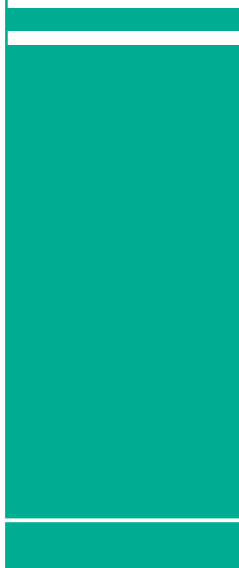
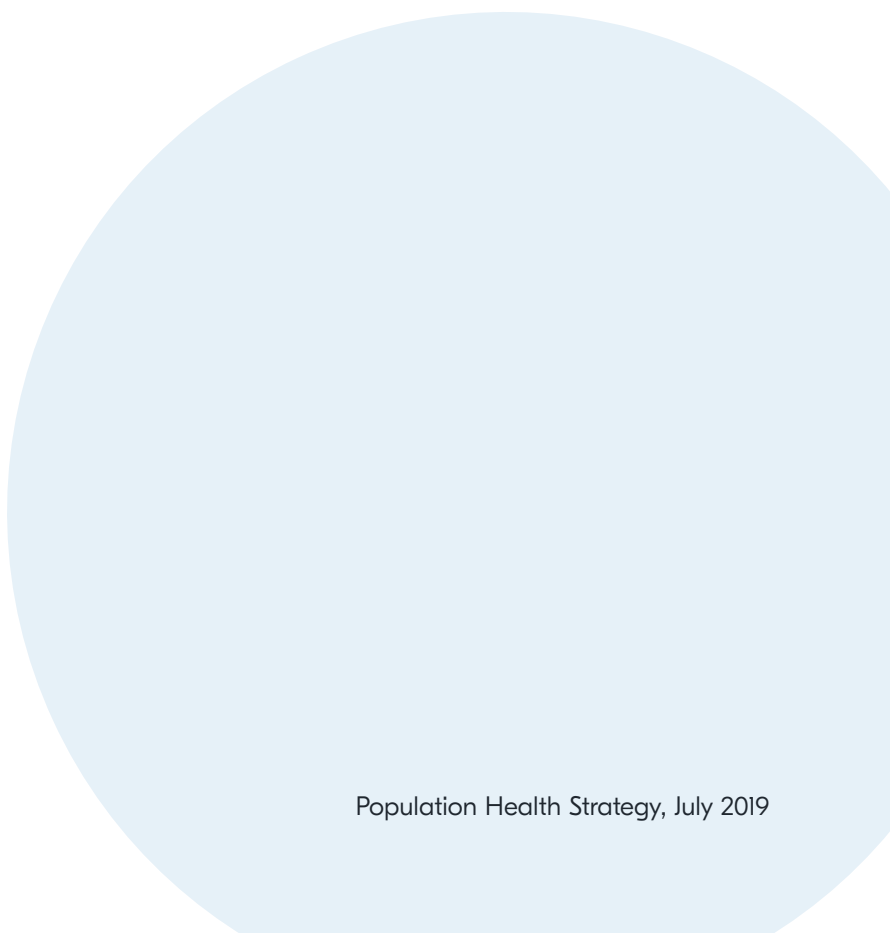
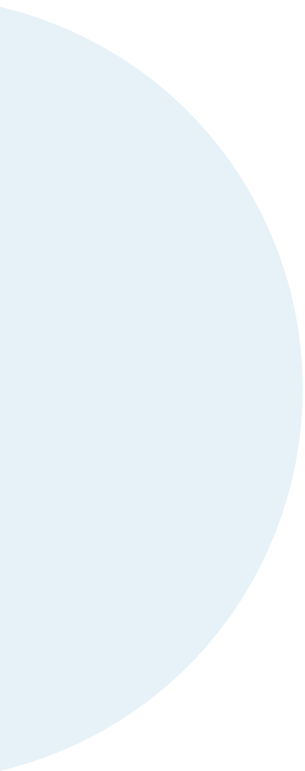


# ProCare Population Health Strategy

2019 – 2024



Empower whānau to be well



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# Māori glossary

Māori	Translation
Hapū	Kinship group, subtribe
Hui	Gathering, meeting, assembly, seminar, conference
Iwi	Kinship group, tribe, nation, people, nationality
Kapa haka	Māori cultural performing group
Kaumātua	Elder, person of status within the whānau
Kohanga reo	Māori language preschool
Kura kaupapa	Primary school operating under Māori custom and using Māori as the medium of instruction
Mihi	Speech of greeting, acknowledgement, tribute
Rongoā	Remedy, medicine, drug, cure, medication, treatment
Te Tiriti o Waitangi	Treaty of Waitangi
Rangatiratanga	Kingdom, realm, sovereignty, principality, self-determination, self-management
Wahakura	Sleeping bassinet for an infant of six months of age, or less
Waka ama	Outrigger canoe
Whareniui	Meeting house, large house – main building of a marae where guests are accommodated
Whare Tapa Whā	Holistic Health model including; Taha hinengaro – health of the mind, consciousness, awareness; Taha wairua – health of the spirit, soul; Taha whānau – health of extended family, family group, Taha tinana – physical health
Whānau	Extended family, family group
Whānau Ora Model	Whānau Ora puts whānau and families in control of the services they need to work together, build on their strengths and achieve their aspirations. It recognises the collective strength and capability of whānau to achieve better outcomes in areas such as health, education, housing, employment and income levels
Whānaungatanga	Relationship, kinship, sense of family connection

## Abbreviation glossary

Abbreviation	Description
ARDHS	Auckland Regional Dental Health Service
ASH	Ambulatory sensitive hospitalisation
BHC	Behavioural health consultant
CHF	Congestive heart failure
CQI	Clinical quality improvement
COPD	Chronic obstructive pulmonary disease
CVD	Cardiovascular disease
CYF	Child, Youth and Family
DHB	District Health Board
FACT	Focused acceptance and commitment therapy
HIP	Health improvement practitioner
HNA	Health needs analysis
HQSC	Health Quality and Safety Commission
IHD	Ischaemic heart disease
LGBT	Lesbian, gay, bisexual, and transgender
LMC	Lead maternity carer
LTC	Long term conditions
MOPS	Maintenance of professional standards
NGO	Non-government organisation
NNT	Number needed to treat
OPoH	<i>Our Picture of Health</i> (ProCare's Health Needs Analysis and performance indicators)
OQF	Outcome and quality framework
PCBH	Primary care behavioural health
PHO	Public health organisation
PMS	Practice management system
ProMa	Māori Advisory Committee
ProPa	Pacific Advisory Committee
RBA	Results based accountability
RCT	Randomised controlled trial
SMA	Shared medical appointment
STI	Sexually transmitted infection
SUDI	Sudden unexplained death in infancy
SWOT	Strengths, weaknesses, opportunities, threats

## Foreword

This is ProCare's first population health strategy, developed because we believe in our vision that every New Zealander has the right to live well. In 2017 we published a population needs assessment (*Our Picture of Health*) on our enrolled population (824,735). It was clear that there were many inequities across our broad Auckland communities and Māori and Pacific people were particularly affected.

As Arthur Ash said: "Start where you are, use what you've got, do what you can." And we are! Given large gaps in the equity of access, provision of services and health outcomes, the ProCare PHO board directed staff to develop a strategy that would address these unmet needs.

