.

2. People are protected from the impact of notifiable infectious diseases[1]

2.1. Novel Coronavirus (COVID – 19)

Executive Summary

Since the beginning of 2020, New Zealand has been responding to the COVID-19 global pandemic. The first case ARPHS managed was notified on 28 February 2020. In February/March, most confirmed cases in Auckland had links with international travel or known cases; however, over time there were some cases for which no link was readily apparent. Subsequently, with the closing of the borders and the introduction of the first New Zealand lockdown (Alert Level 4), the number of cases fell dramatically. At the beginning of June, there were no cases notified, however, during the last weeks of June 2020 cases started to increase again, this time related to people in quarantine facilities returning to New Zealand.

After 102 days of no new COVID-19 cases in the community, on 11 August 2020, four members of an Auckland household returned a positive result for COVID-19. Within weeks, the number of cases rose and this became the single largest COVID-19 cluster in New Zealand. Auckland was again placed into Alert Level 3 lockdown and ARPHS worked to undertake case and contact management, cluster identification and source investigations to manage the outbreak. Since 25 September, there has been no community transmission.

In June 2020, ARPHS established a COVID-19 response unit to support its ongoing response to the pandemic. ARPHS' operating model has centred on the aims of its Outbreak Strategy:

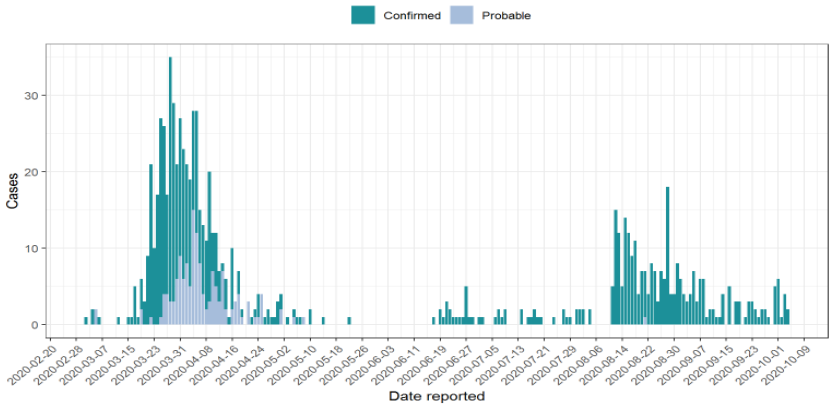
- act in accordance with Te Titiri o Waitangi, including Māori health equity
- ensure an equitable response
- establish the outbreak response
- identify the outbreak source
- stop on-going transmission
- support affected communities
- ensure a safe and sustainable response
- ensure clear communication and documentation.

The total number of COVID-19 confirmed and probable cases in Auckland, since 28 February to 5 October 2020 was 859 (713 confirmed cases and 146 probable). There were also three notifications under investigation (see Figure 1) and six deaths in the reporting period.

[1] **ARPHS receives notifications of 48 notifiable diseases as defined under the Health Act, 1956. ARPHS' role includes receiving the disease notifications, case confirmation, risk assessment and ensuring appropriate public health actions are undertaken (e.g. contact tracing, investigating potential outbreak sources), daily and weekly monitoring and surveillance of these notifications, and investigation and follow-up of any disease outbreaks.**

The Prime Minister, Ministers, Director General of Health and other officials have visited ARPHS on various occasions and have provided favourable reviews on ARPHS' outbreak response.

Figure 1: Weekly confirmed and probable COVID-19 cases, Auckland region, 2020



Total cases per DHB and in Managed Isolation Facilities (MIF) for the Auckland region for the same period are included in Table 1.

Table 1: COVID-19 confirmed and probable case distribution by DHB, Auckland region, 2020[2]

DHB	Confirmed cases	Probable Cases	Under investigation
Auckland DHB	130	51	0
Counties Manukau Health	96	22	0
Waitematā DHB	168	71	3
Managed Isolation Facilities (MIF)	319	2	0

ARPHS Operational Response

The COVID-19 response has placed significant demand on ARPHS and required rapid escalation at times to support the public health response. The response included the need to respond to complex cases and contact tracing, ensuring the needs are met to support isolation and quarantine requirements. In the August outbreak, contact tracing involved multiple settings including churches, workplaces and educational facilities. The complex operational activity for outbreak management included:

- detailed (and often repeated) case interviewing
- communication (and follow up) with multiple contacts
- sophisticated analysis to link numbers of cases and contacts
- implementation of novel processes to delegate contacts in specific circumstances to other PHUs for follow up
- discussion with cases and where possible, household contacts, to quarantine at Jet Park Hotel
- stakeholder engagement with multiple key stakeholders

[2] A total of seven cases have not been geocoded. Such cases either appear in the address unknown fields or are assigned to DHB via a suburb lookup until they are able to be correctly geocoded

- meeting welfare needs of highly vulnerable whānau
- detailed internal and external reporting, and

- simultaneous requirements to assume responsibility for assessing and endorsing isolation exemptions processes.

Given that the resurgence disproportionally affected mostly Pacific but also Māori communities, ARPHS worked with stakeholders, cultural advisors and communities to ensure they were kept well informed and supported and any concerns were addressed. Māori and Pacific workforce and cultural support have been embedded across ARPHS response.

The Auckland regional DHBs also supported ARPHS outbreak response by providing additional staff to support the surge workforce requirements. This included Māori and Pacific Health leaders, doctors and nurses from the DHBs supporting the cultural appropriateness of the response, including communication with Church Leaders.

To support its response, following the initial outbreak ARPHS made significant progress on the following:

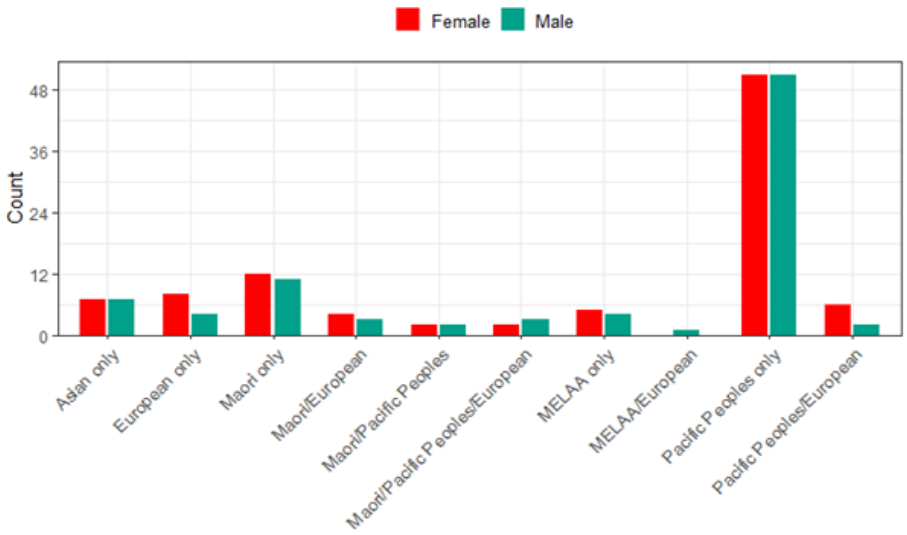
- establishing a dedicated COVID-19 Response Unit (CRU)
- capacity building, providing weekly progress reports to the Ministry
- establishing a Pae Ora (healthy futures for Māori) response model
- establishing a Pacific case and contact management team
- updating existing Standard Operating Protocols
- developing procedures for response at the maritime border and for outbreak management
- working with the DHBs to support the health response part of the isolation and quarantine facilities
- developing a surge framework for our response, which includes triggers and processes for an escalating response (including accessing additional staff from the DHBs)
- ongoing training to maintain competency of internal and external staff who have been involved in the response.

Resurgence of COVID-19: August Outbreak

After a period of 102 days of no reported community transmission of COVID-19, an Auckland household with four confirmed cases was identified on 11 August 2020. This resulted in the largest COVID-19 outbreak New Zealand has seen to date, and is commonly known as the Auckland August outbreak. The earliest symptom onset of this outbreak was identified in a case as at 31 July. The source of the outbreak remains unknown. There were five significant sub-clusters (over 10 cases) related to the August cluster. In addition to the August cluster, there were other non-associated single cases and a small cluster associated to a Christchurch Managed Isolation and Quarantine Facility (six confirmed cases).

Between August 11 (first case of the second outbreak was notified) and October 5, 2020, there were 187 cases in the community in Auckland and 70 imported cases. Population groups significantly impacted by the August outbreak included people self-identified as of Pacific ethnicities (*Figure 2*). Māori people were also affected. Household, workplaces and religious settings were the main places of exposure.

Figure 2: COVID-19 resurgence, confirmed and probable community case distribution by ethnicity[3] and gender, Auckland region, 11 August-October 5th 2020.



The 20 to 29 (17%) and the 30 to 39 (16%) age groups were more affected with the COVID-19 resurgence (Table 2). This in comparison to the previous outbreaks (up to May 2020) where the 20 – 29 age group was the most affected.

Table 2: COVID-19 confirmed and probable case distribution by age group, Auckland region, 11 August-October 5th 2020.

Age	Confirmed and probable cases (community)	Percentage (%)
<1	2	1
1 to 4	8	4
5 to 9	14	7
10 to 14	22	12
15 to 19	17	9
20 to 29	31	17
30 to 39	30	16
40 to 49	26	14
50 to 59	23	12
60 to 69	8	4
70+	6	3
Total	187	100

Surge planning and response

[3] Ethnicity at Level 2

In June 2020, ARPHS moved to a longer-term structure to respond to the COVID-19 pandemic by establishing a response unit which operates seven days per week. The purpose of the unit is to provide an effective, ongoing and scalable platform for ARPHS' ongoing response to COVID-19, while re-establishing ARPHS' usual management processes.

As a response to the current resurgence, ARPHS instigated a surge response including:

- standing up an Incident Management Team
- applying its surge framework to guide surge planning in accordance with current and predicted demand (ARPHS moved from alert level yellow to orange, red and back again to orange and currently is at yellow)
- scaling back on business as usual
- re-deploying nursing and medical staff to ARPHS (many worked on the first COVID-19 response)
- establishing additional case and contact management teams and symptom checking teams
- delegating tasks where appropriate to other PHUs

With Alert Level 3 lockdown, DHBs continued to provide elective services which impacted on the DHBs' ability to provide surge workforce to ARPHS. During September, ARPHS reviewed its operating model, and the updated workforce model has increased the case and contact management team baseline to four teams. This will support management of Managed Isolation Facility cases and relatively small contained outbreaks which are anticipated to occur every two to four months. When ARPHS surge response goes to orange or red DHB and Auckland Council staff will be sourced to support additional teams, according to the size of the outbreak and scalability required.

National Contact Tracing System (NCTS)

For the last ten years or so ARPHS used its Notifiable Disease Case Management System (NDCMS) as the platform for recording and managing cases, contacts and outbreaks. As a result of COVID-19, the Ministry has developed a national platform (NCTS) and mandated its use by all Public Health Units. The NCTS will enable all PHUs (and the Ministry) to access information on cases and contacts to support delegation of contact management between PHUs and the Ministry. After a process akin to user acceptance testing and training of ARPHS staff, ARPHS moved from NDCMS to NCTS in late July which added in complexity for staff to learn a new system whilst responding to the August outbreak. This has supported ARPHS to delegate MIF cases to Waikato PHU and follow up of some contacts to the National Investigation Tracing Centre and other PHUs.

Opportunity costs

ARPHS has deployed over 90 of its 140FTE to support the COVID-19 outbreak response. ARPHS has only maintained its essential regulatory services and TB case management. This will have an impact on the long term public health impacts for the population of Tāmaki Makaurau. The other sections of the report summarises the opportunity costs of the redeployment of ARPHS staff to the COVID-19 response.

Next steps

It is assumed that for the next 12-36 months ARPHS will continue to deliver core COVID-19 'Stamp it Out' public health actions:

- public health surveillance and reporting
- public health management of cases notified from Managed Isolation Facilities (MIF) and cases/outbreaks due to community transmission

- contact tracing and follow up including monitoring effective isolation and quarantine of cases and contacts, assessing their welfare requirements and provision of cultural support
- outbreak identification, investigation and management
- public health management of the maritime border
- provision of public health advice
- public information management, including translated resources

- assessment and endorsement or otherwise of exceptional exemptions requested through Managed Isolation Facilities
- training staff to develop/maintain their case and contact management expertise
- Jet Park liaison, welfare, exemption and "bubble breach" functions.

The core principles for a sustainable response to COVID-19 include:

- maintain a trained workforce and management infrastructure to support rapid scale up
- work in partnership to deliver equitable outcomes for Māori and Pacific communities
- early identification of, and response to, outbreaks and cases in high risk settings
- rapid response with scalability within defined parameters, and
- transfer of cases to the national contact tracing service on an agreed risk basis.

2.2. Other notifiable diseases (Tuberculosis and Vaccine Preventable diseases)

ARPHS continues to manage both Tuberculosis (TB) and vaccine preventable diseases (VPDs) with a reduced team while the workload post lockdown one and two continues to grow. Vaccine preventable diseases notifications had remained low until the second lockdown returning to more normal patterns now (See Appendix B). Factors that have likely impacted our work include:

- on-going complex TB outbreaks more challenging where households may not have followed COVID-19 Alert Level rules
- no Latent Tuberculosis Infection (LTBI) clinics are run by ARPHS at this point due to COVID-19 response requirements
- people may not have sought timely medical treatment from their GP during the lockdowns and are potentially more unwell
- resumption in TB contact tracing and contact testing now identifying new TB cases post lockdown (but volumes consistent with previous years).

LTBI and BCG vaccine clinics are planned to resume in November 2020, when the nursing resource redeployed to the COVID-19 response unit, can return to Business As Usual (BAU). ARPHS

completed 530 vaccinations between 1 July – 12 August 2020 and currently approximately 2,200 children are awaiting BCG Clinics.

3. People are protected from the harms associated with harmful commodities

3.1. Alcohol

The alcohol programme has been heavily affected by COVID-19 with the redeployment of staff to the response and much of the work has been paused.

Alcohol signage: At the beginning of 2020, 66 bottle stores (alcohol off-licenses) were audited across Māngere, Manukau, Manurewa, Ōtāhuhu, Ōtara, Papakura and Papatoetoe and their compliance with Auckland Council's Signage Bylaw 2015. The audit showed 100% non-compliance with at least one section of the bylaw. All non-compliant bottle stores breached one or more criteria across each signage type (with up to 14 breaches). The summary of the audit results was shared with Auckland Council policy team to assist in their options report to the Auckland Council Regulatory Committee for a new bylaw. In ARPHS' view, the recommendations by Auckland Council's policy staff, to the Regulatory Committee in the options report, were not proportionate to the levels of non-compliance and evidence of the harm caused by excessive exposure to alcohol signage.
In part, due to the prior work by ARPHS and other public health partners such as Alcohol Healthwatch and the Cancer Society, the Regulatory Committee on 13 October 2020 amended the options report to include the recommendations for stronger controls that ARPHS and others had been advocating for during the presentation at the Regulatory Committee in June 2020. ARPHS is pleased the Regulatory Committee also requested that unhealthy food and gambling was added to the Signage Bylaw options report.

Alcohol licensing: Alcohol licensing continues to run at high volumes but reduced capacity. The Immediate Modification Order (IMO), which is empowered by the Epidemic Preparedness (COVID-19) Notice 2020, has extended reporting ARPHS statutory timeframes and allowed this volume to be managed. Applicants continue to apply for new unlicensed premises and novel applications not envisaged by the Act, for instance, restaurants using off-licences. Both of these types of applications generate additional work, through work with agency partners (Auckland Council, Police), and possible hearings with the District Licensing Committees. Priorities continue to be new off licences, particularly bottle shops, in vulnerable communities. At least three of these types of application have been made in the last quarter which is higher than any time in the last two years.

Local Alcohol Policy (LAP): In March 2021, the Court of Appeal hearing of the Auckland Council's appeal of the Judicial Review launched by the supermarkets will be held. ARPHS will be appearing at the hearing as an *Interested Party* in support of Auckland Council's position. Until these legal proceedings have concluded, the Alcohol Regulatory and Licensing Authority (ARLA) cannot re-hear the Provisional LAP elements and therefore endorse the proposed LAP so it can come into effect. One of the main impacts of the LAP, if endorsed, will be off-licence hours reduced to a maximum 9pm across the whole of the Auckland Council region. The continued delay is disappointing for population health and reducing alcohol-related harm as it is envisaged an LAP will likely come into effect in 2023 at the earliest; ten years after the process began.

3.2. Smokefree

Smokefree Environments Act (SFEA) review (Vaping Amendments Bill)
Following consultation with the three Auckland region DHBs and Hāpai Te Hauora, a joint submission signed by ARPHS and the three Auckland region DHBs was submitted on the Smokefree Environments Act review (Vaping Amendments Bill). The submission was supported by a joint presentation to the Health Select Committee by ARPHS and Counties Manukau Health on April 15th 2020.

The submission was supportive of the following proposed amendments to the SFEA:

- Vaping being used as a smoking cessation tool
- Prohibiting vaping and smokeless tobacco products in legislated smokefree areas
- Prohibiting advertising, endorsements and sponsorship of vaping and smokeless tobacco products
- Prohibiting the sale and supply of regulated products (including vaping under the new definition) to people under the age of 18
- Allowing approved vaping premises with controls
- Introducing a product notification scheme
- Introducing a regulatory mechanism to develop plain packaging, labelling and safety standards for regulated products
- Significantly restricting flavours of vapes available outside of specialist vape retailers.

The submission also made a number of additional recommendations, including

- Māori should be consulted to ensure a strong equity focus is placed on the Bill
- That the definition of 'regulated products' be expanded to capture other non-tobacco nicotine containing products
- That the development regulations for vaping products be expedited.

The full list of additional recommendations and other details about the submission can be found in Appendix C.

The legislation received Royal Ascent on 11 August 2020. All of the recommendations above were finalised in the amendment. We are now awaiting the development of the supporting regulations to implement the changes to the legislation by August 2021.

Tobacco Retail Reduction: ARPHS chairs the National Tobacco Supply Reduction steering group which aims to reduce the commercial availability of tobacco in New Zealand and participates in the research and communications sub-groups. The steering group consists of members from the Cancer Society, Northland DHB, Mid-Central DHB, Hapai te Hauora, Pegasus Health, Otago University, T&T Consulting Ltd and Tākiri Mai te Ata Whanau Ora Collective Regional Stop Smoking Service. Three steering group meetings were held during this period.

All other smokefree work has been put on hold due to staffing limitations resulting from COVID-19 redeployment.

4. The environments in which people live, learn, work and play promote health and wellbeing

4.1. Healthy Auckland Together (HAT)

Healthy Auckland Together (HAT) is a coalition of 32 partners committed to making it easier for Aucklanders to eat better, be physically active and maintain a healthy weight. HAT partners include health entities (including Auckland region DHBs), local government, iwi-based organisations and non-governmental organisations. ARPHS is the backbone organisation for HAT, providing a coordination and administrative function as well as being a partner.

Due to the continuation of the COVID-19 outbreak in Auckland, the majority of ARPHS staff, including members of the HAT Backbone team, were re-deployed to roles in the ARPHS COVID-19 Response Unit. Again, HAT partners understood the necessity for ARPHS resources to be re-prioritised to contain the outbreak. This has impacted on deliverables during the reporting period, as seven out of the nine ARPHS-based backbone team members were redeployed to substantive COVID-19 roles. Despite this, HAT has carried out the following:

Collaboration and Leadership: The Cancer Society Auckland Northland branch has joined HAT and will add significant value to the Marketing to Children action area in particular. This is the 32nd partner in the coalition.

An Interagency Group (IAG) meeting was held at the end of July with 37 representatives from 17 organisations in attendance. The focus of this hui was a workshop session on COVID-19's impacts and recovery. A Public Health Medicine Specialist registrar is currently collating feedback from this session with support from the backbone team to help inform HAT actions for the next twelve months.

Food and Marketing Environments - Marketing to Children: A powerful eight minute video was created to showcase marketing strategies the food industry has used to leverage the COVID-19 pandemic, including donations to essential workers. The video was met with positive feedback from HAT partners at the Interagency Group meeting. The team are developing a plan to maximise the impact of this new resource.

HAT submitted an Advertising Standards Authority (ASA) complaint on 'The HELL Reading Challenge' which is being run by the NZ Book Awards Trust and promoted through Auckland Libraries and schools nationwide. To encourage reading, children are incentivised with free pizza rewards. The ASA will facilitate a meeting between Auckland Libraries, Hell Pizza and the NZ Book Awards Trust to discuss breaches and changes required to the challenge.

ARPHS and University of Auckland worked together to create a training package about making complaints to the ASA on critiquing unhealthy food and beverage advertising. The package includes an introduction to the research and the current complaints process, an example of an effective complaint and actions that students can take to promote government change.

ARPHS completed a submission to the ASA Influencer Guidelines consultation document which detailed clearer labelling of advertising on social media. The team also supported other organisations to have their say and submit on the key issues.

HAT also received five ASA complaint decisions. These were either not upheld or there were no grounds to proceed as the ASA determined that the advertisements targeted adults and parents.

Food and Marketing Environments – Google Street View: ARPHS and The University of Auckland continue to collaborate on a Google Street View project to analyse advertising on convenience stores near schools. Two undergraduate Public Health Placement students are building on data

collection that began last semester (February – July 2020) by two postgraduate dietetic students. This project was not impacted by the COVID-19 response due to the online nature of data collection and supervision via Zoom.

Food and Marketing Environments - Wai Auckland: There have been two major events in 2020 that have affected the use of drinking water fountains – COVID-19 and the drought. Fountains have been turned off by a range of organisations, including Auckland Council and Auckland Transport (AT), to mitigate the spread of disease and reduce wasted water. Consequently, the infrastructure work stream of Wai Auckland has paused.

Eight new RefillNZ Stations were signed up, during the first quarter of 2020/2021 period, bringing the Auckland total to 155. Due to COVID-19 restrictions and reduced staff capacity, it has been difficult to visit premises for sign-ups. A 'Safe Refilling Tips' resource was developed to encourage people to continue refilling their water bottles in a COVID-19 world.

Due to relationships with Auckland Council and RefillNZ, Wai Auckland contributed to the Ministry for the Environment's Feels Good to Refill Campaign (January 2020). Recently commissioned research found that single-use plastic drink bottle are the most common item in New Zealand's waste despite being easily recycled, which led to the creation of this campaign. It was a huge success, described as transforming this Ministry's social engagement, and additional funding has been secured to run another campaign later in 2020.

HAT continued to build a strong research relationship with the University of Auckland with four student projects completed during the first six months of the year. A brief description of each project and its outcomes are listed below:

- To support Wai Auckland, a drinking water fountain survey in Auckland shopping malls found that only two out of the 31 places had infrastructure. Advocacy is being planned to encourage more shopping malls to provide fountains.

- Google Street View (GSV) analysis of advertising on bus stops near Auckland schools found that 12.8% of all advertising is for non-core foods. Advocacy is being planned to influence guidelines to create healthier marketing environments around schools. Previously noted, this research was published in the *Nutrients* journal.

- A Wai Auckland business case for improving the provision of public drinking water fountains was accepted by Auckland Council and will be piloted to test its acceptability.

- GSV analysis of advertising on convenience stores near schools was initiated with a research protocol being complete. Additional student resource is required to complete data collection and analysis.

Food Environments and Marketing – Good Food Kai Pai: Preparation began for the annual Diwali Festival and training for vendors with the Good Food Kai Pai initiative. Most major events planned for Tāmaki Makaurau have now been cancelled or postponed, including Diwali, due to COVID-19 uncertainties. Consequently, this component of HAT has been paused.

Food Environments and Marketing – Public Health and Environmental Determinants Toolkit: HAT intended to update the Public Health and Environmental Determinants Toolkit using one of the undergraduate Health Placement Students. This toolkit helps visualise the availability and density of fast food outlets and grocers across Tāmaki Makaurau and was last updated in 2015. This update

was put on hold as a result of COVID-19 response; however, the student provided support for the Google Street View project.

Research – Journal articles: Two journal articles from HAT projects were published in the *Food Marketing and Dietary Behaviours Among Children Special Edition* of *Nutrients*:

- *Wai Auckland* partnered with the *University of Auckland* to assess the types of advertising on bus stops within a walkable distance (500m) from all schools across the region. Three students were involved in the project and used Google Street View (GSV) to collect data and get around almost 600 schools in an efficient manner. They found that 12.8% of the advertisements were for non-core foods, which highlights an opportunity to create healthier environments around our schools to limit children's exposure to unhealthy food and drink (Huang. D., et al; *Nutrients*, *Bus stops near schools advertising junk food and sugary drinks*; (2020), *12*(4),1192).

- ARPHS partnered with *University of Auckland* to review New Zealand's self-regulatory ASA Codes against a public health law framework. They found that the majority (12 out of 16) of complaints assessed were not upheld. Many facets of the public health law framework were not met in the Complaints Board's interpretation of the Codes. This highlights that the current self-regulatory system does not adequately protect children from being exposed to the power of unhealthy food and drink marketing (Sing. F., et al; *Nutrients, Food advertising to children in New Zealand: A critical review of the performance of a self-regulatory complaints system using a public health law framework* (2020) *12*(5), 1278).

Forty two people attended a HAT Research Platform Zoom event in mid-September. The purpose of the event was to encourage greater collaboration between academics and HAT partners. ARPHS and The University of Auckland led planning and delivery of the event. Next steps include sharing information about research funding and student availability; facilitating targeted conversations regarding common HAT prioritised issues; and highlighting research gaps.

Schools and Early Learning Services – Healthy Active Learning: Healthy Active Learning (HAL) is a joint initiative from Ministry of Health (MoH), Ministry of Education and Sport NZ. Public Health Units are responsible for delivering the nutrition component while Regional Sports Trusts (RSTs) are responsible for physical activity.

The Tāmaki Makaurau team started in early February with a workforce of four fulltime and two part-time HAL Advisor roles, including two New Zealand Registered Dieticians to provide specialist nutrition support. The scope of work includes exploring the status of food and drink policies of all secondary, intermediate, primary schools and Early Learning Services (ELS) across the region.

The schools and ELS prioritisation tool, including criteria set from the MoH service specifications, has been completed for the greater Auckland region. From this exercise, 53 secondary schools and 28 ELS have been identified as priority education settings.

The development of a national toolkit to support the programme has been delayed due to COVID-19. Led by the dieticians in the team, an interim food and drink policy guide has been developed to assist schools to implement HAL and meet contractual obligations. As part of the school nurses agreement in Auckland and Waitematā DHBs, schools must have a food and drink policy. Twelve of the 15 identified priority schools have taken up this guide.

The team continue to work on stakeholder engagement regionally, nationally and internationally. The newly developed food and drink policy guide was presented by our dieticians to the RSTs Activators to show how our nutrition team can support their work in primary schools. HAL is also working on strengthening relationships with other nutrition providers in schools to avoid duplication and ensure a consistent approach across the region. Networking with schools nurses contracted by the three Auckland Metro DHBs has identified needs and gaps in the schools they work with.

The team met with the Healthy Eating Advisory Service from Victoria, Australia, via zoom, to learn from their eight years of experience implementing a similar model across their state. This will help inform our regional approach.

5. People are protected from the impact of environmental hazards

5.1. Drinking Water

Completion of drinking water annual survey: In August, ARPHS Drinking Water Unit (DWAU) completed the drinking water annual survey for the period of 1 July 2019 to 30 June 2020. This was conducted by the Drinking Water Assessors (DWAs) in ARPHS on behalf of the Ministry of Health, against the drinking water requirements of the Health Act 1956 (the Act) and the Drinking-water Standards for New Zealand 2005 (Revised 2018)

Data collected is checked by the Institute of Environmental Science and Research (ESR) and verified by the water suppliers. From there, ARPHS will complete compliance reports to inform water suppliers of the survey outcome in due course. Data will also be used by the Ministry of Health to prepare a report on the quality of drinking water in New Zealand.

Drought planning: The Auckland and Northern regions have experienced unusual drought conditions in 2020. ARPHS took the following actions to support our stakeholders:

- ARPHS was a major stakeholder in the Auckland Emergency Management drought planning strategy. ARPHS Environmental Health manager led the health and welfare sub group.
- ARPHS worked collaboratively with Watercare as the major local supplier of drinking water in Auckland. This included supporting Watercare to split its analytical laboratory capacities (and staff) into two as to guard against the possibility of one COVID-19 case impacting their entire laboratory function.
- Registration of drinking water carriers was expedited by ARPHS Drinking Water Assessment Unit (DWAU) in anticipation of higher demand for drinking water from safe sources.

6. Public Health Leadership, workforce development and organisational sustainability

6.1. Policy submissions

ARPHS develops policy submissions to represent the public health view for the Auckland region on behalf of the three Auckland metro DHBs.

Policy capacity has been reduced with the redeployment of staff to the COVID-19 response.
ARPHS completed four submissions between January and September 2020 on the following topics:

- Employment, labour markets and income report
- Accessible Streets
- Smokefree Environments Act review (Vaping Amendments Bill
- Advertising Standards Authority (ASA) Influencer Guidelines consultation.

Appendix C briefly summarises the key points for each submission

Appendix A
Overview of ARPHS and its role

ARPHS is one of New Zealand's 12 public health units (PHUs). ARPHS provides regional public health services to people residing in the rohe of Counties Manukau Health and Waitematā and Auckland District Health Boards (DHBs) through health protection and promotion, and disease prevention. A key role for ARPHS is provision of regulatory public health services and work to improve population health outcomes for the people of Tāmaki Makaurau. ARPHS is funded via a direct contract from the Ministry of Health to ADHB, who manage the contract with ARPHS on behalf of the three DHBs in the metro Auckland rohe.

ARPHS' vision is Te Ora ō Tāmaki Makaurau. ARPHS' strategic long term outcomes are:

People are protected from the harm of notifiable infectious diseases
People are protected from the impact of environmental hazards
People live free from the harms associated with harmful commodities
The environments in which people live, learn, work and play promote health and wellbeing.

Long term outcomes are supported by the organisational enabler: Public Health leadership, sustainability and workforce development.

ARPHS strategic priorities 2017-2022 include:

1. Reduce the harm of notifiable infectious diseases, in particular:
    - Reduce the spread of Tuberculosis through TB case and contact management
    - Actively manage infectious diseases and pursue an 'up stream' approach to infectious disease prevention

2. Build healthy and resilient environments and communities, in particular:
    - Early identification and active management of enteric diseases
    - Active support and management of waters and wastes

3. Reduce obesity, improve nutrition and physical activity

4. Support Smokefree 2025

5. Enhance surveillance of communicable and non-communicable diseases and risk factors for public health action and reporting

6. Enhance and build stakeholder relationships with organisations and communities to continuously improve public health for Tāmaki Makaurau.

The work of ARPHS

ARPHS' work includes management of notifiable infectious and environmental diseases, including operational management of the regional tuberculosis control programme. ARPHS provides advice and support on actual/potential environmental hazards such as drinking and recreational water quality, air quality, border health protection, and hazardous substances. Much of ARPHS' work involves working with other agencies, including work on liquor licensing, smokefree, emergency response, physical activity and nutrition and obesity prevention activities. These other agencies include central government agencies, Auckland Council, non-government organisations and workplaces.

Intersections between the work of ARPHS and the three Auckland metro DHB

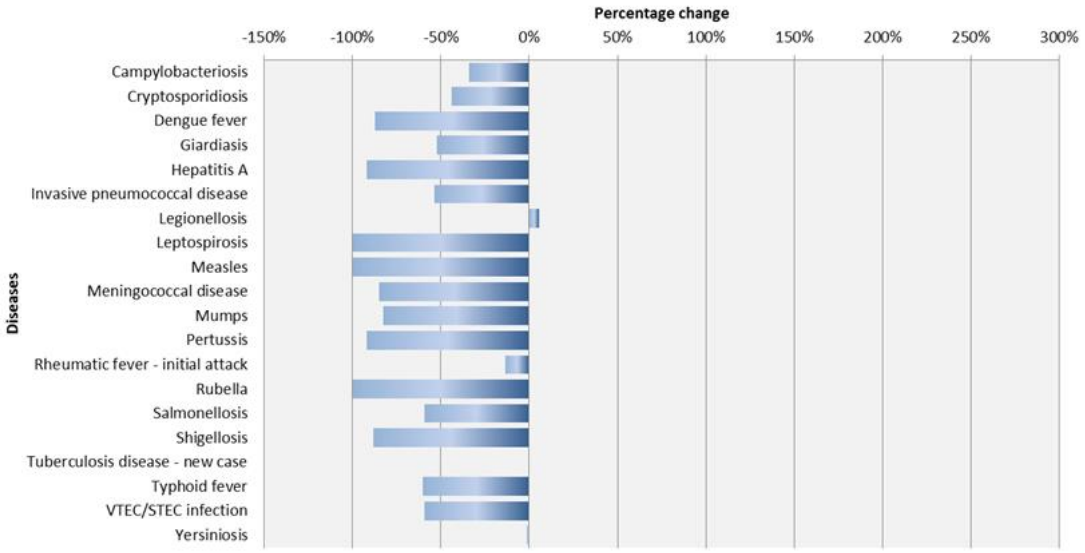
Key points of intersection for ARPHS with DHB activities are interfaces with primary and secondary services in sharing surveillance information, managing communicable disease outbreaks, policy engagement and submissions and improving physical and social environments to support reduced harm from tobacco, alcohol and unhealthy food. For example, ARPHS provides the backbone support team for the Healthy Auckland Together (HAT) coalition, of which the three DHBs are partners. The recent Coronavirus preparedness and response is an example of where strong collaboration between ARPHS and DHBs is critical.

Appendix B
Surveillance

ARPHS undertook a comparison of notifications between the six month period between April 1st to September 30th, 2019 and the same period in 2020. In general and with the exception of COVID-19, notifiable disease notifications reduced in April-September 2020 compared to April-September 2019

- Leptospirosis notifications are usually around six in any six month period. There were none over the reporting period in 2020.
- Salmonellosis, cryptosporidiosis, and giardiasis notifications were down 59%, 41%, and 52% respectively over the six month period.
- Shigellosis notifications were down to six cases compared with 50 in 2019.
- There were only four typhoid notifications for the six month period compared with 10 in 2019. Two cases were acquired in India, while the other two were family members whose illness was locally acquired, the most likely source being visitor from Samoa.
- VTEC notifications were down 59% with 38 notifications compared with 93 in 2019. There was one case of haemolytic-uremic syndrome. Serotyping was completed on 17 of the 38 cases. The predominant serotype was O157 at 53% followed by O128 and O26 at 12%.
- There was only one case of Hepatitis A notified. The possibility of a Korean source featured in this case with ESR serotyping identifying a single serotype which has been noted by ARPHS in three Korean cases over the past 18 months; interviews have not elicited a common source or event.
- Listeriosis cases notifications were around average at five. There were no deaths.
- There have been no confirmed cases of measles or rubella during the six month period and only eight cases of mumps were notified compared with 46 cases for the same period in 2019.
- Invasive pneumococcal disease is a seasonal disease and tends to accompany seasonal influenza however the number of notifications (41) in the last six months has been well down (53%) on the same period last year in 2019 (88).
- There were concerns that under lock down conditions that meningococcal cases might increase. This has not been observed and there has been only six cases notified compared with 40 over the same period in 2019. Three cases were serotype B, two were W and one was serotype Y.
- Hepatitis B notifications were down from four cases in 2019 to one for the six month period.
- There were 14 Hepatitis C cases notified compared with 14 cases for the same period in 2019.

Figure 3. Selected infectious diseases percentage change in the Auckland region for April to September 2020 compared with the same period in 2019.