While so much of what affects health is outside of health service control (e.g. housing, employment, education, food security etc.), we focused on the things that we could do – the ways we deliver care, organise care and take care. ProCare's population health strategy was a wide collaboration developed at multiple meetings, hui and focus groups and is rigorously supported by data and evidence of impact for diverse populations, Māori and non-Māori. This is a five year plan with five major health goals.

We took a life-course approach, which was very clearly the preference at the first workshop, and grouped our responses under this approach, amended somewhat to be inclusive of broader categories. The strategy will guide the ProCare network of practices to focus and align effort where they will have the greatest ability to achieve equity of health outcomes, especially for the most disadvantaged. This will include advocating and partnering with other organisations that can impact the socio-economic determinants of health.

We have set some aspirational goals which will guide the board in making investment decisions over the next five years to achieve the maximum health gain for our population.



A handwritten signature in black ink, appearing to read 'Tevita Funaki'.

Tevita Funaki,  
CHAIR, PROCARE HEALTH LTD (PHO)

# Mihi

*E ngā mana e ngā reo e ngā tōpito o te ao, tēnā koutou katoa.*

*He ngākau nui te whānau o ProCare kia whai whakaaro me whakatutuki ai ngā huarahi pai mō tātou katoa o tēnei motu. Kua kohikohi mai ngā maramara e te hapori o ProCare mō ngā tāngata i raro i a mātou taumarumarutanga. Ko te tino tūmanako o mātou ināianeī ki te whakawhānui ai ngā momo āhuatanga mo ngā iwi katoa kia noho i te āhua oranga mō ake tonu. Nā ko te tuhituhinga ki konei mō tātou katoa kia tūtuki ai ngā anga whakamua.*

*Nō reira me mahitahi tātou katoa kia ea ngā anga whakamua.*

*Tēnā tātou katoa*

To those of authority, to those who speak the language and to all those who come from all corners of the world, we say welcome.

We of ProCare are encouraged to pursue peoples thinking and achieve pathways that are going to enhance the wellbeing of all people of this land.

The people of ProCare have collected data of people under its care, our desire is to expand our work into identifying various strategies that are going to assist our people to wellness over a long period of time. Therefore, this publication aims to set us in a direction that manages people's wellbeing into the future.

Let us all work together to achieve our strategic goals.

Greetings to each of us as we pursue our goals of wellness.



## Acknowledgement

ProCare acknowledges the numerous people who contributed to this document. Ranging from the many consumers who attended one of the dozen workshops, our staff and our Board to our Māori and Pacific advisory committees (ProMA, ProPA) and Clinical Quality Committee. In particular, we note the lead role that Associate Professor Susan Wells played in development of the Population Health Strategy, supported by Dr Tania Riddell, Associate Clinical Director Māori Health Equity and Belinda Storey, Portfolio Manager.

## Executive summary

ProCare's Population Health Strategy supports our organisational vision that 'Every New Zealander has the right to live well' and receive the right care, at the right time, in the right place. To do this we need to address equity in health outcomes as well as overall health gain.

We aim to empower whānau to be well through five key goals that span all the ages of our lives. For:

- Children to have a healthy start to life
- Youth to increase their engagement with primary care
- All people and their family/whānau to be enabled to improve their wellbeing
- People living with long term conditions to have an improved quality of life
- Older people to have an improved quality of life

Using a life course approach for prioritising population health efforts, these goals were chosen by our community, Māori, Pacific and clinical governance groups, and the ProCare network of general practices after a series of workshops, hui and Pacific, Asian and refugee focus groups. To guide our strategy and to create a shared understanding we have used *Our Picture of Health 2018*, (ProCare's health needs assessment), ProCare's Māori Health Strategy as our Māori equity framework and ProCare's Pacific Health Strategy recognising the diverse cultural needs of Pacific peoples. There is much alignment with the Metro Auckland System Level Measures Improvement Plan.

Key primary care operating models to drive equity and health outcome improvements are Health Care Home and Te Tumu Waiora (primary mental health and wellbeing innovation programme). Exemplars of primary care in the future are likely to include these models with expansion of workforce roles such as health coaches/health navigators/health improvement practitioners to support whānau to plan and connect with support they need to achieve their goals. This will also include strengthened community/whānau partnerships and better co-ordination with other health, education, housing and social services. The Whānau Ora approach has led the way on this with a recent review concluding that whānau are *experiencing positive and measurable change as a result in participation*.<sup>2</sup>

Other enablers for implementing this Population Health Strategy are information technology for consumer and whānau engagement, new modes of consumer-clinician interactions, measuring and monitoring system performance and the planned provision of practice-specific health needs analyses, identifying where the major equity gaps exist for each practice's enrolled population.

Our health goals focus on three age groups (0-4 years, 15-24 years and older people) and, across all age groups, wellbeing (including positive lifestyles and effective behaviour change) and evidence-based and equitable care for people with long term conditions.

The *Healthy Start to Life* goal recognises the stark differences in the health of infants and children by population group as measured by ambulatory sensitive hospitalisation (ASH) rates. In the next five years our aim is to reduce ASH rates for 0-4 year olds and close the equity gap. Maternal and infant wellbeing is central to this goal. We aim for 80% of pregnant women to have a systematic assessment for health and social determinants needs, and to have plans in place according to unmet current and postpartum needs. This will involve increasing connectedness and partnerships with community health and social services.

The *Youth Engagement* goal recognises the specific health needs of youth aged 15-24 years as they move through adolescence into adulthood. Among these are issues relating to substance and alcohol use, contraception, sexually transmitted diseases, depression, psychosocial stress and other mental health disorders. In the next five years our aim is to implement a range of youth friendly changes in practices and increase access (and reduce inequities of access) for youth to broader primary health care services.

The *engaged and enabled to improve wellbeing* goal crosses all ages. The workshops strongly emphasised a resilience and strengths-based approach towards positive lifestyles and effective behaviour change. Three healthcare topics were highlighted – mental health, smoking, and harmful alcohol and other substance use. To support this goal we aim to increase access to Te Tumu Waiora. Formally known as the Primary Mental Health and Wellbeing Innovation Programme, this includes enhanced integrated practice teams for behavioural health (including health coaches and health improvement practitioners), ‘walk alongside’ NGO community support services, counselling, talking therapies and referral pathways to specialist services. Other activities relate to increased referral to smoking cessation services and alcohol brief advice and counselling. The key performance indicators are improved patient experience of care and reduced suicide rates and inequities by population group. Long term conditions account for around 70% of general practice visits and are the leading cause of hospitalisations and preventable deaths. We aim to *improve the quality of life* for people with long term conditions and will focus on improving care processes and reduce inequities for diabetes, primary and secondary prevention of cardiovascular diseases, heart failure, chronic obstructive pulmonary disease and gout. Planned activities include expanding the implementation of Health Care Homes across the network, optimising management of long term conditions through use of care bundles (evidence-based packages of care, measures and change ideas), investigating shared medical appointments and identifying where ProCare can foster health literacy. In the next five years our aim is to reduce hospitalisation rates for long term conditions and their associated inequities.

The fifth goal aims to *improve quality of life for older people*. The target population for this goal is initially those at highest risk i.e. all Māori and Pacific aged 65 or older, and non-Māori/Pacific aged 75 or older with a high (10% or greater) risk score of hospitalisation in the next six months. A Kings Fund report in 2014 laid down the challenge; *‘Transforming services for older people requires a fundamental shift towards care that is co-ordinated around the full range of an individual’s needs (rather than care around single diseases) and care that truly prioritises prevention and support for maintaining independence.’*<sup>3</sup> We aim to do this in many ways. In five years, 80% of our target older population will have received a holistic assessment and been offered management or referral to community-based resources centred on healthy ageing and respectful end-of-life care.