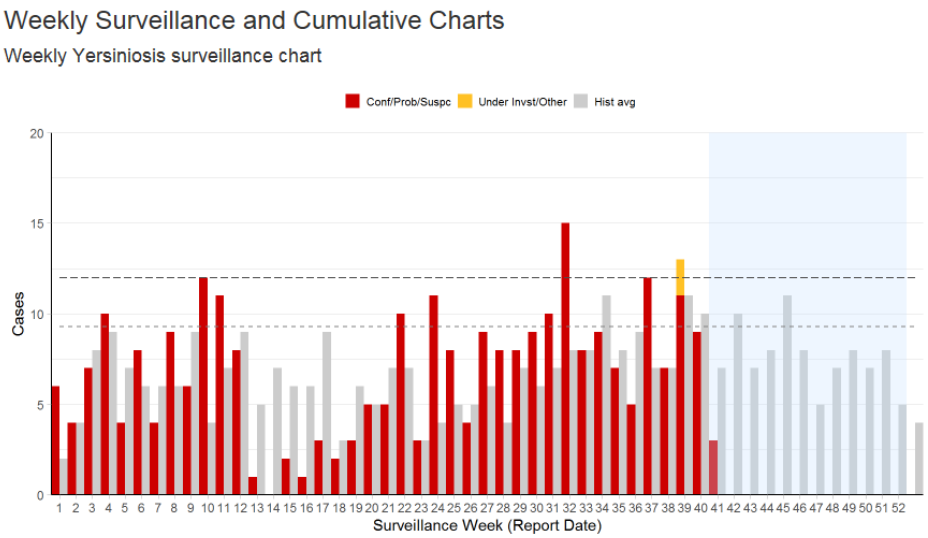


B.1 Foodborne diseases - Yersiniosis

Enteric disease notifications dropped significantly during the two COVID-19 lock down periods with notifications down between 30% and 60% across the enteric diseases. Campylobacteriosis is now slowly returning to normal as COVID-19 restrictions are eased. Stringent infection control precautions at aged residential care and other institutions have resulted in virtually no gastroenteritis outbreaks in residential care since late March.

The exception to this trend was yersiniosis (Figure 4). While notifications dropped markedly in the first lock down period, notifications for yersiniosis gradually returned to normal and even reached warning level triggers in September. A RedCap questionnaire was initiated at the second week of the warning level surveillance triggers but the response rate was poor and no common cause was identified. Serology has identified a small number of Yersinia pseudotuberculosis cases during September and October which is not uncommon for this time of year. Since PCR testing does not identify Y. pseudotuberculosis, these notifications are based on Yersinia serology. Unfortunately serology does not meet the current surveillance criteria for laboratory confirmation.

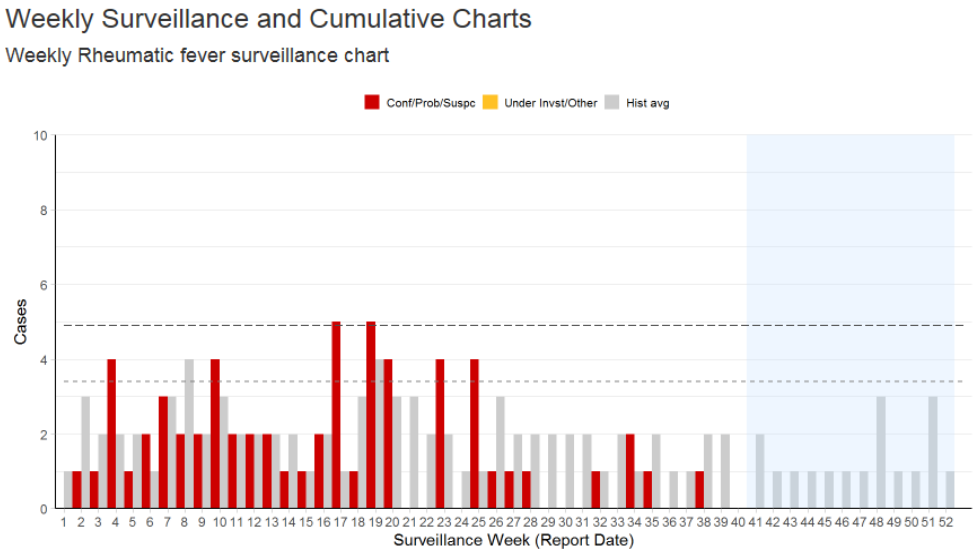
Figure 4: Yersiniosis weekly surveillance and cumulative charts, Auckland region, 2020



B2. Acute Rheumatic Fever (ARF)

Acute rheumatic fever notifications for the six month period April to September 2020 were 35 compared with 39 for the same period in 2019. ARPHS had concerns that an increase might occur with COVID-19 lockdown periods, as a result of household crowding and winter climatic conditions, however, this did not occur (Figure 5). Of the 35 cases, 31 were aged 0 – 19 years (86%), while 26 cases (74%) were aged between five and 14 years. Of those aged 0 - 19 years, nine self-identified as Māori, and 21 were of Pacific descent, the majority of whom identified as Samoan. The largest burden of disease remains in CMDHB with 50% (3.2/100,000) of cases compared with ADHB (1.7/100,000) and WDHB (1.3/100,000) at 25% each. The majority of the cases were notified in April (10), May (9), and June (10) with the last three months seeing only five cases.

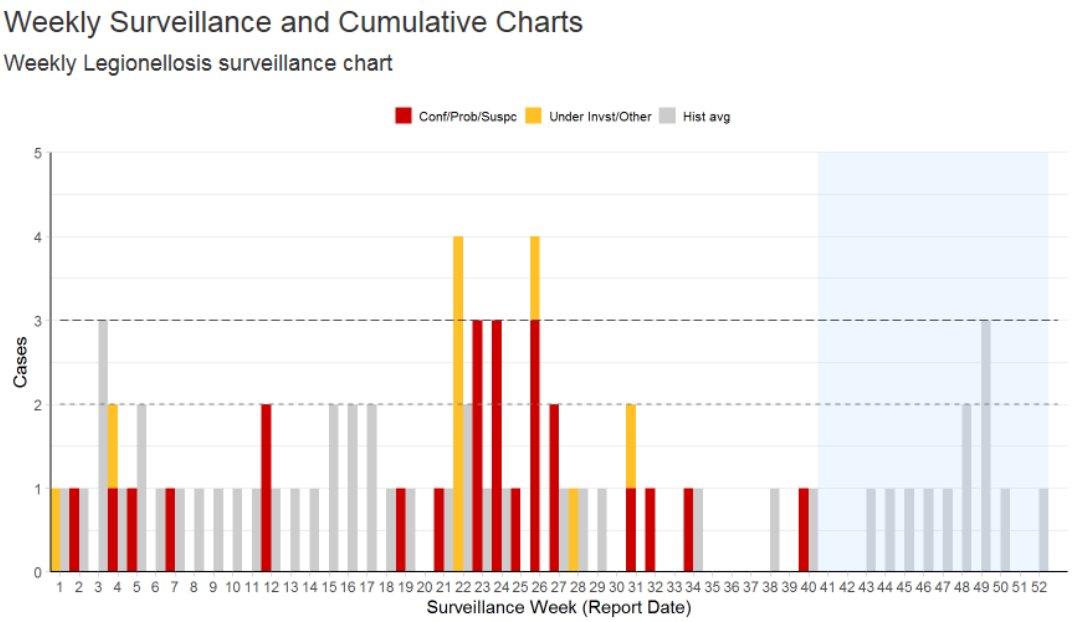
Figure 5: Acute rheumatic fever, weekly surveillance and cumulative charts, Auckland region, 2020



B3. Legionellosis

At the beginning of the year, the number of notifications showed a reduced pattern, however, the number of confirmed and under investigation cases increased in the period May to June with a subsequent decrease in notification numbers (Figure 6). L. pneumophila sero-group one was identified in six out of 18 cases notified since April, which is typically associated with aerosolised water and man-made warm water systems, especially cooling towers. There was one L. longbeachae case over this period but this serotype typically increases during spring and summer months as a result of increased contact with soil and landscaping products.

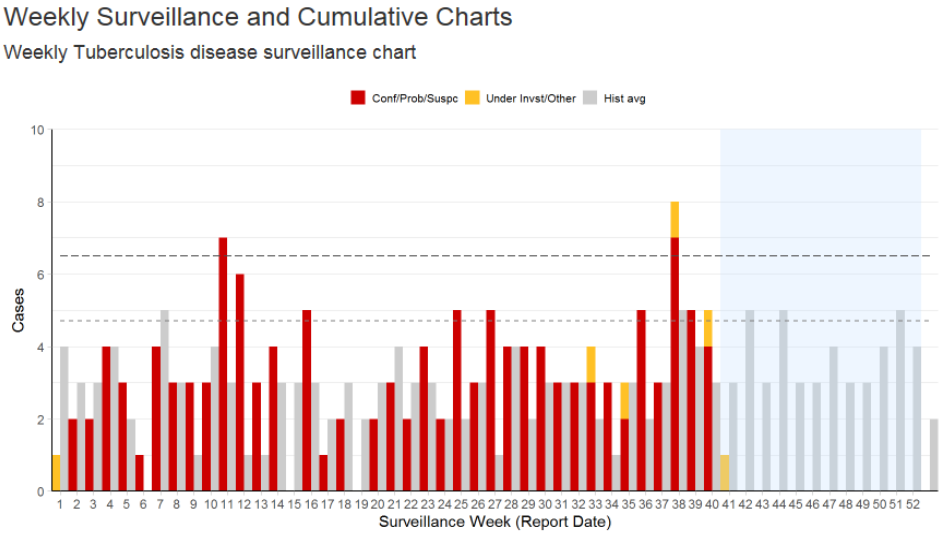
Figure 6: Legionellosis weekly surveillance and cumulative charts, Auckland region, 2020



B4. Tuberculosis

TB notifications overall are tracking at the same number of cases (80) compared with 80 for the same period in 2019. Although the numbers have not increased and we would not necessarily expect the COVID-19 lockdown to impact on the incidence of new TB cases, the management of cases and their contacts has been challenging. Of the 80 cases, 83% of new TB cases were born outside of New Zealand. The probable source countries were India (29%), China (13%), Philippines (12%), South Africa (5%), Tonga (4%), and Tuvalu, Kiribati, Myanmar and England (2%) respectively. Average time between arrival in NZ and onset date was ten years. Twenty cases were diagnosed within the first two years of their arrival, ten between one and two years and four within one year of arrival (Figure 7).

Figure 7: Tuberculosis weekly surveillance and cumulative charts, Auckland region, 2020



Appendix C
Submissions summary

Summary points for ARPHS' submissions between January and September 2020:

Topic	Brief note
Employment, labour markets and income report ***7 February 2020***	The Productivity Commission is undertaking an inquiry that explores the impacts of new and changing technology on the quantity and nature of work. It aims to answer two main questions: • What are the current and likely future impacts of technological change and disruption on the future of work, the workforce, labour markets, productivity and wellbeing? • How can the Government better position New Zealand and New Zealanders to take advantage of innovation and technological change in terms of productivity, labour-market participation and the nature of work? ARPHS's submission commented on the second of five draft reports, noting that good quality, secure work improves health and wellbeing, and that income is arguably the most important social determinant of health as it determines the quality of other determinants such as food security, housing, and other basic prerequisites of health. ARPHS's submission recommended the Commission: • Recognises the health promoting value of work beyond financial reward; • Prioritise active and on-going collaboration with Māori representatives as part of the inquiry; • Include a recommendation that considers how specific aspects of income smoothing policies such as coverage and replacement rates support health and reduce inequities.
Accessible Streets ***20 May 2020***	To increase the safety and accessibility of our footpaths and streets, and encourage active modes of transport, the Government sought public feedback on the 'Accessible Streets' rules package. The package proposed a number of new rules to respond to the rise of micro-mobility devices like e-scooters. Rule changes are also proposed to improve the safety and efficiency of active transport modes and buses. ARPHS submission supported many of the proposals such as: • users of mobility devices should give away to pedestrians and wheelchair users; • having a mandatory minimum overtaking gap for motor vehicles when passing pedestrians, cyclists, horse riders and other users of other devices; • turning traffic should give away to path users crossing a side

	road; • introducing lighting and reflector requirements for powered transport devices at night, that pedestrians should always have right of way on the footpath etc. ARPHS did raise a concern that the current regulatory package does not address the status of powered transport devices that have yet to be declared a motor vehicle, as this leaves many popular devices in use illegal. ARPHS also considered the speed limit of a *shared path* should be determined by its users (15km/h was deemed an appropriate speed limit) rather than the adjacent roadways speed limit, or having a default speed of 50km/h.
Smokefree Environments Act review (Vaping Amendments Bill ***1 April 2020***	ARPHS was supportive of the following proposed amendments : • Vaping being used as a smoking cessation tool • Prohibiting vaping and smokeless tobacco products in legislated smokefree areas • Prohibiting advertising, endorsements and sponsorship of vaping and smokeless tobacco products • Prohibiting the sale and supply of regulated products (including vaping under the new definition) to people under the age of 18 • Allowing approved vaping premises with controls. • Introducing a product notification scheme • Introducing a regulatory mechanism to develop plain packaging, labelling and safety standards for regulated products • Significantly restricting flavours of vapes available outside of specialist vape retailers. ARPHS made the following additional recommendations: • Māori should be consulted to ensure a strong equity focus is placed on the bill. • That the definition of 'regulated products' be expanded to capture other non-tobacco nicotine containing products. • The Director General be given powers to extend the types of products defined as 'regulated' • Allow pharmacies and cessation services to provide vaping products and demonstrations on correct use to people who smoke and are seeking to quit. • Limit the sale of not just flavours, but vape devices themselves to

	specialist retailers who can offer appropriate support. • That legislated smoke free areas be extended to include outdoor hospitality areas. • Extend restrictions on advertising, endorsements, sponsorship, promotion, sale and distribution of regulated products, removing exemptions allowing specialist vaping retailers to market and display vaping products where they are visible from outside the premises. • Require mandatory training on supporting cessation for all specialist vape store employees serving customers. • Restrict online sales through regulation. • That the development regulations for vaping products be expedited • That a positive licensing system is introduced for the sale of regulated products, ensuring tobacco remains at least as heavily restricted as other nicotine products. • Numerous small changes to the wordings in various sections to increase the enforceability of the act ARPHS challenged/did not support: • Allowing vaping devices to continue to be sold at 'generic' retailers – Idea is first time users are channelled towards specialist retailers who can offer support and ensure they have the right product. • That specialist vape stores be allowed to market and advertise regulated products where it is visible to the public from outside the premises. • The proposed approach (or lack thereof) in the bill for dealing with online sales of regulated products. • The length of time taken to introduce and pass this legislation.
Advertising Standards Authority (ASA) Influencer Guidelines ***3 August 2020***	The Advertising Standards Authority (ASA) developed AdHelp guidance to support responsible advertising and the requirement for Influencers to clearly identify advertising content to their audiences. ARPHS's submission recommended: • The influencer guidelines provide clarity around monitoring and enforcement • The ASA should not have to rely on the public for monitoring and

highlighting breaches of the Codes

- The influencer guidelines only recommended 'hashtags' to be used in content produced by influencers, this should be mandatory
- The ASA communicate these guidelines to the relevant parties
- The influencer guidelines should not be used to circumvent the existing Codes
- More stringent rules in relation to marketing of unhealthy food and beverages to children and young people (under 18 years)
- A mandatory regulatory system would ensure New Zealand is implementing the WHO Global Action Plan on the Prevention and Control of Non-communicable Diseases and upholding the United Nations Convention on the Rights of the Child.

HPV Self-Testing for Cervical Screening Summary

Recommendation

That the Community and Public Health Advisory Committee note:

1. **That the two equity focused human papilloma virus (HPV) Self-Testing studies are now complete with results awaiting publication.**
2. **The HPV Self-Testing research programme has demonstrated that the approach is acceptable and will improve equity of access, including for those women who are most underserved in the current screening programme. This research aligns well with similar work undertaken by research colleagues in Northland District Health Board.**
3. **The Parliamentary Review Committee in 2018 strongly recommended that HPV Self-Testing alongside primary HPV screening is implemented with urgency in the New Zealand national cervical screening programme.**
4. **On the basis of the successful local research and the clear international evidence there is increasing support in metro Auckland for local implementation of HPV self-testing in ahead of national programme implementation to address low coverage and worsening inequities. The volume of deferred screens related to COVID-19 has provided further urgency. It is likely that the national implementation of a primary HPV programme will be further delayed; noting that supportive infrastructure such a new national cervical screening register is not yet in place.**

Prepared by: Dr Karen Bartholomew (Director Health Outcomes), Jane Grant (HPV Research Nurse), Anna Maxwell (HPV Research Study Coordinator), Dr Georgina McPherson (Nurse Practitioner and Lead Colposcopist, Waitematā DHB), Dr Helen Wihongi (Research Advisor-Māori), Ruth Bijl (Funding and Development Manager, Child Women and Youth Health), Jesse Solomon (Portfolio Manager, Child Women and Youth), Kate Moodabe (GM, Total Healthcare PHO), Samantha Bennett, Asian, Migrant & Former Refugee Health Gain Manager, Leani Sandford (Pacific Portfolio Manager), Dr Rachel Mackie (High Grade Project clinical lead, Māori Health Pipeline).
Study Advisors: Dr Sue Crengle (University of Otago), Dr Nina Scott (Waikato DHB)
Endorsed by: Dr Debbie Holdsworth (Director Funding)

Glossary

DHB	-	District Health Board
HPV	-	Human papillomavirus
HRC	-	Health Research Council
PHO	-	Primary Health Organisation
RCT	-	Randomised Controlled Trial

1. Executive summary

This report provides a summary of the human papilloma virus (HPV) self-testing for cervical screening research programme. In New Zealand the National Cervical Screening Programme (NCSP) has indicated its intention to move to primary HPV screening for cervical cancer, which would potentially enable HPV self-testing. Substantive national policy work, led by the NCSP, has been undertaken on this policy change. However the planned implementation date originally 2018, pushed out to 2021, now seems unlikely. The work of our own research programme (and that of other research colleagues) indicates that HPV self-testing is safe and acceptable and will result in equity positive improvements in coverage if well implemented. This paper notes the key lessons

learned in the research relevant for implementation and the urgency highlighted both by our research and by the large volume of deferred screens due to COVID-19.