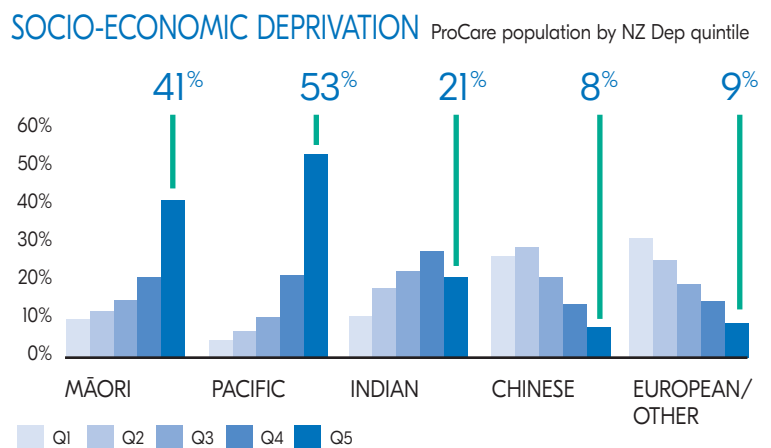
An agreed Population Health Strategy and Implementation Plan will provide ProCare with some clarity on what it needs to do and why – leading to more focused prioritisation, role clarity and consumer and staff satisfaction. It will assist ProCare to be more purposeful in progressing its five health goals. Throughout the strategy therefore we have selected specific conditions and population groups upon which to focus and prioritise our initial efforts. This is not to minimise or discount other disease conditions or population groups, but is rather an attempt to ensure that we take a strong pro-equity stance and direct our activities to those groups who have been identified as having most to gain in the present context of ProCare’s enrolled population health. While addressing equity is a key focus, activities will include all domains of quality – safety, effectiveness, efficiency, timeliness, consumer engagement and co-design to meet patient/whānau needs. The strategy has also been restricted to areas where general practice can make a difference. For now, attention to broader population interventions (e.g. advocacy for social determinants) will generally be conducted at the PHO organisational level. This strategy and its implementation plan provides guidance as opposed to absolute direction, and this guidance will be subject to change and influence over time.

# Introduction

ProCare has developed a Population Health Strategy to support our organisational vision that ‘Every New Zealander has the right to live well’ and receive the right care, at the right time, in the right place. We aim to improve our population’s health through five key goals that span all the ages of our lives. We wish for:

- Children to have a healthy start to life
- Youth to increase their engagement with primary care
- All people and their family/whānau to be enabled to improve their wellbeing
- People living with long term conditions to have an improved quality of life
- Older people to have an improved quality of life

These goals require sustained actions towards the health and wellbeing of our enrolled populations at all levels; from individuals and their family/whānau, communities, hapū and iwi, across general practice and broader primary care health services. We also need to have better co-ordination with secondary services and with other areas that impact on population health such as housing, social services and the environment.



## Our population

ProCare is a large primary health organisation (PHO) serving 170+ practices and as at 1 January 2017 had 824,735 enrolled patients, making up 51% of Auckland region’s population and 17% of New Zealand’s population. Within our enrolled population are large Māori (89,912), Pacific (109,239) and Asian (176,469) communities, many of whom are living in the most socio-economically deprived residential areas.

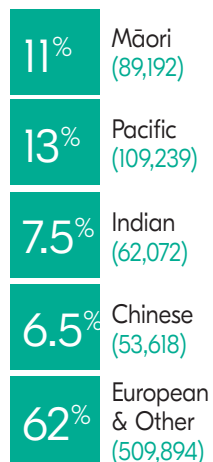
ProCare is responsible for the largest Māori and Pacific communities in New Zealand.

WHICH IS ALMOST  
**200,000**  
PEOPLE

ProCare also has the largest enrolled high-needs patient population in New Zealand.



PRO-CARE POPULATION AS AT 1 JAN 2017



**38%** Of the enrolled population (310,411) are missing out on VLCA subsidies

**66%** Of high-needs patients (263,173) are enrolled in VLCA practices so ...

**34%** Of high-needs patients (89,844) are enrolled in VLCA practices

ProCare along with other PHOs face some significant challenges – a rapidly growing and aging patient population that is experiencing more chronic disease and significant health inequities by age, ethnicity, deprivation and geography.

The hallmarks of good primary care are comprehensiveness, co-ordination, continuity, disease prevention and health promotion. To sustain high quality primary care we need to actively engage our populations in the design of services, leverage new technologies and treatments, support and sustain our workforce and change the way services are delivered through new models of care and expanded team roles.

## PROCARE PRACTICES – NUMBER OF VISITS

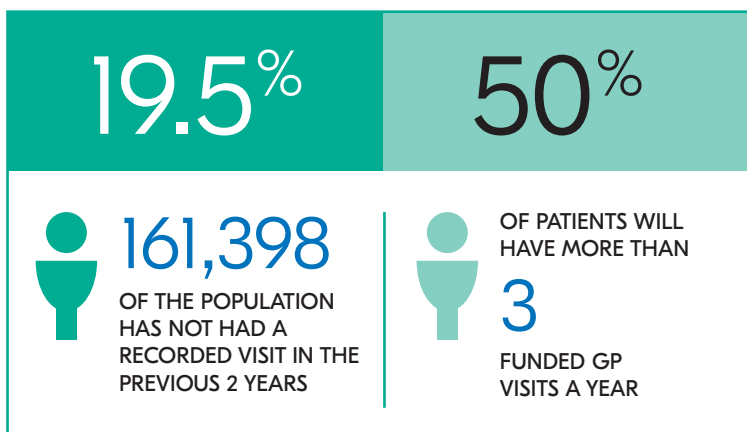


On average, general patients see their GP **2.9 TIMES A YEAR**



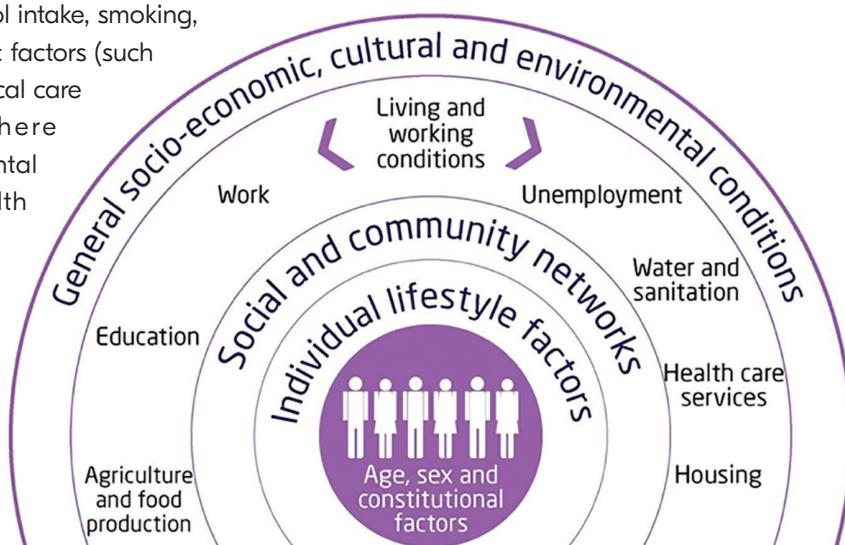
On average, high-needs patients see their GP **3.0 TIMES A YEAR**

## RANGE OF VISITS FOR TOTAL POPULATION (0 – 214 VISITS)



## What is population health?

Population health means the health outcomes of defined populations – groups, families and communities – and the distribution of outcomes within populations<sup>4</sup>. The health of a population is influenced by a wide range of factors; what we are born with (genes and hereditary factors), what we do (lifestyle behaviours such as alcohol intake, smoking, diet and physical activity), socio-economic factors (such as employment, education, housing), clinical care (access and quality of care) and where we live (built environment, environmental quality). It has been estimated that health care services contribute only about 20% of the influence on population health, 80% coming from all the other determinants.<sup>5</sup>

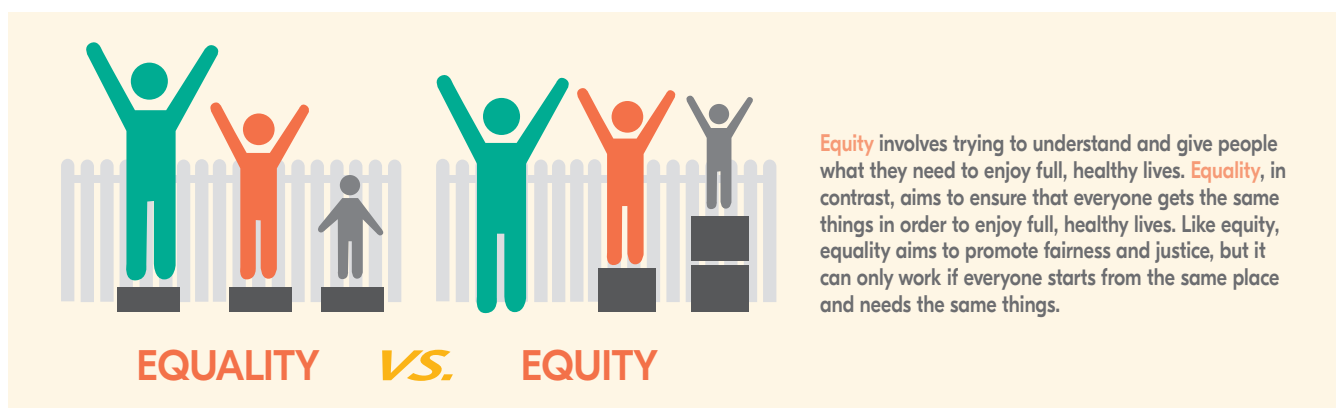


Dalgren and Whitehead Model [Picture source: <https://www.kingsfund.org.uk/>]

## What do we mean by equity?

Health inequities are defined as ‘differences which are unnecessary and avoidable, but in addition are considered unfair and unjust’.<sup>6</sup> Equity is an ethical construct based on justice. It acknowledges that sometimes different resourcing is needed in order that different groups experience equitable health outcomes. The distinction between equality and equity is therefore relevant.

Equality assumes ‘sameness’ and uniformity. Uniform approaches are indeed equal because they provide the same care to everyone. They become inequitable (unfair) where the socio-economic determinants of health outcomes vary between population groups. Uniform approaches fail to account for basic contextual differences such as age, sex, ethnicity, socio-economic status and access to primary healthcare. In contrast, equitable approaches are seldom equal because they consider and aim to minimise the impact of differences between population groups. Health equity is therefore concerned with how resources, including health services, are distributed in the community. This includes evaluating the processes and structures that determine such distribution. Failure to avoid or overcome inequities by modifying unfair resource allocation infringes on human rights. For Māori this is reinforced by Tiriti o Waitangi and the 2007 United Nations Declaration on the Rights of Indigenous Peoples.<sup>7</sup>



*Image sourced from ccf.ny.gov*

## Influences for our population health strategy

The 2016 New Zealand Health Strategy provides us with a high level direction for the health system over the 10 years from 2016 to 2026. The overarching aim is that All New Zealanders live well, stay well, get well, in a system that is people-powered, provides services closer to home, is designed for value and high performance, and works as one team in a smart system.

The New Zealand Health Strategy has an important associated strategy – He Korowai Oranga, the Māori Health Strategy (updated in 2014) in recognition and respect for the Tiriti o Waitangi. Other key government strategies include the New Zealand Disability Strategy, 'Ala Mo'ui – Pathways to Pacific Health and Wellbeing, Health of Older People Strategy and the Primary Health Care Strategy.

Our Population Health Strategy is nested beneath these national strategies, and within the context of a PHO. It seeks to bring to life what we can do to achieve national health goals.

# Methods for developing our population health strategy

To guide our Population Health Strategy and to create a shared understanding we have used the following resources, frameworks and models of care:

- ProCare's Strategic Plan 2017
- *Our Picture of Health* 2018, ProCare's Health Needs Assessment
- Metro Auckland System Level Measures Improvement Plan 2018/19
- A life course approach for prioritising population health efforts
- ProCare Māori Health Strategy as our equity framework
- ProCare Pacific Health Strategy recognising the diverse cultural needs of Pacific peoples
- Health Care Home Model as an enabler for practice change
- Te Tumu Waiora (formally known as the Primary Mental Health and Wellbeing Innovation Programme)
- High performing primary care system components

These are described in more depth in Appendix 1.



In late 2017 and early 2018 a series of workshops was conducted with multiple governance and advisory groups including ProCare Network Board, ProCare Health Board, Clinical Governance Committee, Clinical Quality and Education Committee, ProMa (Māori Advisory Committee), ProPa (Pacific Advisory Committee), and staff including the Clinical Directorate.



The mandate was to take the findings from *Our Picture of Health* and determine a way forward. The workshops took a life course approach and participants were divided into four working panels – childhood (including maternal health during pregnancy), youth, middle age and the elderly. Groups shared their insights and voted on priorities. Clear underlining themes were increasing people's quality of life and addressing equity of health outcomes for Māori and for Pacific communities. Five goals emerged that met with strong consensus.

## Our population health goals

To improve our population's health we need to engage, partner with and bring our patients' voices and their family/whānau to focus on:

- Children having a healthy start to life
- Youth increasing their engagement with primary care
- Enabled to improve their wellbeing
- People living with long term conditions to have an improved quality of life
- Older people having an improved quality of life

In essence, these goals relate to three age groups (children 0-4 years, youth 15-24 years, older people from 75 years (and for Māori and Pacific elders from 65 years) and two areas that cut across all ages (promoting lifestyle, behavioural and mental health and wellbeing) and care for those living with long term conditions.

Having agreement on these overarching goals, the next steps were to envision what we would like to achieve in five years and develop key performance indicators (KPIs). It was acknowledged that these KPIs were proxy measures providing 'signals' towards addressing the goals.

Existing work on new models of care (e.g. Health Care Home and Te Tumu Waiora, see Appendix 1) and expanded practice teams were endorsed, as was the need to harness health information technology more effectively for patient engagement, co-ordinated care across services, patient safety and measuring and monitoring system performance.

### Each goal was then:

- Framed according to Results-Based Accountability (RBA) questions as a guide from thinking to action, and;
- The Ottawa Charter to include a spectrum of activities to address population health issues Results—based accountability

Results based accountability (RBA) is described as a 'disciplined way of thinking and taking action'. It starts with the end goal and works backwards. We adapted the questions from the 2010 RBA guide to outline each of the population health priorities identified from our workshops.