2. Background

There are inequities in cervical screening coverage for Māori, Pacific and Asian women. The large coverage gap, particularly for Māori women, is persistent and longstanding. The most recent changes related to population projection updates post census (back calculated with new trends, see Figure 1 below) show that there has been improved the coverage for the 'Other' ethnic group however coverage for Māori women has remained at about 60%, Pacific coverage is now seen to be falling and Asian coverage remains low.[1]

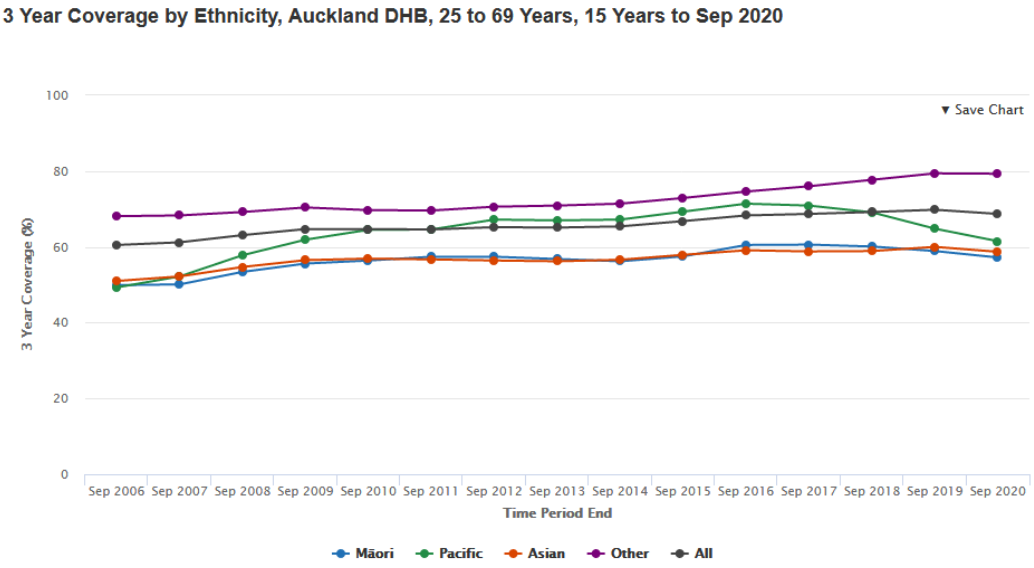


Figure 1. NCSP 3 year cervical screening coverage for Auckland DHB, women aged 25-69 years to Sept 2020, by ethnicity, trend data updated with new population projections (Source: NCSP)

Multiple evidence-based activities have been undertaken by the DHB, Primary Health Organisations (PHO) and support to screening partners to address coverage. Despite this activity coverage not improved overall. Coverage is likely to be multifactorial including the cervical screening ceasing to be a target in the primary care performance programme (called IPIF) and effects of the 2016 consultation by the NCSP on their intention to move to a primary HPV programme. The programme change is still scheduled to commence from 2021, however the infrastructure to support a major programme change (including a new cervical screening register) is not currently in place and we anticipate a further delay.

[1] Noting that there is currently no outcome inequity for Asian women, however there remain outcome inequities for Māori, Pacific and never/under-screened women.

Cervical screening with testing for high risk types of HPV as the primary test will be an important step forward for the programme. HPV is a better test (more sensitive) and is modelled to reduce the currently plateaued mortality by a further 12-16% in New Zealand.[2] Primary HPV testing also allows the screening interval to be increased from 3 to 5 years, meaning fewer tests for women. Locally women and providers report confusion about the timing of introduction of the change and the impetus for improving coverage ahead of the rollout of a major programme change. Similar feedback was reported in Australia ahead of the Australian NCSP 'Renewal' primary HPV programme change.

The current NCSP has been successful over the last three decades at reducing cervical cancer incidence and mortality so that cervical cancer is now a relatively rare cancer. However, inequities persist with mortality for Māori women twice that of non-Māori women. Cancer incidence and mortality is strongly linked to a history of never screening or being under-screened.[3]

In 2018 the World Health Organization (WHO)[4] Director-General issued a call for action to eliminate cervical cancer as a public health problem. Elimination is possible because cervical cancer is a preventable cancer almost entirely caused by HPV, and there are two highly effective complementary prevention strategies – HPV vaccination and cervical screening with a primary HPV test (followed by treatment of precancerous lesions). Australia, being the first country to introduce HPV vaccination, and to have introduced primary HPV screening in 2017 is on track to be the first country in the world to eliminate cervical cancer (by 2020 using the rare disease definition of elimination of 6 new cases per 100,000 women per year or 2028 if using the 4/100,000 definition).[5] A range of international areas of focus to accelerate vaccination and screening efforts are noted, including, specifically, the need for strategies to introduce cervical screening HPV self-collection.[6]

A simple, safe, and convenient self-test (cotton swab, similar to a STI self-test)[7] has been demonstrated internationally to improve access for women who are currently not participating in cervical screening.[8] HPV self-tests have been validated in a meta-analysis[9] as comparable to HPV

[2] Lew, J. B., Simms, K., Smith, M., Lewis, H., Neal, H., & Canfell, K. (2016). Effectiveness modelling and economic evaluation of primary HPV screening for cervical cancer prevention in New Zealand. PLoS One, 11(5), e0151619. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0151619

[3] Only 13% of women with cervical cancer had been adequately screened. Reference: University of Otago, for the Ministry of Health. Review of Cervical Cancer Occurrences in relation to Screening History in New Zealand for the years 2008-2012. May 2018. https://www.nsu.govt.nz/publications/review-cervical-cancer-occurrences-relation-screening-history-new-zealand-years-2008--0

[4] Simms, K. T., Steinberg, J., Caruana, M., Smith, M. A., Lew, J. B., Soerjomataram, I and Canfell, K. (2019). Impact of scaled up human papillomavirus vaccination and cervical screening and the potential for global elimination of cervical cancer in 181 countries, 2020–99: a modelling study. The Lancet Oncology, 20(3), 394-407 https://www.sciencedirect.com/science/article/abs/pii/S1470204518308362, and Brisson, M., Kim, J. J., Canfell, K., Drolet, M., Gingras, G., Burger, E. A et al. (2020). Impact of HPV vaccination and cervical screening on cervical cancer elimination: a comparative modelling analysis in 78 low-income and lower-middle-income countries. The Lancet, 395(10224), 575-590. https://www.sciencedirect.com/science/article/pii/S0140673620300684

[5] Hall, M. T., Simms, K. T., Lew, J. B., Smith, M. A., Brotherton, J. M., Saville, M., ... & Canfell, K. (2019). The projected timeframe until cervical cancer elimination in Australia: a modelling study. The Lancet Public Health, *4*(1), e19-e27. https://www.sciencedirect.com/science/article/pii/S246826671830183X

[6] Canfell, K. (2019). Towards the global elimination of cervical cancer. *Papillomavirus Research*, *8*, 100170. https://www.sciencedirect.com/science/article/pii/S2405852119300369

[7] Note that women do not need to find their cervix to conduct a HPV self-test, this is a high vaginal sample. Sexually Transmitted Infection (STI) self-tests have been in clinical practice for more than a decade, and are safe and acceptable diagnostic modality.

[8] Racey, C. S., Withrow, D. R., & Gesink, D. (2013). Self-collected HPV testing improves participation in cervical cancer screening: a systematic review and meta-analysis. Canadian Journal of Public Health, 104(2), e159-e166. https://link.springer.com/article/10.1007/BF03405681

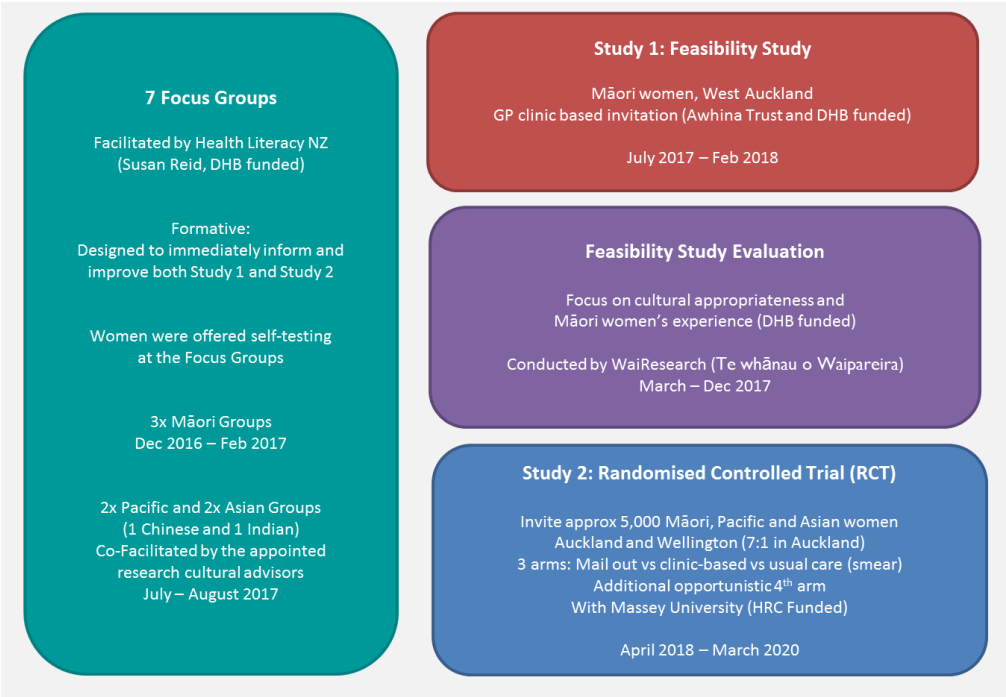
clinician-taken samples (current screening method to sample cervical cells, but testing for HPV rather than looks for abnormal cells). HPV screening has already been established as superior to cytology as a primary cervical screening test.[10]

3. DHB Research Programme

In order to understand how to best optimise the technology and robustly test potential approaches focused on equity, Auckland DHB and Waitematā DHB undertook a research programme, which contains a series of interconnected implementation research projects (Figure 2 below).

The focus groups, initial feasibility study (Study 1) and evaluation were funded by the DHBs with support from Awhina Trust. The joint Auckland DHB and Waitematā DHB CPHAC has previously received updates on the HPV self-testing research programme in 2016 and the results of the focus groups, evaluation and feasibility study in 2018. The feedback from the focus group participants directly informed the changes to the study materials (including written, graphic design, instructions, video content and including of QR codes) as well as informing support pathways (see Figure 3).

Figure 2. HPV Self-Testing Research Programme



[9] Arbyn, M., Verdoodt, F., Snijders, P. J., Verhoef, V. M., Suonio, E., Dillner, L et al. (2014). Accuracy of human papillomavirus testing on self-collected versus clinician-collected samples: a meta-analysis. The Lancet Oncology, 15(2), 172-183. https://www.sciencedirect.com/science/article/abs/pii/S1470204513705709

[10] Dillner J, Rebolj M, Birembaut P, Petry K-U, Szarewski A, Munk C, et al. Long term predictive values of cytology and human papillomavirus testing in cervical cancer screening: joint European cohort study. BMJ. 2008;337.

Figure 3. Schematic of the focus Group and Study 1 approaches

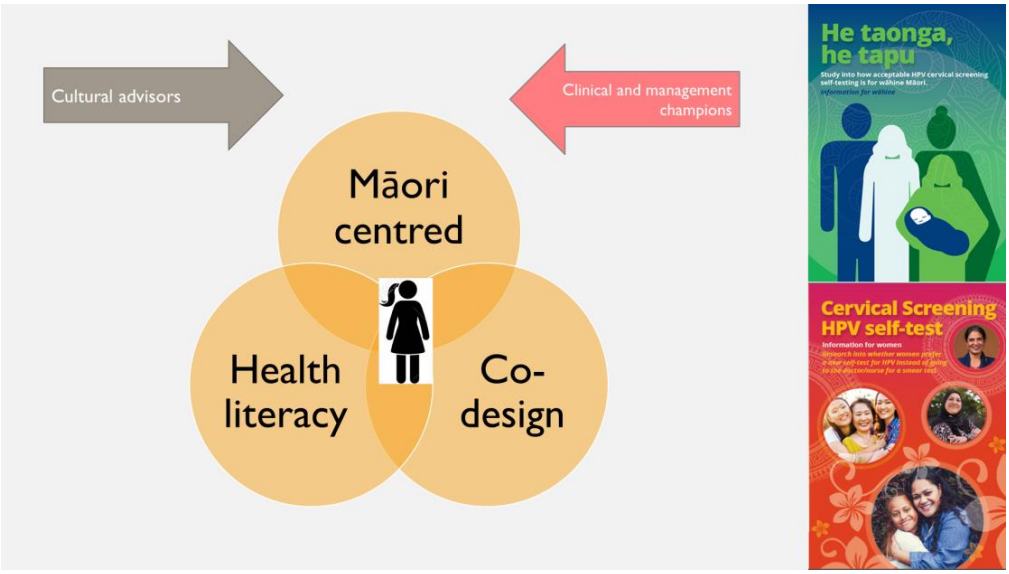


Figure 4. Key elements of the HPV Self-Test RCT protocol

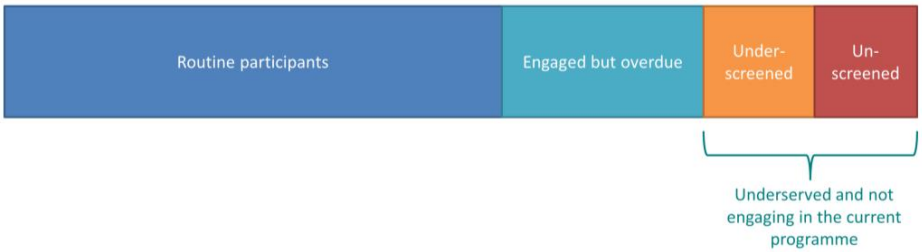
Eligibility	• Inclusions: Ethnic-specific unscreened and under-screened women, 30-69 years, identified from NCSP/PHO data matched lists and DHB resident • Exclusions: Hysterectomy, previous high grade history on CMI, symptomatic, pregnant
Test	• A single sterile copan cotton swab and a sarstedt 12mL polypropylene dry tube • Testing at Anatomical Pathology Services (APS) on cobas ® 4800 HPV assay • Results reported as HPV 16, HPV 18, or HPV other (12 types) or invalid • Result notification by primary care (training) and monitored by the research nurse who steps in after 10 days elapsed without notification, in consultation with the practice staff
Follow up and management	• Positive for HPV 16 or 18 referred directly to colposcopy • Positive for other HPV types, triage with cervical cytology: positive referred for colposcopy; cytology negative repeat cytology in 12 months (note: at women's choice and with lead colp agreement some women with HPV other were offered to go straight to colposcopy) • Invalid samples: lab check process, discuss with participant and offer of a repeat sample • Women's participation in the study recorded on the NCSP Register with a research flag • Post test questionnaire (adapted from iPAP) includes barriers to routine cervical smears, acceptability of self–test, and how they might prefer to be tested in future

In Study 2 the DHB team worked with Massey University (Centre for Public Health Research) on a community Randomised Controlled Trial (RCT) comparing mail out to clinic-based invitation. This work was funded by the Health Research Council (HRC). Key elements of the trial protocol are described in Figure 4 above, and have been published.[11] Recruitment has been completed. Building

[11] Brewer, N., Bartholomew, K., Maxwell, A., Grant, J., Wihongi, H., Bromhead, C., ... & Potter, J. D. (2019). Comparison of two invitation-based methods for human papillomavirus (HPV) self-sampling with usual care among un-and under-screened Māori, Pacific and Asian women: study protocol for a randomised controlled community trial to examine the

on the user-centred and health literacy supported qualitative work, and our feasibility study with Māori women, Study 2 focused on the ethnic groups with the lowest coverage Māori, Pacific and Asian women. Within this ethnic-specific focus the research team was further focused on a subgroup of women who were never-screened (no record on the NCSP-register) or under-screened (very overdue at >5 years). These groups are shown as the orange and red groups in the schematic in Figure 5 below. The literature often describes this group the most 'hard-to-reach.' Our research team do not approve of the use of this term as it is victim-blaming and deficit-focused,[12] we refer to our target group as underserved or the least served by the delivery of the current NCSP programme.

Figure 5. Schematic of screening participant characteristics and focus of RCT



Our research purpose was to robustly test whether particular modes of invitation might work better for this group of women, who are the least served by the programme but have the most to gain from participation in screening. In particular we wanted to test whether women in our target groups would respond to an offer of screening via a mailed kit. Our previous work (and our broader experience in the mailed-invitation Bowel Screening pilot) has clearly demonstrated that multiple access methods are required to address equity of access, therefore we also included in our study design a nested sub-study for women who did not take up the RCT offer of self-testing, providing an further period of 6 months to be offered self-testing opportunistically (when attending the clinic for any other reason).

We cannot yet report on the quantitative results as they are awaiting publication, however we found increased participation, particularly Asian and Māori women, and that the mail out arm achieved a higher uptake. A second offer opportunistically was also successful, particularly for Pacific women. In both our feasibility study and the RCT we found comparable proportions of HPV types as reported internationally, and within the group of women who screened positive for HPV we found both precancerous disease and early cancer. Through a highly intensive follow up support approach and close relationships with colposcopy leads, more than 90% of women achieved follow up for a positive HPV test. This is higher than international benchmarks.

Feedback from women throughout the study was positive, and women reported being supported to make their own decision about follow up and supported at colposcopy.

> *"….I really liked doing the test this way – I hope I can do it this way next time."*

> *"…hope all women can have this test one day I'm glad I could be involved."*

effect of self-sampling on participation in cervical-cancer screening. *BMC cancer*, *19*(1), 1-10. https://bmccancer.biomedcentral.com/articles/10.1186/s12885-019-6401-y

[12] This point is raised because of the importance of narrative in the setting of inequities research with the requirement to consciously move in language away from deficit focus.

"this test kept my dignity intact."

"I like this test for me as it's my body."

"if it was this easy I would have done it a long time ago."

"thanks so much good to hear my result is normal looking forward to the next test"

"thank you so much I really appreciated being able to self test. It had actually been nearly 30 years since had a smear test because of embarrassment and bad experiences so I think this study is amazing."

"Oh … thanks for this opportunity. I believe this self testing is a great idea and it will really benefit so many women like me."

"Thank you for choosing me for this test – I would never have had another smear – I am so glad that my doctor and nurse gave me this test, another 2 years and I would not be here – this test saved my life."

"I don't mind going to the specialist if I know I have to after doing my own test - I can suck that up knowing there's a risk there."

"the doctor was amazing couldn't have asked for better … I was able to relax – thank you for everything."

4. Other New Zealand HPV self-testing research

A small study examining different types of self-test kits available overseas was conducted with Pacific and Māori women in Wellington by members of the Massey University research team.[13]

HPV self-testing has also been examined in New Zealand by research colleague Professor Beverly Lawton through kaupapa Māori hui-based qualitative research,[14] and through a primary care based study in Northland DHB inviting all women due or overdue for screening and comparing uptake with usual care at a practice level. Professor Lawton's work indicates clearly the acceptability of self-testing for Māori women, and she has championed the urgency for immediate implementation of HPV self-testing to address current NCSP inequities for Māori.[15] Professor Lawton has recently been successful in further funding to extend her work to investigate point-of-care HPV testing for rural women and to implementation approaches to primary HPV testing in Northland DHB.[16]

[13] Brewer, N., Foliaki, S., Bromhead, C., Viliamu-Amusia, I., Pelefoti-Gibson, L., Jones, T., Pearce, N., Potter, J and and Douwes, J. Acceptability of human papillomavirus self-sampling for cervical-cancer screening in under-screened Māori and Pasifika women: a pilot study. The New Zealand Medical Journal 132, no. 1497 (2019): 21-31. https://researchonline.lshtm.ac.uk/id/eprint/4653873/

[14] Adcock, A., Cram, F., Lawton, B., Geller, S., Hibma, M., Sykes, P., ... & Mataki, T. (2019). Acceptability of self-taken vaginal HPV sample for cervical screening among an under-screened Indigenous population. Australian and New Zealand Journal of Obstetrics and Gynaecology, 59(2), 301-307. https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/ajo.12933

[15] https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018753377/cervical-cancer-smearing-smears

[16] https://www.hrc.govt.nz/news-and-events/study-aims-improve-outcomes-more-one-10-nz-births

5. Key implementation lessons learned from HPV research

The key lessons learned from our research programme have been that self-testing is safe and acceptable, and will increase participation and coverage. Multiple methods of access to the test would be preferable to ensure women least served in the current programme can access the test. In Australia self-testing is only enabled via a health professional (GP) visit. We similarly tested invitation methods based on current NCSP primary care-based model through primary care enrolment, however we are well aware that there are women who are not enrolled (or present as casual visits), and that there is opportunity to consider alternative health providers and offer through support to services or potentially non-clinical roles (eg community health workers). Further development and research of this option in a local context would be useful.

We also found that women do respond to mailed-offer, including Māori women. Given the level of issues with contactability (we previously reported that approximately 30% of the sample had incorrect or out of date contact details) and the mailed/return of result ratio there is likely to be programme level concern about cost of a primary mailed invitation approach. However, the study team consider that it is important to keep mail-out as an option to access the test. This could be managed through ascertaining women's preferences to receive and return the kit. Alternatively there could be a 'mail-order' approach for example a kit could be mailed after a consultation discussion with a health professional or provider. The consultation could include a virtual or telehealth appointment. We collected preference in our study and found many would prefer to be mailed a kit when they are due for a screen (the survey results will provide useful baseline preference data). We do note that 'mail out' is actually courier services (mailed parcels no longer available) which does introduce some complexity. We allowed a laboratory (learning from the Bowel Screening Pilot) and primary care drop-off process for women mailed a kit to optimise return of a sample.

In Primary HPV testing there are concerns about the management of colposcopy volumes given that HPV is a more sensitive test. Internationally the implementation of primary HPV screening has seen an increase of in colposcopy referrals; with English results including referrals after early recall showing an 80% increase in colposcopies[17] and the first 6 months of the Australian Renewal programme showing that 2.6% of women were referred for colposcopy compared to 0.8% in the cytology based programme.[18] Management of colposcopy service waiting lists raises similar concerns as colonoscopy waiting lists in the implementation of bowel cancer screening. Modelling work has been undertaken on the impact of a total programme shift to primary HPV, noting an initial increase in colposcopies which reduces as vaccinated cohorts enter the screening age. The projected 15% colposcopy impact[19] appears an underestimate compared to the international data. However we are not aware of modelling on a regional or time staggered implementation approach, or a HPV self-test approach only. Primary HPV programmes use a triage system to manage colposcopy impacts, reduce unnecessary invasive testing and treatment, and also allowing time with repeat HPV testing for the virus to regress or resolve. The proposed New Zealand primary HPV triage system, like Australia, is to

[17] Rebolj, M., Rimmer, J., Denton, K., Tidy, J., Mathews, C., Ellis, K et al. (2019). Primary cervical screening with high risk human papillomavirus testing: observational study. BMJ, 364. https://www.bmj.com/content/364/bmj.l240.full.
[18] Machalek, D. A., Roberts, J. M., Garland, S. M., Thurloe, J., Richards, A., Chambers, I et al (2019). Routine cervical screening by primary HPV testing: early findings in the renewed National Cervical Screening Program. Medical Journal of Australia, 211(3), 113-119. https://onlinelibrary.wiley.com/doi/full/10.5694/mja2.50223.
[19] Lew, J. B., Simms, K., Smith, M., Lewis, H., Neal, H., & Canfell, K. (2016). Effectiveness modelling and economic evaluation of primary HPV screening for cervical cancer prevention in New Zealand. *PLoS One*, *11*(5), e0151619. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4871332/

conduct a reflex cytology test on a HPV positive clinician-taken sample. A 'limitation' of the self-test is that cervical cells are not collected which could enable reflex cytology.[20]

The clinical pathway our research team followed for a positive HPV screen was the Australian 2017 recommendations by the Medical Services Advisory Committee (MSAC),[21] where a HPV 16/18 (high risk or oncogenic HPV type) was referred straight to colposcopy, and women with HPV Other (12 lower risk HPV types) were recommended to have a cytology and referred if this was abnormal. From the experience of implementing the trial, with an interest in ensuring equitable and high access to follow up, we noted that many women in our study reported negative experiences of smears in the past. We found that intensive support was required from our research nurse and at times the colposcopy service for a number of participants, including the occasional need for double appointments and time to defer an appointment until the woman had decided to proceed. This included the ability, on a case-by-case basis, for women with HPV Other to attend colposcopy without a cytology test where this is more acceptable to them. The flexibility of this approach was very important for achieving high follow up, and adequate resourcing for both additional colposcopy service wrap-around and intensive support-to-service is required.

Our colposcopic colleagues note the concern in the sector about the increase in colposcopy volumes and resource requirements, particular given the service is only partially funded by the programme currently. The Auckland DHB colposcopy service is considering the potential impact of the implementation of primary HPV screening and the implications for workforce development to manage the increased workload. Following the publication of the ARTISTIC[22] trial follow up data the NCSP Primary HPV screening guidelines group have recommended a variation to an initial proposed pathway which was originally based on the Australian guidelines. The ARTISTIC trial follow up data has shown the risk of high grade disease is significantly lower in women with HPV 16/18 positive test and normal cytology and regression of HPV may occur within 12 months. There is currently a proposed change to the primary HPV NCSP guidelines which recommend women with positive HPV 16/18 and normal cytology will have a repeat HPV test in 12 months. If the follow up test is HPV positive referral to colposcopy is recommended. The proposed change will reduce the number of women referred to colposcopy. Data from Australia has reported 63.6% of women with HPV 16/18 had normal cytology, accounting for a significant proportion of colposcopy referrals[16]. The Australian programme will publish in the near future the updated clinical risk of different approaches for different HPV types. Proposed revisions to the guidelines might require this cytology step and repeat screen for all women who self-test positive for HPV. This is to ensure women are triaged to the appropriate follow up stream to reduce the risk unnecessary colposcopy. If this approach is followed the results from the study indicate the importance of including a case-by-case ability to be flexible for women with ensure equity of access to follow up.

Effective introduction of HPV self-testing starts with considered presentation or 'promotion' of the test to women. This should align with communications about the HPV immunisation programme, which is an ideal opportunity for parents/young women to make the connection with screening for HPV. Despite having a long-standing HPV immunisation programme, we found that many women in our studies had a low level of knowledge of HPV as the cause of cervical cancer, consistent with international findings. We also found, in parallel research, that there were gaps in health

[20] It is likely in the future that there will be full molecular triage approaches that can be completed without the need for cytology (for example methylation or full HPV genotyping). However this is not currently available.
[21] MASC 2017 recommendations:
https://wiki.cancer.org.au/australiawiki/images/f/f0/Cervical_screening_pathway_for_self_collection.pdf
[22] Gilham, C., Sargent, A., & Peto, J. (2020). Triaging women with human papillomavirus infection and normal cytology or low-grade dyskaryosis: evidence from 10-year follow up of the ARTISTIC trial cohort. *BJOG: An International Journal of Obstetrics & Gynaecology*, *127*(1), 58-68. https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.15957

professional knowledge.[23] For informed consent to a HPV self-test (which is a primary HPV test) women and health professionals need to understand what an HPV test is and what a positive result means, including the recommendation for follow up which will include a vaginal examination for a positive test. Mechanisms to address knowledge gaps, ensure equitable access to information, and health promotion approaches will be needed.

We excluded women in this study who were pregnant, symptomatic, or had a high grade cervical screening history. However we now have evidence and clinical guidance that HPV testing can be safely offered alongside self-testing for STI during pregnancy. There have been several recent cases of young women with cervical cancer who could have been screened in pregnancy, suggesting this is important. Our team also want further consideration of the offer of HPV self-testing to women with a High-Grade cervical screening history, particularly those very overdue for screening, and this is a focus of further research under the Māori Health Pipeline.

Table 2. Key implementation elements to consider for primary HPV testing

Element	Comment
Knowledge about HPV and HPV primary screening	• Target audience, providers and wider sector • Appropriately targeted public messaging in key translated languages • Linkage with the HPV vaccination programme
Invitation processes	• Written, online and video communication options available in key translated languages • Multiple access methods inclusive of primary care text portal and opportunistic offer, a mail-out option tailored to women's preferences and language and/or request and alternative providers • Multiple return of sample options including mail, laboratory or primary care drop off • Further research on options for delivery with alternate providers/roles
Informed consent	• Tailored written materials and instructions in key translated languages • For target audiences drawing on the learning from the research (women were very clear about how they wished to be communicated with) • Ensure that women undertaking a self-test are aware that it is a primary HPV test not a cytology test and are aware that a vaginal examination will be recommended for a positive test • Ensure that the legislative informed consent requirements are met[24]
Test device	• Our research and Professor Lawton's used a simple flocked cotton swab (eg Copan). There are other proprietary devices internationally although these are not recommended for performance and cost reasons. We note that there has been

[23] Sherman, S. M., Bartholomew, K., Denison, H. J., Patel, H., Moss, E. L., Douwes, J., & Bromhead, C. (2018). Knowledge, attitudes and awareness of the human papillomavirus among health professionals in New Zealand. PLoS One, 13(12), e0197648. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0197648

[24] The NCSP is under the Health Act (Part 4A) which includes a range of requirements on sample takers and related to screen test results and data.

Element	Comment
	an international shortage of Copan swabs over COVID-19. Swabs can be used dry or in wet transport media. This is relevant for at home use (dry swabs preferred) and mail out. • Cost of swabs
Laboratory test	• Validation of HPV tests on appropriate platforms acceptable to laboratory standards is required. There is recent published data from an Australian validation series[25] • Confirmation of appropriate HPV platforms in New Zealand and the cost for HPV self-testing (not currently in the programme)
Clinical pathway	• Confirm a clinical pathway particularly follow up of HPV positive women at colposcopy • Ensure that equity of access to diagnostic services and support required for underserved women is considered in the pathway, including the resourcing requirement
Appropriate increase in resourcing and change in model of support to services	• Appropriate increase to resourcing for an intensive model for some groups of women to ensure high follow up (>90%) • Support to services will need to include a more intensive supported and shared-decision making follow up model to ensure equity of access to diagnostic services • Linkage and wrap-around to cancer treatment services (if required) could be strengthened • Service commitment to cultural competency and cultural safety training to their workforce • Linkages to interpreter services to ensure access to language support
Appropriate increase in resourcing for colposcopy	• Fully address the current underfunding of colposcopy services within the programme • Allow flexibility for some underserved women who need an additional level of support • To address the potential workforce development implications of increased referrals following primary HPV screening
Clinical safety and monitoring Safe data management	• Monitoring key indicators such as HPV positivity rate, HPV type, referral and attendance at colposcopy requires appropriate clinical and data systems. • Visibility of women across the screening pathway is a key element of quality screening programme management;[26] this

[25] The cobas HPV test for use on the 6800 and 8800 systems was approved by the FDA in April for primary screening https://www.fda.gov/medical-devices/recently-approved-devices/cobas-hpv-use-cobas-68008800-systems-p190028. Australian validation studies: Saville, M., Hawkes, D., Keung, M. H. T., Ip, E. L. O., Silvers, J., Sultana, F., ... & Brotherton, J. M. L. (2020). Analytical performance of HPV assays on vaginal self-collected vs practitioner-collected cervical samples: the SCoPE study. Journal of Clinical Virology, 104375. https://www.sciencedirect.com/science/article/abs/pii/S1386653220301177 and a review Hawkes, D., Keung, M. H., Huang, Y., McDermott, T. L., Romano, J., Saville, M., & Brotherton, J. M. (2020). Self-Collection for Cervical Screening Programs: From Research to Reality. *Cancers*, *12*(4), 1053. https://www.mdpi.com/2072-6694/12/4/1053

[26] We note that the current NCSP-register does not interface with primary care and does not perform safety-net functions well in terms of women who do not attend colpsoscopy after a positive screen. It is also not a population register and has incomplete data due to a change from opt on to opt off in 2008. The register does not hold complete or quality information

Element	Comment
	is currently undertaken with the national NCSP-register. There is concern that the current NCSP-register may be destabilised by an increase in volumes of results through the inclusion of more never-screened and under-screened women. • Results of a screening test are legislatively required to be reported to the register. • A new register, population based such as the bowel screening register, is planned as infrastructure for the move to primary HPV screening. The timeline on this is unknown. • There are alternatives available although they would require appropriate investigation including the bespoke IT system used for the HPV studies and cloud-based registers used internationally. The NCSP have raised concerns about risk with parallel information systems. • Māori data sovereignty issues are critical to address in terms of safe data management
Legislative requirements	• As noted cervical screening is the only programme under legislation and there are a range of legislative requirements to consider in terms of self-testing. The NCSP are developing communications to the sector on this currently.

6. COVID-19 deferred cervical screens

The Cancer Control Agency has undertaken analyses on a range of cancer screening, diagnostic and treatment services nationally across COVID-19. The delays to screening programmes have been noted as a concern with 'deferred screens' and catch-up processes having impacts on services along the screening pathway and on cancer registrations. Deferred colonoscopies and mammographies were noted as a particular concern, as was the large volume of cervical screens missed through COVID primary care cessation of most face-to-face interaction. Although deferral of screens is a concern, it is more likely that the clinical risk of missed cancers sits in the group of women never-screened and under-screened than in those women engaged in the programme and due a routine screen. Similarly there is clinical risk in the group of women with a previous high grade history and overdue for a screen, which is a project in the Māori Health Pipeline. HPV self-testing as a mechanism to improve reach and to manage the volume of deferred screens is attractive to the sector, metro Auckland PHOs are very supportive of further local implementation research, particularly those involved in the research programme to date.

7. Parliamentary review recommendations

In the third Parliamentary Review of the NCSP (2018)[27] the review committee's first recommendation (p3) is:

on exclusions such as hysterectomies. There are therefore many opportunities for improvement to the current NCSP-register.

[27] Ministry of Health. 2019. Report of the Parliamentary Review Committee Regarding the National Cervical Screening Programme, April 2019. Wellington. Ministry of Health. https://www.nsu.govt.nz/system/files/page/prc_final_report_2019.pdf

> Primary HPV screening, including self-sampling, should be funded and implemented as a matter of urgency. Delays in implementing the primary HPV screening programme will result in a significant number of otherwise preventable cervical cancers in New Zealand women and continuing inequities.

Describing our DHB research programme they further recommend (p5) that:

> The PRC believes it is essential that self-sampling be included in the initial implementation of the new primary HPV programme as this will lead to improved equity for and the increased participation of priority group women. A pilot programme should be developed to examine the feasibility of 'whole population self-sampling for cervical screening'.

In relation to the need for primary HPV screening to be supported by an upgraded national register, the Review Committee states (p6-7):

> The development of the new NCSP-R, as part of the NSS, should occur in parallel with the National Bowel Screening Programme Register, if this is logistically possible, and not be delayed until after the National Bowel Screening Programme Register has been developed. This would reduce the risk of unnecessary further delay to implementation of the new HPV screening programme. Effective and appropriate integration of Practice Management Systems (PMS) must be considered as part of any design for a new technology solution for cervical screening. This will enable real-time access to cervical screening data to optimise clinical decision-making.

In regard to colposcopy funding the Review Committee recognises the current underfunding and states (p108-109):

> The Parliamentary Review Committee was interested to learn that DHBs receive a significantly lower payment for NCSP colposcopies than for non-NCSP colposcopies. For DHBs that are struggling to contain burgeoning deficits, this inequity in funding would suggest there is limited incentive for DHBs to prioritise NCSP colposcopies. It was suggested to the Parliamentary Review Committee during stakeholder interviews that some DHB's may choose not to continue providing NCSP. The Parliamentary Review Committee recommends that funding for NCSP colposcopies be reviewed to ensure that pricing supports the maintenance of quality services.