1. What is the 'end'? What is the five-year key performance indicator?
2. How are we currently doing? What is the baseline performance of the indicator?
3. What are the factors influencing current performance?
4. Who are the partners who have a role in improving current performance?
5. What interventions would work to improve the baseline status?
6. What do we propose to do?

## Population health activity spectrum

The Ottawa Charter put forward five strands to guide interventions that range from the individual to the broader socio-economic, cultural and environmental conditions. These include; healthy public policy, community advocacy and action, reorienting health services to meet the needs of patients and their whānau, developing personal skills and supporting each other in communities.<sup>8</sup>

Improving population health therefore requires many different interventions and approaches. The figure below describes a possible spectrum of activities that might be considered for each population health goal.



Range of activities to address each prioritised population health issue\*

Individual focus								Population focus	
Patient and whānau care	Health information	Health education, counselling and skill development	Social marketing	Organisational development	Settings and supportive environment	Community action	Economic and regulatory activities		
For example, screening, individual risk assessment, immunisation, when people are unwell or have long term conditions	Person to person communication or readily available online information tailored to individual needs	Delivered to individuals or groups	Programmes designed to influence the voluntary behaviour of the target audience, and/or raise awareness about a health issue, often using media in various forms	Building the capacity of the PHO to be a health promoting organisation and a health literate organisation including practice systems, workforce development, strategic allocation of resources	Aims to improve local living and working conditions so that they are more conducive to health	Working with the community to achieve health outcomes for specific health issues including consumer co-design of services and integration and communication within and between health and social services	Policy and systems support for promoting health including financial, contracting and legislative incentives or disincentives		

\*Adapted from Tū Ora Compass Health Population Health Strategy

## Evidence-based interventions

For each of the five health goals, interventions and actions have been proposed. Where applicable the proposed interventions were explored for evidence of effectiveness by a rapid review of the national and international literature.

For each review the key questions were:

*What is the evidence to support this intervention; and will it improve equity of health outcomes?*

These reviews are in Appendix 2.

## Community and network consultation

The Population Health Strategy consultation draft document was discussed with ProMa and ProPa and following this with Tainui and Ngāti Whātua in October 2018. In addition, three Pacific community focus groups (Cook Island, Tongan, Samoan) were held in November and December 2018 and a further three focus groups in January 2019 representing South Asian (Indian subcontinent), Asian (Chinese, Japanese, Korean) and refugee communities.

The Population Health Strategy was presented at all the February 2019 GP cell groups (n=38) and then all members from each cell group were sent an email the next day with a link to the population health strategy, health needs analysis and a link to give feedback on the members website. Throughout January and February 2019, we asked for feedback from the network via the weekly electronic bulletin and an information evening was scheduled for interested parties from the network.

Changes and suggestions arising from the consultation were then incorporated either within the Population Health Strategy or addressed in the implementation plan (separate companion document) and activities.

# Healthy start to life 0-4 years

## Healthy start to life: What are the five-year key performance indicators?

### Healthy Start to Life (0-4 years): five-year KPIs

- Reduce ambulatory sensitive hospitalisation (ASH) rates for 0-4 year olds and close the equity gap
- 80% of pregnant women will have a systematic assessment for health and social determinants, and have plans put into place according to unmet current and postpartum needs (earlier KPI for Māori, Pacific and high needs mothers)

## How are we currently doing? What is the baseline performance of the indicators?

The table below shows ambulatory sensitive hospitalisation (ASH) rates per 1,000 new-born to four year olds enrolled in ProCare practices and highlights stark differences in the health of children by population groups.

ASH rates per 1,000 by condition and ethnic group for age group : 0-4  
(total average annual volumes in brackets)

ASH FLAG (group)	ASH FLAG	Ethnicity Group					Grand Total
		Māori	Pacific	Indian	Chinese	Euro / Other	
Cardiovascular	Rheumatic fever/heart disease					0.0 (1)	0.0 (1)
Dental conditions	Dental conditions	5.1 (48)	6.3 (63)	3.0 (15)	2.6 (13)	2.1 (57)	3.5 (196)
Dermatological	Cellulitis	10.6 (100)	14.3 (143)	4.5 (23)	3.0 (15)	2.4 (66)	6.1 (346)
	Dermatitis & eczema	3.9 (37)	4.2 (42)	0.8 (4)	0.9 (5)	0.9 (24)	2.0 (111)
Diabetes	Diabetes		0.1 (1)	0.1 (1)		0.1 (2)	0.0 (3)
Epilepsy	Epilepsy	3.1 (29)	4.4 (44)	2.1 (11)	2.3 (12)	2.5 (69)	2.9 (164)
Gastrointestinal	Constipation	0.8 (8)	1.0 (10)	0.8 (4)	0.7 (4)	1.4 (39)	1.1 (64)
	Gastroenteritis/dehydra...	11.0 (104)	12.7 (127)	15.4 (78)	7.0 (36)	10.6 (289)	11.2 (632)
	GORD	0.3 (3)	0.3 (3)	0.2 (1)	0.3 (2)	0.8 (22)	0.5 (30)
	Nutrition deficiency and anaemia	0.2 (2)	0.3 (3)	0.3 (2)	0.1 (1)	0.2 (6)	0.2 (13)
Kidney/urinary infection	Kidney/urinary infection	4.0 (38)	6.5 (65)	2.9 (15)	6.2 (32)	3.4 (93)	4.3 (242)
Other	Sexually transmitted infections					0.0 (1)	0.0 (1)
	Vaccine-preventable disease – Other*	0.1 (1)				0.0 (1)	0.0 (1)
	Vaccine-preventable disease – MMR			0.1 (1)			0.0 (1)
Respiratory	Asthma	17.5 (165)	26.0 (259)	15.2 (77)	9.8 (50)	11.1 (302)	15.0 (851)
	Respiratory infections – Pneumonia	9.5 (89)	17.4 (173)	5.0 (25)	5.2 (26)	5.4 (148)	8.1 (461)
	Unsp acute lower respiratory infection	4.2 (40)	7.0 (70)	1.8 (9)	1.7 (9)	2.3 (63)	3.4 (190)
	Upper respiratory tract and ENT infections	11.5 (109)	17.8 (178)	12.4 (63)	8.8 (45)	8.8 (239)	11.1 (632)
Grand Total		81.9 (771)	118.3 (1,177)	64.5 (325)	48.5 (245)	52.0 (1,417)	69.4 (3,934)

The highest ASH rates are for respiratory disorders (asthma, respiratory infections, pneumonia and upper respiratory tract infection, and ear nose and throat infections), gastroenteritis/dehydration and cellulitis. ASH rates are highest among Māori and Pacific infants with the exception of gastroenteritis/dehydration where Indian infants have the highest age-specific rates. ASH rates for dental conditions are 2-3 times higher for Māori and Pacific infants than they are for European/Other infants.

ASH rates are strongly associated with the socio-economic determinants of health experienced by children and their whānau. These include living in cold, damp houses, housing instability, household overcrowding, food insecurity, transportation difficulties, unemployment, and education and unmet utility needs (such as electricity and heating costs). Other factors include maternal health, breast feeding, maternal and infant immunisations and caregiver factors (e.g. diet, physical activity, and smoking). While much of the health burden is linked to factors outside of health services, *we believe that more connection across primary healthcare and social services are needed to better support children to have a healthy start to life.*

## What are the factors influencing current performance?

A small working group for this health goal highlighted the following primary care health service factors using a strengths, weaknesses, opportunities and threats (SWOT) framework. They identified that ProCare's strengths are that its network of practices:

- Have good immunisation rates and processes
- Proactively engage with the caregivers of new-born infants at six weeks
- Use or refer mothers and whānau to support agencies (such as Healthline and Plunket)
- Use or refer mothers and whānau to oral health initiatives (such as 'Lift the Lip' and Community Oral Health Services).

However, some of its weaknesses include:

- A lack of tools to identify health and social issues being experienced by mothers and whānau
- Inadequate referral, communication and handover between primary healthcare providers and lead maternity carers (LMCs) or Well Child providers
- LMCs have a key role supporting a healthy pregnancy and delivery but there are important gaps in information sharing including both pregnancy and postpartum patient care needs (e.g. immunisations, smoking, housing, alcohol and domestic violence) and across services (e.g. between LMCs and GPs)
- Teams that are not connected across the health and social sectors
- An ineffective enrolment system for newborns
- Complex funding and eligibility rules that change regularly
- Resource and time constraints within practices
- Health misinformation (such as anti-immunisation messages).

Opportunities to improve 0-4 health goals include: maternal immunisation during pregnancy; paediatric influenza vaccination to prevent respiratory admissions; preventive measures for Sudden Unexplained Death in Infancy (SUDI); improving how LMCs and Well Child providers work together; and models of care (such as decision support, care planning and holistic assessment). However threats to these opportunities include a lack of teamwork, lack of shared responsibility, and health service funding issues.

## Who are the partners who have a role in improving current performance?

ProCare needs to foster closer collaboration and relationships with a number of key agencies that link with general practices. These include (but are not limited to):

- LMCs, Well Child Tamariki Ora providers, Plunket, Māori health providers, wahakura providers
- Dental services
- Early childhood education centres, Te Kōhanga Reo, kura kaupapa
- Housing New Zealand, WINZ, CYF, Justice Department, Māori wardens
- Salvation Army, Māori Women's Welfare League
- Auckland City Council
- Auckland Metro DHBs and Regional Alliance for System Level Measures

## What interventions would work to improve the baseline status?

We currently do not have data on numbers of expectant mothers. However, there are approximately 56,500 enrolled children aged 0-4 years of whom there are about 9,400 Māori, 9,800 Pacific and an additional 4,400 children who reside in New Zealand Dep quintile 5 areas. Our practices are part of a network of primary care providing critical points of contact for these children and their whānau/families. Currently infant and preschool preventive health services cover childhood development, growth, healthy weight, vision and hearing screening, oral health, social and emotional health and immunisation. Other practice activities that support healthcare for 0-4 year olds are identification and care for maternal depression, maternal and household smoking cessation efforts, and education to reduce skin infections.

While child/family/whānau assessment tools that include other social and environmental needs and stresses have been developed, these are not routinely or consistently used. Barriers include lack of time and insufficient care co-ordination across primary care providers (including IT systems for referral, shared data and feedback). The international literature identifies other barriers such as: lack of knowledge of, or access to, community resources; inadequate training on how to address psychosocial issues; low provider self-efficacy; and poorly aligned financial incentives.<sup>9 10</sup>

The proposed interventions for well child design have been explored for evidence of effectiveness (and impact on equity) by a rapid review of the national and international literature (Appendix 2). This section provides a brief summary of the review.

More holistic systems of care delivery (such as the systematic referral of families with unmet needs to community-based resources) is hypothesised to improve care co-ordination, referral rates, parental satisfaction and longer term health outcomes (e.g. ASH rates). Internationally, conceptual frameworks for well child primary care practice redesign have been developed.<sup>9 11 12</sup> In addition to traditional well child checks, the focus has shifted to include broader psychosocial and environmental stresses (such as the impact of poverty, parent in prison or family violence) and to identify these stresses early (ante or postpartum). These stresses have been shown to adversely affect child health and in the longer term, adolescent and adult health.<sup>9</sup>

Well child primary care practice redesign links the structure of care delivery (how care is provided, where it is provided, who provides the care, and financing and information systems), to processes of care (screening, diagnosis, management, referral, reassessment) and hence to outcomes.<sup>9 11-13</sup> Therefore, well child practice redesign provides a potential suite of change ideas that ProCare practices in conjunction with our communities could test and evaluate.

*Well child practice redesign is not about over-burdening primary care providers with large checklists. Instead it involves customising the content of well child visits to meet families' needs at that time.*<sup>13</sup> It also involves extending who provides care (e.g. team-based care, shared group visits, parent-coaches or other health coaches, health psychologists, community health workers), other formats of care (electronic tools) and care delivered in other community settings outside practices.<sup>13</sup>

WE CARE is a recent trial of systematic screening for social determinants (parents complete a self-reported screening tool in the waiting room) and referral during well child care compared to usual care.<sup>14</sup> The majority of the families in the study had low household incomes. In the intervention arm 68% of the families attending well child checks had two or more unmet basic needs. Compared to usual care, 70% vs 8% received one or more referrals at the index visit. After 12 months, more mothers in the intervention group were enrolled in a community resource, had greater odds of being employed and receiving fuel assistance and lower odds of the family being in a homeless shelter.<sup>14</sup>

A different multi-component intervention by Margolis et al<sup>15</sup> involved community, practice and family-level strategies to improve processes of care delivery to families and children. At the community level, its objectives were to achieve policy changes to modify resources available for clinical care, engage multiple practice sites, and to enhance communication between public and private organisations to improve co-ordination and avoid duplication of services. Practice level interventions focused on teamwork and systems to provide preventive care services. At the family-level, pregnant women who were poor (defined as being 100% or less of the federal poverty level) were offered a home visiting intervention (2-4 visits per month of community nurses and educators throughout the new baby's first year of life).<sup>15</sup> US home visiting programme models for at-risk pregnant women and their children from birth to five years (typically including positive parenting strategies with counselling, provision of learning materials such as toys and books, modelling behaviours etc.) has also been shown to be effective.<sup>16</sup>

To address equity, well child practices should be designed to specifically meet the needs of the most vulnerable families and disproportionately benefit underserved groups.<sup>17 18</sup> Screening tools for social determinants (e.g. housing, food, transportation, mental health, employment) are available and can detect unmet needs that are outside the scope of usual clinical care. However, to be effective, and arguably ethical,<sup>19</sup> this requires a system of effective care co-ordination and cross-sector collaboration.

A key enabler is the Health Care Home (HCH) model with service elements relating to proactive assessment, care planning and care co-ordination processes to support individuals and whānau with complex needs, facilitating integrated health and social care. In addition, to support urgent and unplanned care for mothers and their children the HCH model includes multiple modes of contact, appointment types, GP triage and extended practice operating hours.

## What do we propose to do?

### **Adopt a systematic assessment during pregnancy for health and social needs with pre and post-natal plan of care**

ProCare will adopt well child primary care practice redesign principles, including assessment and referral pathways and develop a suite of community resources and partnerships. Currently ADHB/WDHB Maternal and Infant Wellbeing Alliance is collaboratively developing an assessment tool and referral pathways. CMDHB has also undertaken similar work. We plan to undertake a co-design process with consumers, multi-sectoral agencies and our practice network in order to ascertain how best to implement the assessment and referral packages of care across the network.