8. Conclusion

Our main HPV self-testing research programme is now complete and many lessons have been learned relevant to implementation of self-testing, particularly on ensuring equitable reach and benefit. The urgency to address current (and worsening) programme inequities with self-testing was already clear in the Parliamentary Review recommendations of 2018 and has been magnified post-COVID-19, adding the large volume of deferred screens to the urgency. There is substantive national policy work on primary screening and HPV self-testing already undertaken. However, the current timelines for the national primary HPV programme change appear unlikely to be met (given key infrastructure such as a new register are not available) and the preparatory implementation work has not yet been initiated. This creates a tension given the maturity of New Zealand and international research, the current urgency and a primary care sector enthusiastic about local HPV self-testing implementation and keen to build on COVID opportunities for change and doing things differently.

System Level Measures Improvement Plan

Auckland, Waitemata & Counties Manukau Health Alliances

2020 2021

FINANCIAL YEAR

***Tawhiti rawa tō tātou haerenga te kore haere tonu, maha rawa wā tātou mahi te kore mahi tonu*.**

We have come too far to not go further and we have done too much to not do more.

– Sir James Henare

Photo Credit (cover): John Hettig Westone Productions

CONTENTS

1. EXECUTIVE SUMMARY

The Counties Manukau Health and Auckland Waitematā Alliance Leadership Teams (the Alliances) have jointly developed a 2020/21 System Level Measures Improvement Plan.

Continuing with the *one team* theme in the New Zealand Health Strategy, the joint approach to development of the single improvement plan will ensure streamlined activity and reporting, and best use of resources within the health system.

Extensive consultation was carried out across the sector in the development of the 2018/19 System Level Measures Improvement Plan. This year's plan is a further consolidation of the 2018/19 plan. The Covid-19 pandemic has had a significant impact on the delivery of the SLM programme. Primary care capacity to engage with a broad plan has been reduced. The 2020/21 plan has been through a prioritisation process to focus on post-pandemic priorities. Some activities have been removed from the current plan and will be reintroduced in subsequent plans.

Some activities have been removed as they have been successfully achieved. Some have been found to be impractical or not easily measurable. These too have been removed. Activities have been included where they can be expected to contribute to milestone measures over a three year time frame. The focus is on areas where there is the greatest need and, where possible, robust data can be used for quality improvement.

New contributory measures have been added where data collection processes have been developed in response to identified clinical priorities. Examples of this include alcohol harm reduction and smoking cessation rates. An extensive stocktake of activity against the 2018/19 plan, across primary and secondary care allowed stakeholders to contribute to the prioritisation of activities in the current plan.

The Alliances are firmly committed to including additional well-aligned contributory measures over a three year timeframe, as the structures, systems and relationships to support improvement activities are further embedded. This plan reflects a strong commitment to the acceleration of Māori and Pacific health gain and the elimination of inequity for Māori and Pacific peoples.

The district health boards (DHBs) included in this improvement plan are:

- Auckland DHB;
- Waitematā DHB, and
- Counties Manukau DHB.

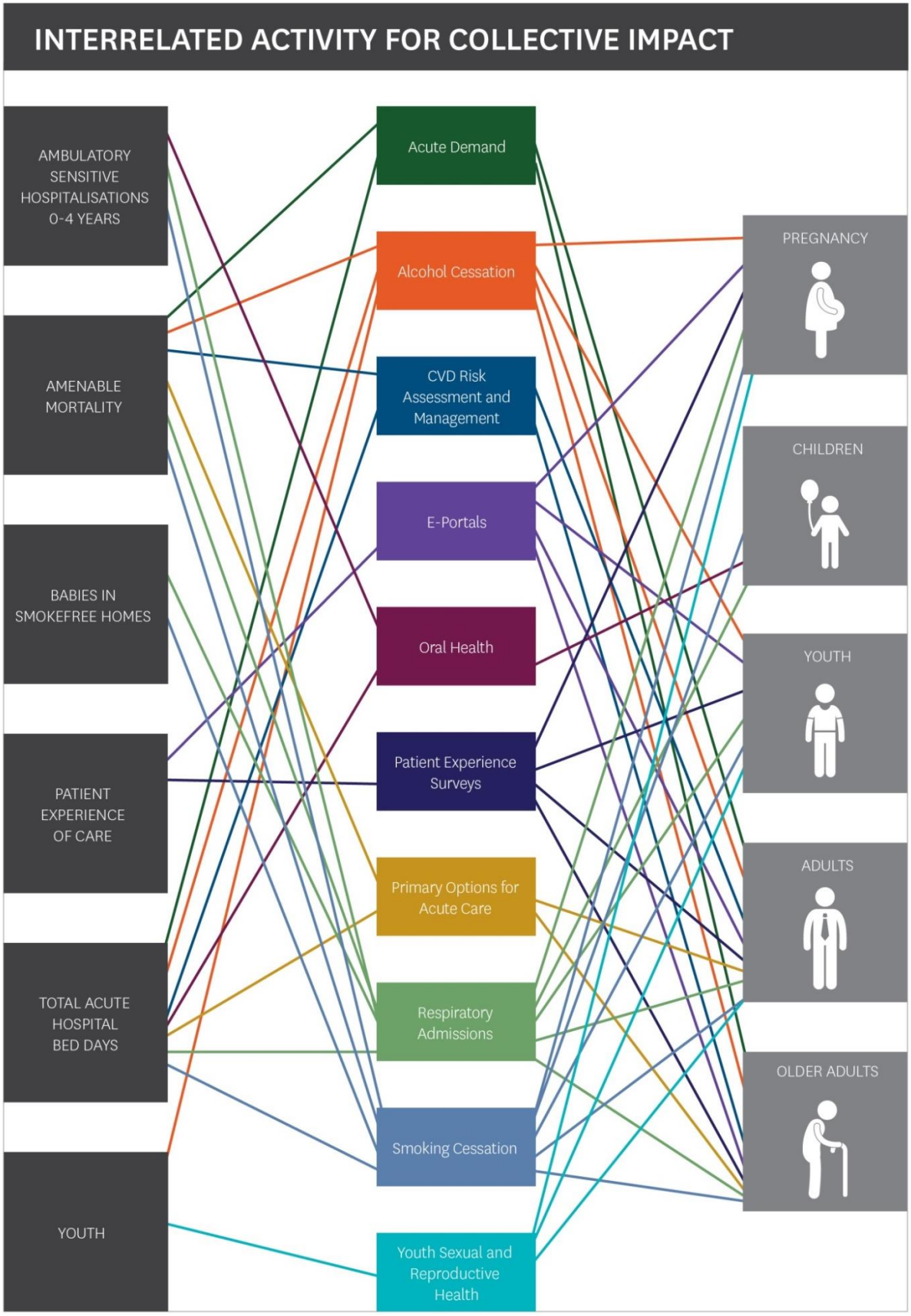
The primary health organisations (PHOs) included in this improvement plan are:

- Alliance Health Plus Trust;
- Auckland PHO;
- East Health Trust;
- National Hauora Coalition;
- ProCare Health (PHO) Limited;
- Total Healthcare PHO, and
- Comprehensive Care.

The diagram below shows an overview of the relationship between milestones and key activities chosen for the Metro Auckland System Level Measures, and the stage of life they represent. The current plan will maintain this approach of supporting activities and contributory measures that will have impact on multiple milestones.

The plan continues to promote a prevention approach and a strong focus on improving equity of outcome for Māori and other populations with high health need across the greater Auckland region.

2. INTERRELATED ACTIVITY FOR COLLECTIVE IMPACT



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3. PURPOSE

This document outlines how the 2020/21 SLM Improvement Plan will be applied across the Metro Auckland region. It summarises how improvement will be measured for each SLM and the activities that will be fundamental to this improvement. Please note that, as further discussed in section 4, implementation planning is developed annually to sit under this document to provide a higher level of detail.

4. BACKGROUND

The New Zealand Health Strategy outlines a high-level direction for New Zealand's health system over 10 years to 2026, to ensure that all New Zealanders live well, stay well and get well. One of the five themes in the strategy is 'value and high performance' 'te whāinga hua me te tika o ngā mahi'. This theme places greater emphasis on health outcomes, equity and meaningful results. Under this theme, the Ministry of Health has worked with the sector to develop a suite of SLMs that provide a system-wide view of performance. The Alliances are required to develop an improvement plan for each financial year in accordance with Ministry of Health expectations. The improvement plan must include the following six SLMs:

- ambulatory sensitive hospitalisation rates per 100,000 for 0 – 4 year olds
- total acute hospital bed days per capita
- patient experience of care
- amenable mortality rates
- youth access to and utilisation of youth-appropriate health services, and
- babies living in smokefree homes.

Each SLM, has an improvement milestone to be achieved in 2020/21. The milestone must be a number that shows improvement (either for Māori, total population, or a specifically identified population to address equity gaps) for each of the six SLMs.
A brief description of activities to be undertaken by all alliancing partners (primary, secondary and community) to achieve the SLM milestones.
Contributory measures for each of the six SLMs that is chosen by the district alliance based on local needs, demographics and service configurations that enable the alliance to measure local progress against the SLM activities.
Signatures of all district alliance partners to demonstrate an integrated and partnership approach to the development and implementation of the improvement plan.
In 2016, the Counties Manukau Health and Auckland Waitemata Alliances agreed to a joint approach to the development of the SLM Improvement Plan. This included the establishment of a Metro Auckland Steering Group and working groups for each SLM. Steering Group membership includes senior clinicians and leaders from the seven PHOs and three DHBs. The Steering Group is accountable to the Alliances and provides oversight of the overall process.

In 2020/21, SLMs continue to be business-as-usual. There is a focus on risk factors for respiratory infections including smoking, vaccination for influenza and pertussis. There is also priority given to effective use of Primary options for Acute Care (POAC) to prevent unnecessary use of hospitals and greater use of primary care patient portals to improve efficiency of contactless primary care where appropriate. The governance structure of Alliance Leadership and Steering Group continue to guide improvement processes. The responsibility for implementation sits primarily with the Implementation Group. This group has primary care representation and flexible subject matter expertise dependant on topic and requirements. The Implementation Groups stopped meeting during the pandemic but will again meet regularly during 2020/21 to further develop key actions (particularly at a local level) and inform implementation planning, monitor data, facilitate systems partnerships, and collaboratively guide the ongoing development of the SLMs with the Steering Group and Alliance Leadership Teams.
The work of the Implementation Group is guided by an Implementation Plan which sits under this plan and contains considerably more detail on activities and timeframes, and how a quality improvement approach will be taken for each area. The distinction between this high level plan and an implementation plan is necessary in a relatively complex environment of seven PHOs spanning three DHBs.

We continue to benefit from PHO leadership. The role of PHO lead has been retained from the original working group structure, and leads now have responsibility for diffused matrix management of SLM planning and implementation in their key activity areas. They continue to engage with other systems partners.

Data sharing between primary and secondary care is developing under the Metro Auckland Data Sharing Framework. This allows data matching with primary care and non-primary care data sources, more consistent reporting, establishment of baseline performance across DHBs and PHOs and drives quality improvement facilitated by the Implementation Group.

Reporting processes, both at a local and regional level have been embedded and DHBs and PHOs have access to both static and dynamic reporting in order to monitor progress and identify opportunities for improvement and individual performance is routinely discussed supportively in the Implementation Group.

4.1 Equity Approach, Consultation and Partnership

This plan reflects a strong commitment to the acceleration of Māori and Pacific health gain and the elimination of inequity for Māori and Pacific peoples. In planning, each contributor has been tasked with considering the role of equity for their particular measures, and providing measures and activities that promote improvement for those with the poorest health outcomes.

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Consultation prior to and during planning for 2018/19 was more extensive than previous years. This process was extended to better address the expectations of mana whenua, and to discuss decision-making proactively. In addition, the Māori health gain teams across the region were invited to workshop the concepts and various drafts of the plan and provided valuable input. Feedback received from the engagement sessions with stakeholders was incorporated into development of the improvement plan. This included a sector-wide pre-planning workshop, cultural consultation workshops, consumer meetings, and a presentation of draft measures, milestones and interventions to stakeholders, the Steering Group and Alliances. Feedback received from the engagement sessions was incorporated into development of the improvement plan.

The 2018/19 Improvement Plan was shared with the DHB Māori, Pacific and Asian health gain teams and their feedback was incorporated. Consultation with other relevant cultural groups and equity partners has been an essential part of this process. The 2018/19 SLM Improvement Plan was designed to align with DHB Māori Health Plans.

The 2020/21 plan is a consolidation of the 2018/19 plan and therefore continues with a strong focus on equity.

4.2 Regional Working

As in previous years, a single improvement plan has been developed in 2019/20 for the Alliances and three Metro Auckland DHBs. As a number of PHOs cross the Metro Auckland DHB boundaries and are members of both Alliances this is considered the most practical and achievable approach given limited resources. Improvement milestones and contributory measures have been carefully selected to take into account the context, population and current performance of each DHB in the wider Auckland region. One regional plan also promotes closer regional collaboration between stakeholders, and ensures that patient outcomes are promoted in a consistent way.

4.3 2020/21 Priorities for System Level Measures

The 2020/21 plan continues to focus on cross–system activities which have application to multiple milestones as demonstrated in the 'interrelated activity for collective impact' diagram in Section 2. An extensive stocktake was conducted with both primary and secondary care stakeholders to establish the uptake of the SLM activities, identify barriers and focus on the areas for prioritisation for the 2019/20 plan. The results of the stocktake were discussed with the Implementation Group and clinical leaders before being considered by the Steering Group. The aim was to consolidate the plan.

The Covid-19 pandemic has put the health system and particularly primary care under pressure. This year's plan has been influenced by this event and has a focus on preventing respiratory illness by concentrating on smoking

cessation and vaccination for respiratory conditions, and referral to healthy housing. Other priorities include effective use of POAC and greater use of patient portals to improve efficiency of delivery of care. Management of cardiovascular risk factors for both primary and secondary prevention is also a priority.

The plan has been developed using a medium term approach. It includes immediate activity that will contribute to goals to be achieved within three years. This year we continue to support the essential work that is the foundation for quality improvement activities, including enabling activities such as building relationships, providing support and education, and creating and maintaining essential data management processes.

Overarching priorities for 2020/21 continue to adopt a prevention approach, and focus on improvements in equity of outcome or access. These activities support intervention in high risk populations, and collective impact. They were developed and planned with a population focus that included specific consultation with patients, family and whānau, and community. Some contributory measures aim for improvement in specific populations such as Māori and Pacific, particularly where significant inequity exists. It is expected that activity to improve these measures will also improve results for the total population as the processes are universal with a focus on high risk groups.

5. ENABLERS TO CAPACITY AND CAPABILITY

6. SYSTEM LEVEL MEASURES 2020/21 MILESTONES

Ambulatory Sensitive Hospitalisation Rates per 100,000 for 0 – 4 Year Olds	
System Level Outcome	Keeping children out of hospital
Improvement Milestone	**3% reduction for total population by 30 June 2021.** **3% reduction for Māori populations by 30 June 2021.** **3% reduction for Pacific populations by 30 June 2021.**

Total Acute Hospital Bed Days	
System Level Outcome	Using health resources effectively
Improvement Milestone	**3% reduction for Māori populations by 30 June 2021.** **3% reduction for Pacific populations by 30 June 2021.**

Patient Experience of Care	
System Level Outcome	Ensuring patient centred care
Improvement Milestone	**Hospital inpatient survey: 5% relative improvement on Inpatient survey question: 'Were you told the possible side effects of the medicine (or prescription for medicine) you left hospital with in a way you could understand?' by 30 June 2021.** **Primary care survey: 5% relative improvement on PES question: 'During this (consult/visit), did you feel your individual and/or cultural needs were met?' by 30 June 2021.**

Amenable Mortality	
System level outcome	Preventing and detecting disease early
Improvement milestone	**6% reduction for each DHB (on 2013 baseline) by 30 June 2021.*** **2% reduction for Māori and Pacific by 30 June 2021.** *** Five year target set in 2016 to be achieved by 30 June 2021**

Youth Access to and Utilisation of Youth-appropriate Health Services	
System level outcome	Young people manage their sexual and reproductive health safely and receive youth friendly care
Improvement milestone	**Increase coverage of chlamydia testing for males to 6% by 30 June 2021.**

Babies in Smokefree Homes	
System level outcome	Healthy start
Improvement milestone	**2% relative increase in the proportion of babies living in smoke free homes by 30 June 2021.**

7. IMPROVEMENT ACTIVITIES AND CONTRIBUTORY MEASURES

The following section outlines the specific improvement activity plan and contributory measures for the six SLMs for 2020/21. Improvement activities create change, improvement in contributory measures and contribute to improved outcomes in the various SLM milestones. For 2020/21, Auckland Metro region are focused on choosing activities which relate to multiple milestones where possible for best collective impact.

7.1 Ambulatory Sensitive Admissions in 0-4 year olds

Activities	Contributory Measure
Increase uptake of children's influenza vaccination to prevent respiratory admissions by: • Improving vaccination rates in primary care of children aged 0-4 years with previous respiratory admissions through the provision of data, practice-level improvement activities, and following up reporting of vaccination uptake provided throughout the season. • Prioritised vaccination of eligible Māori and Pacific children.	Influenza vaccination rates for eligible Māori children. Target 30%. Influenza vaccination rates for eligible Pacific children. Target 30%.
Promote maternal influenza and pertussis vaccination as best protection for very young babies from respiratory illness leading to hospital admission by: • Develop a process to include primary care consultation in the data set to better understand where missed opportunities exist. • Implementing the Best Start Pregnancy Tool so it can function as a pregnancy register in primary care. • Set primary care recalls for pregnant women to ensure they have developed a relationship with a midwife. • Improve the flow of health information by increasing usage of the Best Start Pregnancy tool by midwives. • Develop a process for making pertussis vaccination more readily available in primary care.	Influenza vaccine coverage rates for pregnant Māori. Target 50%. Influenza vaccine coverage rates for pregnant Pacific. Target 50%. Pertussis vaccine coverage rates for pregnant Māori. Target 50%. Pertussis vaccine coverage rates for pregnant Pacific. Target 50%.
Support a decrease in respiratory admissions with social determinants by: • Develop a baseline measurement of referrals to healthy housing with the aim of increasing referrals rates from primary care. • Prompt e-referral to Healthy Housing using Best Start Pregnancy, with a focus on pregnant low income Māori and Pacific women. • Increase referral of pregnant women who smoke for support to stop smoking when they visit general practice to confirm their pregnancy.	Percentage of practices that have Best Start Pregnancy tool installed. Target 30%. Referrals to maternal incentives smoking cessation programmes, for pregnant women. Target each quarter: 27 for ADHB; 58 for WDHB, and 180 for CMH.