This assessment will serve to identify health and social needs including maternal mental wellbeing, what pregnant women and their families/whānau wish to address and offer a suite of options/interventions that could support them as well as co-ordination of services. This may be as simple as providing wahakura (pepi-pods), infant car seats, ensuring antenatal pertussis immunisations, or linking whānau to housing insulation schemes or budgeting services. It might also include referral to other programmes such as Family Start,<sup>20</sup> smoking cessation and oral health services, and outreach immunisation providers. Where medical concerns are identified, referral to appropriate providers may be initiated in a timely manner (e.g. specialist or provider referrals for obesity and gestational diabetes, post-partum depression, positive parenting programmes, Māori health providers for rongoā or traditional therapies).

Other proposed interventions relate to expanded practice teams such as having LMCs and social workers linked to a 'hub' of practices or health coach/navigator/visitor supporting families to access care according to need. Whatever is decided, the role of ProCare is to ensure these activities will be integrated into practice workflows. Monitoring will need to ensure that access is equitable and care delivery consistent.

## Immunisation

The ProCare network will;

Continue to strive for 95% coverage 8 month and 2-year immunisations focusing on 'no gaps' in uptake between Māori and Pacific and high needs children compared to other ethnic groups.

Work with our regional District Health Boards and other agencies to implement the 2019/20 system level measurements regional plan for 0-4 year old children.

Establish data and processes for identifying children who have had a prior respiratory hospitalisation and could benefit by having a flu vaccinations by sourcing timely monthly NHI level ASH respiratory data from DHBs and matching it against ProCare's age sex register.

Increase maternal immunisations during pregnancy (Flu and Boostrix) by:

- Establishing process to identify pregnant women (register/maternity dashboard/Health Pathways)
- Setting Boostrix immunisation recalls for 28 weeks
- Opportunistic immunisation at antenatal clinics

## Encourage smoking cessation

Referral of pregnant women (and other household members who smoke) when they visit general practice to confirm their pregnancy to pregnancy smokefree services and include smoking cessation in maternity dashboard.

Encourage early childhood enrolment.

Support population groups who have inequitable child health outcomes by:

- Identifying Māori children (and their parents and whānau) who are not enrolled in primary care and supporting enrolment with their choice of primary care provider
- Promotion of enrolment with Well Child/Tamariki Ora providers opportunistically in primary care, particularly for Māori and Pacific children.

## Foster an integrated approach

ProCare will focus on an integrated approach to a healthy start to life. We plan to develop closer relationships and partnerships and wider health and social sectors, iwi networks and Māori and Pacific health providers. For example, partnerships with Well Child Tamariki Ora providers, LMCs, Plunket, Early Childhood Education Centres and Te Kōhanga Reo, iwi health providers, Ministry of Social Development, community organisations and NGOs, family and social support agencies, housing providers, immunisation outreach services and breast feeding support and dietary advice agencies.

## Spectrum of activity for a Healthy Start to Life (0-4 years)

Individual focus				Population focus			
Patient and whānau care	Health information	Health education, counselling and skill development	Social marketing	Organisational development	Settings and supportive environment	Community action	Economic and regulatory activities
Holistic assessments linked to a plan according to identified need  HCH*	List of resources available to support expectant and new mothers	Positive parenting programmes  Te Tumu Waiora for maternal stress and depression	Promote pregnancy immunisation  Promote childhood immunisation	Pregnancy registers, dashboard alert, recalls for flu and pertussis vaccinations	E-referrals for unmet need e.g. healthy housing  Widespread smoke-free services  HCH	Multisectoral partnerships to support unmet need	Advocacy for national and infant health initiatives

\*HCH: Health Care Home

# Increased engagement with primary care (15-24 years)

## Youth engagement with primary care: What are the five-year key performance indicators?

Increased engagement with primary care age (15-24 years): five-year KPIs

- 50% of general practices have implemented youth-friendly changes
- Increased and equitable access for youth to primary healthcare (80-90% of enrolled youth have visited a general practitioner in the last two years)
- Reduced teenage pregnancies and STIs
- Improvement in youth experience of care

## How are we currently doing? What is the baseline performance of the indicators?

There were approximately 107,000 people aged 15-24 years enrolled in ProCare practices in 2017, making up 13% of the total patient population. From *Our Picture of Health*, more than 1 in every 4 of enrolled youth did NOT have a recorded visit to their general practitioner over the previous two years. This non-visit rate varied by ethnicity (see Figure below).

AGE GROUP		Māori	Pacific	NZ Dep Q5*	Chinese	Indian	Euro/Other	Grand Total
15-24	100%							
	50%	71%	69%	71%	63%	76%	77%	74%
	0%	29%	31%	29%	37%	24%	23%	26%

Percentage of patients aged 15-24 years with recorded visits (grey) and no recorded visit (coloured) in the past two years (as at January 2017) by ethnicity and New Zealand Dep Index Q5.

Youth have specific health needs as they move through childhood, adolescence and into adulthood (particularly those who have a pre-existing long term condition). Youth are at higher risk of substance and alcohol misuse, mental health disorders, or contracting sexually transmitted infections (STIs).

The national youth health survey of secondary school students (Youth'12),<sup>1</sup> showed that there have been significant and important improvements since the previous 2001 survey for substance use (tobacco, marijuana and binge drinking), risky behaviours (driving without a seat belt, drink driving), violence (being hit or harmed by someone) and sexual coercion/abuse. However, there are still areas of concern and important ethnic inequities between student groups.

### Students report no improvement or worsening in some areas

**There are still areas of health and wellbeing where students report little or no change, but have concerning issues. These include:**

- Inconsistent condom and contraception use
- Being bullied
- Being overweight or obese
- Not feeling they spend enough time with at least one parent
- Significant depressive symptoms

**There are areas that have significantly worsened over time including:**

- Parents worrying about having money for food
- Access to a family doctor
- Participation in paid part-time employment

*Excerpted from Executive summary: Youth'12 Overview: The health and wellbeing of New Zealand secondary students in 2012<sup>1</sup>*



Depression, other mental health disorders, psychosocial issues (including sexual violence or abuse) and high rates of teenage suicide are of major concern. ProCare currently has no accurate data for our enrolled population on the prevalence among youth of mental disorders, presence of psychosocial stressors such as exposure to family or sexual violence, drug and substance misuse, or suicide rates.

Other major issues for this age group arise from inconsistent condom and contraception use resulting in unanticipated pregnancies and STIs. New Zealand has one of the highest rates of teenage births among the OECD countries (22 per 1,000 women aged 15-19 years – making it fourth highest behind Turkey, the United States and the Slovak Republic.<sup>21</sup> ProCare currently has no accurate data on rates of teenage pregnancies for our enrolled population.

Chlamydia trachomatis is the most common STI in this age group. The infection may be asymptomatic in over 70% of infected men and women. Left untreated, chlamydia can cause pelvic inflammatory disease, ectopic pregnancy, urethritis, epididymo-orchitis and reactive arthritis as well as infertility. Infection can also be passed on to infants born vaginally, which may result in neonatal conjunctivitis or pneumonia. In 2014, New Zealand rates of chlamydia infections were reported to be 629 per 100,000 population – twice that of Australia.<sup>22</sup> Most (83%) of chlamydia infections are detected in those aged 15-29 years with the highest rates reported among Māori and Pacific people.<sup>22</sup> ProCare currently has no accurate data on chlamydia infection rates for our enrolled population.