Milestones: The Ambulatory Sensitive Hospitalisations for 0-4 years, Babies in Smokefree Homes and Total Acute Hospital Bed Days milestones will be improved by these activities.

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7.2 Youth Sexual and Reproductive Health

Activities	Contributory Measure
Improve chlamydia testing in young people 15-24 years old in particular, and in sexual and reproductive health of youth in general by: • Increasing engagement with young people by working with general practices to encourage participation in the RNZCGP MOPS Youth Service audit. • Increased sexual health screening and funded sexual health consults for enrolled young people 15-24 years old (including screening for pregnant woman). • Develop a process to include primary care consultation in the data set to better understand where missed opportunities exist.	Percentage of practices with at least one GP who has completed an RNZCGP approved youth audit. Target 50%
Milestones: The Youth milestone will be improved by these activities.	

7.3 Alcohol Harm Reduction

Activities	Contributory Measures
Improve data collection and reporting on alcohol harm reduction interventions in Counties Manukau Health through: • Establishment of an alcohol ABC baseline in primary care for reporting indicators. • Provide general practices with localised resources, training and effective tools to support the systematic and equitable delivery of alcohol ABC to their enrolled population. • Improve data collection capability to multiple practice management systems.	Percentage of the enrolled population aged 15 years and over with alcohol status documented. Target 55%.
Milestones: The Amenable Mortality, Total Acute Hospital Bed Days and Youth milestones will be improved by these activities.	

7.4 Smoking Cessation for Māori and Pacific

Activities	Contributory Measure
Patient outcomes related to harm from smoking will be improved by: • Regularly reporting rates of referrals received by cessation support providers and rates of cessation medication therapy prescribed in primary care. • Audit a selection of practices to ensure referral data is accurate • Develop a surveillance report to monitor smoking prevalence by ethnicity and age. • Develop a report to monitor cessation rates by practice. • Query build lists of pregnant women coded as smoking to update smoking brief advice and direct them into cessation support programmes. • Assuring those who have been prescribed cessation medications are followed up by the local smokefree team for support with medication adherence & quitting. • Identify role of RN in Quit Smoking and upskill by completing a fast-track version of the National Training Standards Programme for smoking cessation. Ensure at least one person is trained per practice.	Rate of referral to smoking cessation providers by PHO. Target 6%. Rate of prescribing of smoking cessation medications by PHO. Target 12%.
Milestones: The Ambulatory Sensitive Hospitalisations for 0-4 years, Amenable Mortality, Babies in Smokefree Homes and Total Acute Hospital Bed Days milestones will be improved by these activities.	

7.5 Cardiovascular Disease (CVD) Risk Assessment and Management

Activities	Contributory Measure
Primary care and systems partners work together to support equitable CVD Risk Assessment (RA) for Māori by: • Provision of prioritised lists of eligible patients for risk assessment to practices, with Māori and Pacific first. Practices will set recalls and screen patients.	CVDRA rates for Māori. Target 90%.
Improved outcomes for patients with a high risk of CVD event are sought by: • Patients who have previously had a CVD event and who are eligible, receive the funded influenza vaccination. Monitored by DHB and ethnicity. • Implement a regionally agreed process to identify at practice level, high risk patients who are not taking recommended medications and record where medications are not tolerated or patients have declined treatment.	Percentage of Māori with a previous CVD event who are prescribed triple therapy. Target 70%. Percentage of Māori with a CVD risk over 20% who are prescribed dual therapy. Target 60%.
Reporting and improvement of clinical management through prescribing is facilitated through: • Comparing dispensing data to prescribing data and identifying any opportunities for improvements. • Specific actions will be developed after the analysis is complete.	
Opportunities to improve data collection and quality are advanced through: • Continue with a pilot focused on coding specified conditions (e.g. IHD, AF, CKD, diabetes). The results, expected in the next six months will inform further activities.	

Milestones: The Amenable Mortality and Total Acute Hospital Bed Days milestones will be improved by these activities.

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7.6 Complex Conditions and Frail Elderly

Activities	Contributory Measures
Māori and Pacific patients with ASH conditions (e.g. CHF, CVD, COPD, AF/Stroke and Cellulitis) receive appropriate clinical support: • Māori and Pacific patients aged 45-64 with ASH conditions who are eligible receive the funded influenza vaccination.	
Improve coding in primary care for specified long term and complex conditions (e.g. COPD and CHF) by matching ICD10 codes from secondary care with PHO registers and developing a process to supplement coding as clinically appropriate.	
Increase referral of patients at high risk of falls to an appropriate Strength and Balance Falls Prevention Programme by: • PHOs to promote the uptake of falls prevention screening templates in all primary care patient management systems. • Development of an updated Goodfellow Unit falls prevention webinar. • DHBs to support contracted programme providers to engage directly at a general practice level to increase the profile of the falls prevention programme, prioritising practices with a high proportion of older people in their enrolled population.	Percentage of patients aged 75 years and over (65 years for Māori and Pacific) who have been screened for falls risk. Target 50%.

Milestones: The Amenable Mortality and Total Acute Hospital Bed Days milestones will be improved by these activities.

7.7 Primary Options for Acute Care (POAC)

Activities	Contributory Measure
Primary and secondary care will work together with the POAC team to increase utilisation of POAC for high needs populations, particularly Māori and Pacific people aged 45-64 by: • Promotion of POAC and referral pathways within general practice. • Focusing on increasing utilisation of POAC for ASH conditions, particularly, CHF, COPD and cellulitis. • Develop regular reports for PHOs on POAC usage	POAC initiation rate in primary care. Target 3 per 100 for each PHO. Report by ethnicity

Milestones: The Amenable Mortality and Total Acute Hospital Bed Days milestones will be improved by these activities.

7.8 E-portals

Activities	Contributory Measure
Continued support for patient enrolment (logon) to e-portals by practices (given that unique email addresses are a critical dependency) by carrying out the following activities: • Receptionist training and socialisation. • Linking with practice accreditation processes.	Percentage of each PHO's enrolled population with login access to a portal. Target 30%.

Milestones: The Patient Experience of Care milestone will be improved by these activities.

7.9 Patient Experience Surveys in Primary and Secondary Care

Activities	Contributory Measure
Primary care will improve patient experience by: • Working with early adopter practices to champion engagement. • Prioritising feedback from Māori and Pacific patients. • Participating in CQI activity via 'PES to PDSA' or 'You said – We did activity/Kōrero mai'. • Developing a PDSA activity focussed on Māori and Pacific. • PHO to practice support continues in monitoring and managing reports post survey week. • Practices utilise feedback from patients and whānau when making changes in the practice. • Develop processes for collection and monitoring of email addresses for Māori and Pacific patients.	Percentage of Maori and Pacific patients eligible for the primary care patient experience survey who have valid email addresses. Target 40%.
Secondary care will improve patient experience by: • Focusing on the medication safety question in the National Inpatient Survey with a multidisciplinary approach. • Create training package in conjunction with a Health Psychologist for all hospital pharmacists and student pharmacists with links to patient experience, multidisciplinary team relationships, framing and communication approaches. • Development of Health Navigator resources and online resources. • Development of an acute pain management discharge checklist. • Testing of electronic solutions via Medchart to prompt patient conversations. • Co-design of patient experience initiatives with a focus on Māori and Pacific people (CMDHB). • Sharing learnings with primary care through established networks and forums. Improving visibility of reporting of Māori and Pacific response rates, with a view to encouraging awareness via activities as noted above. Primary and secondary care will work together to explore the underlying data for Māori and Pacific patients enrolled in primary care to identify barriers to participations in the PHC PES.	ADHB/WDHB Percentage of hospital pharmacists will have completed the medication safety training package. Target 50%

Milestones: The Patient Experience of Care milestone will be improved by these activities.

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8. SYSTEM LEVEL MEASURE MILESTONES IN DETAIL

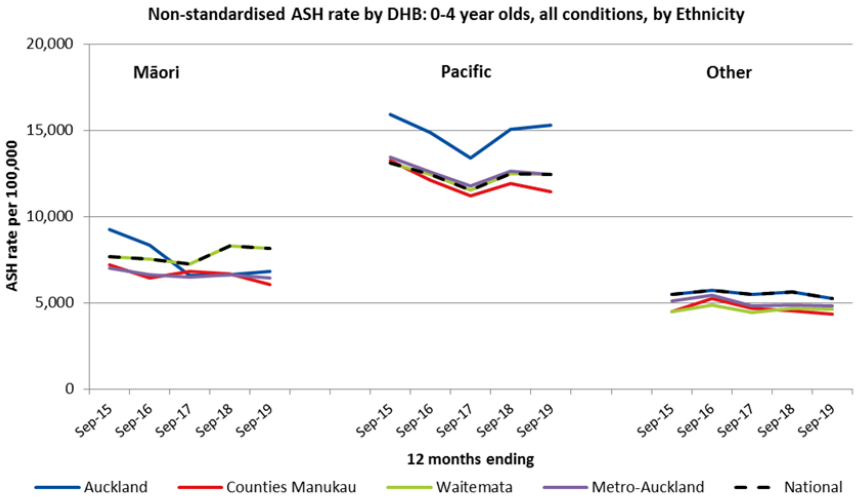
8.1 Ambulatory Sensitive Hospitalisation Rates per 100,000 for 0 – 4 Year Olds

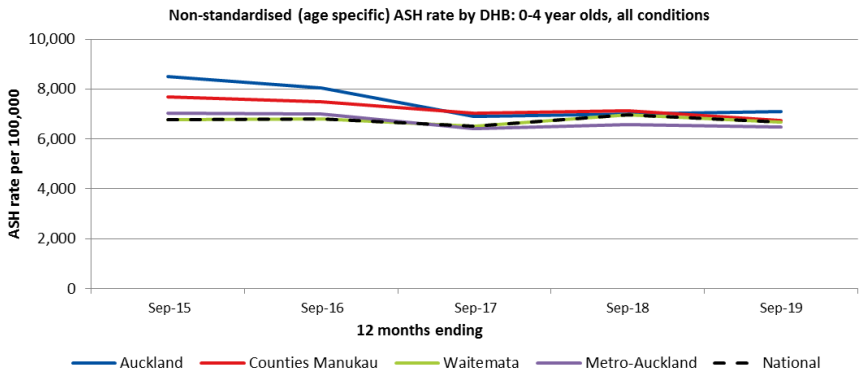
System Level Outcome	Keeping children out of hospital
Improvement Milestone	**3% reduction for total population by 30 June 2021.** **3% reduction for Māori populations by 30 June 2021.** **3% reduction for Pacific populations by 30 June 2021.**

Ambulatory sensitive hospitalisations are admissions considered potentially preventable through pre-emptive or therapeutic interventions in primary care. The admissions included are made up of a specified set of discharge codes considered to be ambulatory sensitive, and are assigned based on the primary diagnosis. This is a challenging indicator as social determinants of health are a significant contributor. The amount realistically amenable to timely access to quality primary care has not been quantified and there is little evidence about what works outside of immunisation for vaccine preventable diseases. Despite these challenges there are many promising approaches.

In addition to paediatric and maternal immunisation, smoking cessation and improving the housing environment are important for improving this milestone. This year we have chosen to focus on these aspects of the Child and Adolescent Asthma Guidelines, fitting with a broader focus on respiratory admissions, which is the largest contributor to Ambulatory Sensitive Hospitalisations in 0-4 across the three DHBs.

We plan to build on improvements in immunisation rates and spread the methodology to other high risk cohorts which will improve outcomes in acute hospital bed days.





This year we aim to continue our focus on equity with an improvement for Māori and Pacific rates.

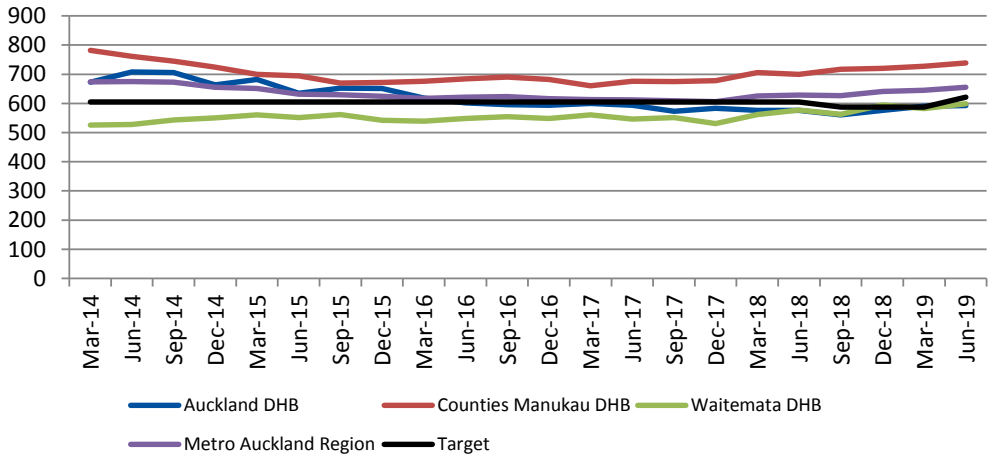
8.2 Total Acute Hospital Bed Days

System Level Outcome	Using health resources effectively
Improvement Milestone	**3% reduction for Māori population by 30 June 2020.** **3% reduction for Pacific population by 30 June 2020.**

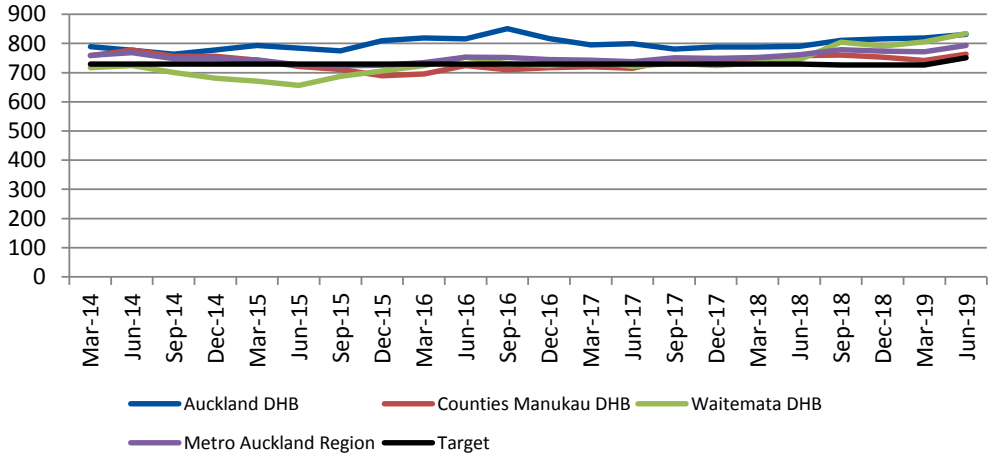
Acute hospital bed days per capita is a measure of the use of acute services in secondary care that could be improved by efficiencies at a facility level, effective management in primary care, better transition between community and hospital settings, optimal discharge planning, development of community support services and good communication between healthcare providers. The intent of the measure is to reflect integration between community, primary and secondary care, and it supports the strategic goal of maximising the use of health resources for planned care rather than acute care. We will achieve a greater reduction in acute bed days for higher risk populations via targeted initiatives to improve the health status of Māori and Pacific peoples in particular. Specific targets for these populations are higher due to the inequity when compared to the total population.

We plan to target populations most likely to be admitted or readmitted to hospital, and focus on prevention and treatment of conditions that contribute the most to acute hospital bed days. Priority areas include alcohol harm reduction, CVD management, influenza vaccination for high risk groups and effective use of POAC. Conditions identified as highest priority include congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD). Coding for these conditions in primary care will be improved so effective interventions can be targeted. Total acute hospital bed days for 2019/20 for Māori and Pacific identify marked inequities when compared to non-Māori, non-Pacific rates, so we will continue to focus on patients from this population in addition to the prioritised conditions.

Standardised Acute Bed Days per 1,000 Maori Population: 12 months ending



Standardised Acute Bed Days per 1,000 Pacific Population: 12 months ending



8.3 Patient Experience of Care

System Level Outcome	Ensuring patient centred care
Improvement Milestone	**Hospital inpatient survey: 5% relative improvement on Inpatient survey question: 'Were you told the possible side effects of the medicine (or prescription for medicine) you left hospital with in a way you could understand?' by 30 June 2021.** **Primary care survey: 5% relative improvement on PES question: 'During this (consult/visit), did you feel your individual and/or cultural needs were met?' by 30 June 2021.**

Patient experience is a good indicator of the quality of health services. Evidence suggests that if patients experience good care, they are more engaged with the health system and therefore likely to have better health outcomes. The Health Quality and Safety Commission (HQSC) patient experience survey (PES) domains cover key aspects of a patient's experience when interacting with health care services: communication, partnership, coordination, and physical and emotional needs.
The 2020/21 plan continues to look at performance of individual questions rather than response rates to the survey.
The patient experience surveys have been significantly disrupted during 2019/20 with:

- A refresh of the survey precluding direct comparison of questions between the old and new surveys
- A change in provider contributing to a pause in delivery of the survey and discontinuous data flow
- The Covid-19 crisis which further contributed to pausing the survey and also resulted in a significant changes in the way patients accessed primary care

Hospital Inpatient PES: The medication side effect question has been modified for the recent inpatient survey. At the time of submission of this plan data was not available for the modified question. It is highly likely that the communication of medication information will continue to be an area for improvement for the total population and also for Māori.
The milestone for 2020/21 will continue to focus on the knowledge patients have about possible medication side effects when they are discharged from hospital. This will be achieved by education of multidisciplinary teams focusing on patient empowerment, health literacy, and equity. A baseline will be established and improved upon when the first survey is conducted using the new survey.

Primary Health Care PES: The PHC PES is also well established in primary care. In keeping with the aim of reducing inequality the question about individual or cultural needs was chosen. This question has been introduced in the new survey and again a baseline will be established with the first round of the survey. Patient feedback and PDSA improvement cycles will lead to changes in practices that are important to patients and will promote cultural awareness.

8.4 Amenable Mortality

System level outcome	Preventing and detecting disease early
Improvement milestone	**6% reduction for each DHB (on 2013 baseline) by 30 June 2021.** **2% reduction for Māori and Pacific by 30 June 2020.**

Two contributory measures have been consistent in amenable mortality improvement planning to date, those that have the greatest evidence-based impact – cardiovascular disease (CVD) management and smoking cessation.

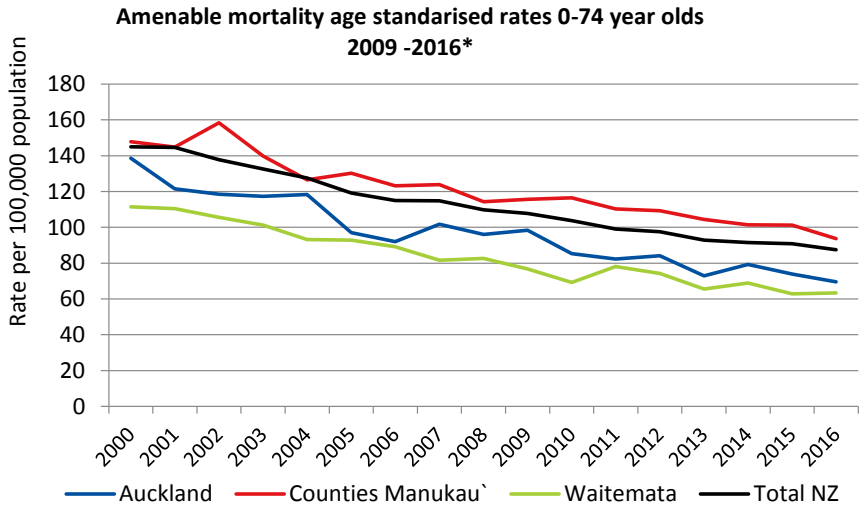
CVD is a major cause of premature death in New Zealand and contributes substantially to the escalating costs of healthcare. Modification of risk factors, through lifestyle and pharmaceutical interventions, has been shown to significantly reduce mortality and morbidity in people with diagnosed and undiagnosed CVD. Patients with established CVD (and those assessed to be at high CVD risk) are at very high risk of coronary, cerebral and peripheral vascular events and death, and should be the top priority for prevention efforts in clinical practice.

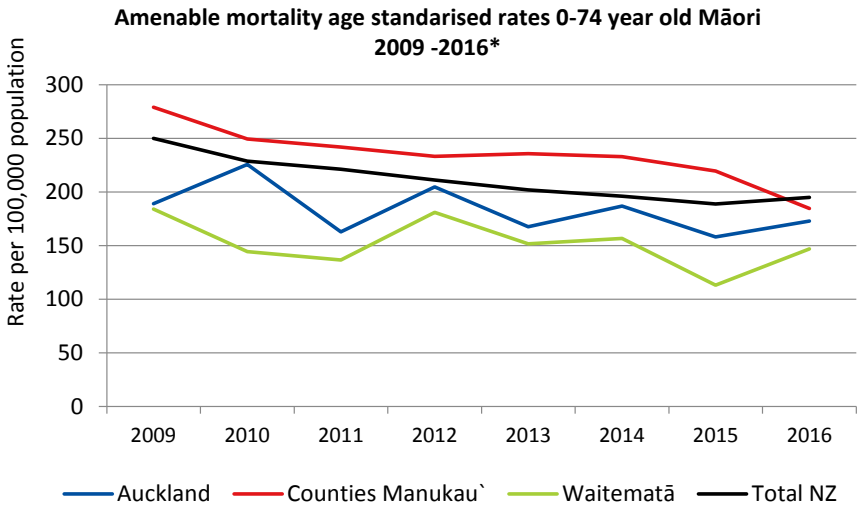
In 2020/21 we aim to build on the work done in implementation of the new Consensus Statement for Assessment and Management of CVD. With the risk assessment algorithms available to primary care there will be a stronger emphasis on risk assessment for Māori and primary prevention for those at greatest risk. We continue to focus on secondary prevention for this population.

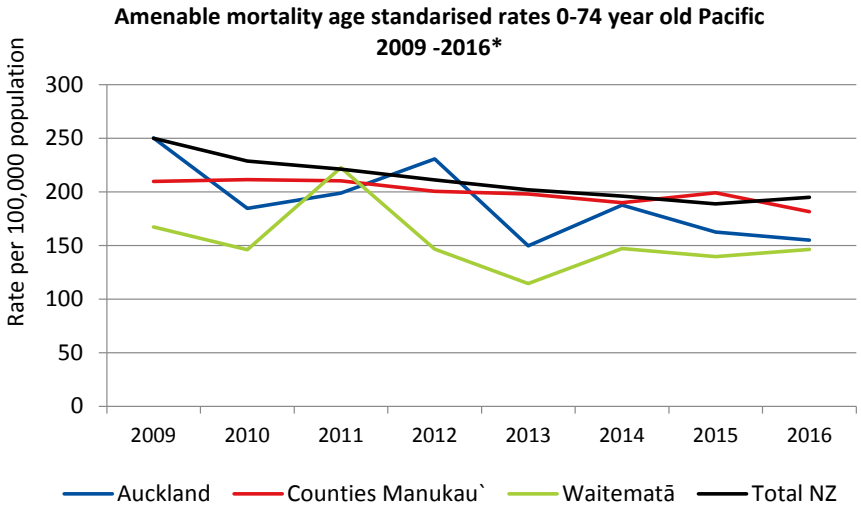
Tobacco smoking is a major public health problem in New Zealand. In addition to causing around 5,000 deaths each year, it is the leading cause of disparity, contributing to significant socioeconomic and ethnic inequalities in health. In 2011, the Government set a goal of reducing smoking prevalence and tobacco availability to minimal levels, essentially making New Zealand a smoke-free nation by 2025. In 2013, 15% of New Zealanders smoked tobacco every day. That rate was even higher among Māori (33%) and Pacific people (23%). Differences continue to be evident in the prevalence of smoking between the three ethnicity groupings of European/Other, Māori and Pacific.

Through the use of data sharing we can focus on referrals to smoking cessation services by practitioners in different parts of the health system.

The 2020/21 plan will build on the successful implementation of the Alcohol ABC programme. This is an evidence based programme to decrease harm from excessive alcohol consumption.




Amenable mortality age standarised rates 0-74 year old Māori
2009 -2016*
Rate per 100,000 population
300
250
200
150
100
50
0
2009
2010
2011
2012
2013
2014
2015
2016
Auckland
Counties Manukau`
Waitematā
Total NZ


Amenable mortality age standarised rates 0-74 year old Pacific
2009 -2016*
Rate per 100,000 population
300
250
200
150
100
50
0
2009
2010
2011
2012
2013
2014
2015
2016
Auckland
Counties Manukau`
Waitematā
Total NZ

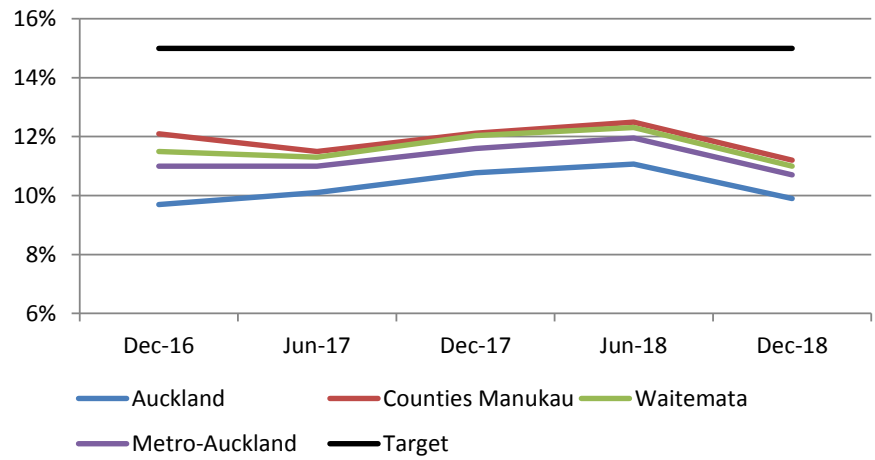
8.5 Youth Access to and Utilisation of Youth-appropriate Health Services	
System level outcome	Young people manage their sexual and reproductive health safely and receive youth friendly care
Improvement milestone	**Increase coverage of chlamydia testing for males to 6% by 30 June 2021.**

Youth have their own specific health needs as they transition from childhood to adulthood. Most youth in New Zealand successfully transition to adulthood but some do not, mainly due to a complex interplay of individual, family and community stressors and circumstances, or risk factors. Research shows that youth whose healthcare needs are unmet may progress to adults with an increased risk for poor health and overall poor life outcomes through disengagement and isolation from society and riskier behaviors, in terms of drug and alcohol abuse and criminal activities.

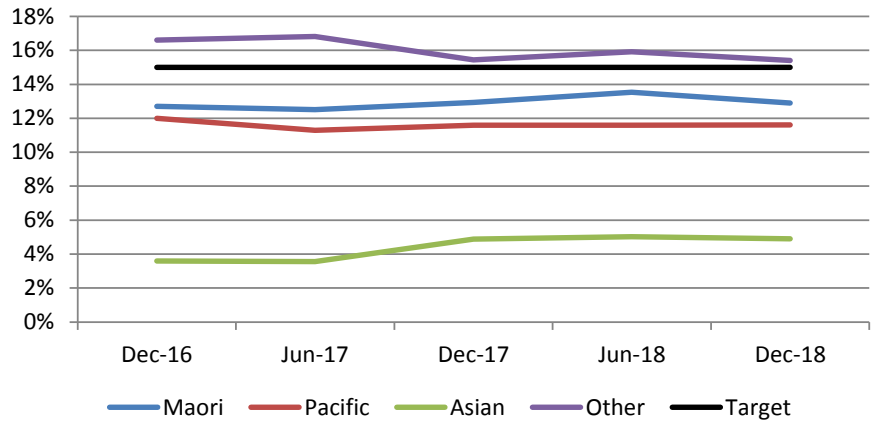
Chlamydia testing coverage: This is an indicator of young people's access to confidential youth appropriate comprehensive healthcare. For those young people 15 years and older who have been, or are sexually active, access to chlamydia testing is an indicator of access to condoms, contraceptives, and to a discussion with a clinician about consent, sexuality and other harm minimisation. For some young people this may mean addressing their safety, unmet mental health needs, or alcohol and drug problem.

Chlamydia is the most commonly reported sexually transmitted infection in Auckland. It is most often diagnosed in females aged 15-19 years and in males aged 20–24 years. Māori and Pacific young people have substantially higher rates of chlamydia than non-Māori non Pacific youth. In addition, when tested, males are more likely to test positive, although this may be because they are only presenting when they have symptoms. In the UK, data from the youth screening programme shows that more than 50% of 16–24 years olds with chlamydia have no or non-specific symptoms. For testing coverage to be effective in reducing the prevalence of chlamydia it needs to target those who have the highest risk of infection, namely males, and Māori and Pacific youth of either gender. While we aim to increase screening rates for all youth there is a focus on improving rates for males.

Chlamydia test rate for youth aged 15-24 years (population level)



Chlamydia test rate for youth aged 15-24 years by ethnicity (population level) - metro-Auckland DHBs

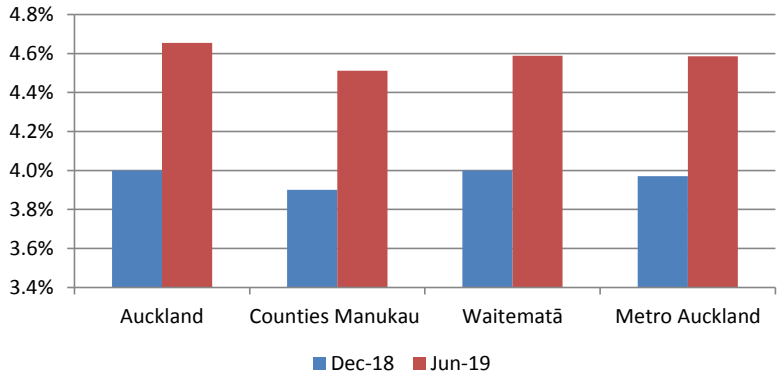


Chlamydia testing coverage in 15-24 year old males

Results for the 6 month period to June 2019: males only.

DHB	Ethnicity	No of people having chlamydia tests	Population	Chlamydia test rate (%)
Auckland	Māori	184	4,230	4.3
	Pacific	244	5,480	4.5
	Asian	256	16,480	1.6
	Other	1,344	17,380	7.7
Counties Manukau	Māori	454	8,700	5.2
	Pacific	553	11,500	4.8
	Asian	261	9,880	2.6
	Other	663	12,720	5.2
Waitematā	Māori	263	6,110	4.3
	Pacific	190	4,170	4.6
	Asian	161	9,270	1.7
	Other	1,387	24,060	5.8
Metro-Auckland	Māori	901	19,040	4.7
	Pacific	987	21,150	4.7
	Asian	678	35,630	1.9
	Other	3,394	54,160	6.3

Chlamydia test rate for males in the 6 months to Dec 18 and Jun 19 by DHB



8.6 Babies in Smokefree Homes

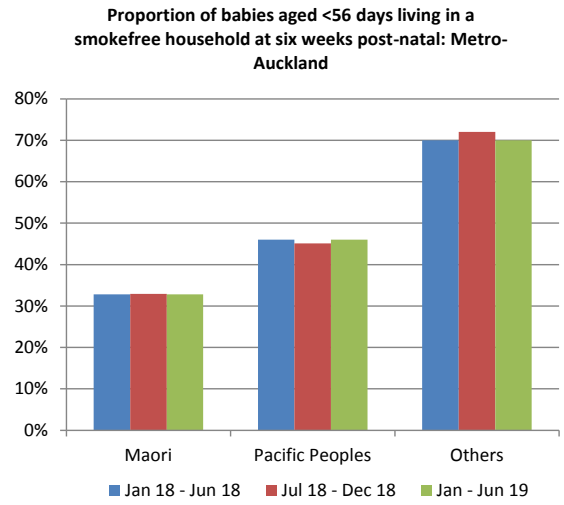
System level outcome	Healthy start
Improvement milestone	**Increase the proportion of babies living in smokefree homes by 2%**

The definition of a smoke-free household is one where no person ordinarily resident in the home is a current smoker. This measure is important because it aims to reduce the rate of infant exposure to cigarette smoke by focusing attention beyond maternal smoking to the home and family/whānau environment. It will also encourage an integrated approach between maternity, community and primary care. It emphasises the need to focus on the collective environment that an infant will be exposed to – from pregnancy, to birth, to the home environment within which they will initially be raised. Of note, smoking during pregnancy and exposure to tobacco smoke in infancy is highest for Māori and Pacific.

Babies living in smokefree homes at 6 weeks postnatal

Reporting period		DHB of domicile		
	Metro-Auckland	**Auckland**	**Counties Manukau**	**Waitematā**
Jan 18 - Jun 18	59.5%	66.8%	52.8%	61.9%
Jul 18 – Dec 18	60.9%	68.3%	54.7%	62.2%
Jan 19 - Jun 19	54.6%	66.2%	44.7%	57.5%
2019/20 Targets	**60.7%**	**68.2%**	**53.9%**	**63.2%**

There is still some work to be done, as data does not reflect live births. This may be improved by an increase in the proportion of births enrolled with WCTO providers. This work should support both smoking intervention in pregnancy and the post-natal period, and continued quality data collection in the Well Child Tamariki Ora space.



Fewer Māori babies live in smokefree homes. Rates for Pacific are also lower than other ethnicities. This correlates with rates of smoking in pregnancy, and general smoking, in Māori and Pacific populations.

Our work will be supported by earlier identification of smoking in pregnancy and referral to services for pregnant women and their whānau.

9. GLOSSARY

ABC	Assessment, Brief Advice, and Cessation Support
ADHB	Auckland District Health Board
AF	Atrial Fibrillation
ARDS	Auckland Regional Dental Service
ARPHS	Auckland Regional Public Health Service
ASH	Ambulatory Sensitive Hospitalisations
A/WDHB	Auckland Waitematā District Health Boards
CHF	Coronary Heart Failure
CKD	Chronic Kidney Disease
CME/CNE	Continuing Medical Education/Continuing Nursing Education
CMH	Counties Manukau Health (referring to Counties Manukau District Health Board)
COPD	Chronic Obstructive Pulmonary Disorder
CVD	Cardiovascular Disease
CVD RA	Cardiovascular Disease Risk Assessment
DHB	District Health Board
ED	Emergency Department
GP	General Practice/General Practitioner
HQSC	Health Quality Safety Commission
IHD	Ischaemic Heart Disease
IMAC	Immunisation Advisory Centre
LMC	Lead Maternity Carer
MACGF	Metro Auckland Clinical Governance Forum
MADSF	Metro Auckland Data Sharing Framework
PDSA	Plan, Do, Study, Act
PES	Patient Experience Survey
PHC PES	Primary Healthcare Patient Experience Survey
PHO	Primary Healthcare Organisation
PMS	Practice Management Systems
POAC	Primary Options for Acute Care
SLM	System Level Measure
SMI	Serious Mental Illness (refers to schizophrenia, major depressive disorder, bipolar disorder, schizoaffective disorder as per the National Consensus Statement for Risk Assessment and Management of CVD in Primary Care)
STI	Sexually Transmitted Infection
UK	United Kingdom
WDHB	Waitemata District Health Board
WCTO	Well Child Tamariki Ora