## What are the factors influencing current performance?

One of the key areas affecting youth health that has worsened significantly over time is access to a family doctor. Factors influencing youth visiting primary care clinicians relate to ‘youth appropriateness’ and ‘youth accessibility’. These include: physical proximity (being located in schools and other education and training institutions); practice environment and reception areas (perceived as welcoming to young people); IT connectivity and text messaging; having and displaying clear policies (regarding confidentiality, data protection, transition of child to adolescent policy, fee structures, appointment processes); practice staff education and training (e.g. how to communicate easily with young people); leaflets and reading material specific to youth health concerns and issues; and providing a service that is flexible about involving other people (parents, carers, partners, siblings, friends, other practitioners) in the young person’s assessment and treatment.

## Who are the partners who have a role in improving current performance?

In partnership with the Youth Health Service Alliance, ProCare has adopted a youth toolbox that can be used by any general practice. There are also excellent examples of youth-friendly services in the Auckland region affiliated or in partnership with ProCare. For example enhanced school-based health services, clinical psychologists in schools, and positive parenting services. Reviewing the successful aspects of these services may provide insight into strategies that could further improve youth friendliness in the general practice environment.

## What interventions would work to improve the baseline status?

Evidence of interventions that increase access, and reduce inequities of access, for youth to primary healthcare is very limited. However, there is evidence to suggest that if the service is right, youth will come.<sup>23</sup> The proposed interventions for youth friendly changes were explored for evidence of effectiveness (and impact on equity) by a rapid review of the literature (Appendix 2).

The youth toolbox is designed to assist practices to make improvements in the youth developmental appropriateness of their service. It includes a RNZCGP-endorsed audit of appropriate healthcare for youth (a maintenance of professional standards [MOPS] tool) and a number of checklists, instruction sheets, standing orders for primary care nurses, and guides (such as a transition of child to adolescence practice policy template). The youth toolbox is a complementary resource that can be used in conjunction with other available resources such as the Auckland Regional Health Pathways – Youth Health Pathways, Child and Youth Mental Health, the RNZCGP Child and Adolescent Health guide, Youthline Services Directory, enhanced school-based health services, and student health services.

National evidence strongly supports enhanced access and utilisation of primary care and mental health services by young people through youth-specific services.<sup>24</sup> School-based health services, community youth health services and general practice care for young people are all ways for providing primary health care to young people.<sup>25</sup> However, no one model of primary health service provision has been found to be more effective than any other. Rather, a range of opportunities to access healthcare are needed for different groups of young people and at different times (e.g. providing healthcare to young people both in and out of school time and in diverse settings). Common themes important for improving youth health and wellbeing within and beyond the health sector are: to address key risk and protective factors, and to offer adolescent focused interventions including youth development and resilience-building programmes. In their review, Fleming and Elvidge (2010) suggest that to improve young people's health, the health sector should:<sup>25</sup>

1. Provide a range of youth friendly clinical health services, staffed by health professionals who are well trained, skilled and knowledgeable in youth health - these should be comprehensive and 'joined up' (for example, co-located services for young people)
2. Work across sectors to encourage population, community, school and family-level interventions that will improve the health of young people.

In the UK, the 'You're Welcome' quality criteria developed in 2007 and reviewed in 2011<sup>23</sup> sets out principles aimed to help health services (including NGOs) become more youth friendly. The criteria cover ten topic areas:

1. Accessibility
2. The environment
3. Confidentiality and consent
4. Health issues for adolescents
5. Sexual and reproductive health services
6. Child and adolescent mental health services
7. Staff training, skills, attitudes and values
8. Monitoring and evaluation, and involvement of young people
9. Joined-up working
10. Publicity

These criteria were based on examples of local practices working with young people. Further information can be viewed at: [www.dh.gov.uk](http://www.dh.gov.uk)

A key enabler is the Health Care Home (HCH) model with service elements relating to multiple modes of contact, appointment types, virtual consultations, portal access, secure messaging to the practice and obtaining laboratory results and repeat prescriptions online. In addition, there is provision for the practice to allocate tasks to broader team roles allowing clinicians to work at 'top of scope'. For example nurses could be enabled with standing orders and training to give contraception advice and prescriptions, administer the 'morning after' pill (emergency contraception), or perform cervical screening etc.

## What do we propose to do?

Implement a range of youth friendly changes in practices based on the youth toolbox and 'You're Welcome' criteria. This will include;

- Undertaking a stock take of primary care youth services (school based services, school clinics, and family planning and LGBT groups)
- Undertaking a stock take of ProCare practices to establish who has implemented youth friendly changes within practices. Look at:
  - What constitutes 'youth friendly'
  - How do they conduct a HEADSSS assessment? (Mnemonic for Home, Education and Employment, [Eating and Exercise], Activities and peers, Drugs, Sexuality, Suicide and depression, Safety, Spirituality)
  - Reviewing, updating and implementing youth health toolbox suite of changes
  - Relevance and acceptability for Māori and Pacific youth
  - How do we audit practices?
  - Youth-appropriate digital technologies for engaging with practices and encourage enrolment. This may include piloting and evaluating new modes of communicating and health IT functionalities (virtual consultations, youth seminars, YouTube clips, patient portals, secure messaging, mobile applications, social media options)
  - Follow Health Navigator/youth sector recommendations for youth appropriate digital technologies and directories that support mental health and wellbeing
  - Consider PMS dashboard enhancements around sexual health, mental health, peer pressure, confidentiality, financial stress, work/career development, weight and body image
- Facilitate youth engagement and address youth specific health issues by implementing invitations for youth e-health checks followed by a planned visit/referral if required
- Reduce teen pregnancies by:
  - Reviewing, updating and implementing youth health toolbox suite of changes regarding sexual and reproductive health needs
  - Enhancing the practice dashboard to include question regarding sexual activity and contraceptive needs
- Reduce alcohol and drug related harm in a variety of youth appropriate settings (such as Alcohol ABC)
- Support youth mental health and wellbeing by:
  - Evaluating the impact of Te Tumu Waiora on youth access, its appropriateness, relevance and equity focus and if successful, spread the initiative to practices with high proportion of Māori, Pacific and NZDepQ5 youth
- Develop multi-setting partnerships to understand primary health care services for our youth (who does what?). Support healthcare for youth in multiple settings including schools, universities, Family Planning clinics, and community run youth programmes and youth groups that foster youth engagement
- Develop metrics for youth engagement and health issues (e.g. mental health needs, teenage pregnancy, STIs and sexual violence)

## Spectrum of activity for Increased Engagement with Primary Care (15-24 years)

Individual focus		Population focus					
Patient and whānau care	Health information	Health education, counselling and skill development	Social marketing	Organisational development	Settings and supportive environment	Community action	Economic and regulatory activities
Te Tumu Waiora and HIP* role development  HCH*	New modes of communication and IT functionality	New modes of communication and IT functionality	Promote youth friendly changes  Awareness of crisis help lines such as 1737	Youth-friendly changes in practices based on the youth toolbox  New modes of communication and IT functionality  Explore virtual registration  Explore indicators for STIs, mental health needs, teenage pregnancy, sexual violence	Multiple settings of care  Enhanced school-based services  Te Tumu Waiora and HIP role development  HCH	Multisectoral partnerships	Advocacy for youth suicide prevention

\*HIP: Health improvement practitioner; HCH: Health Care Home

# Engaged and enabled to improve wellbeing

## Engaged and enabled to improve wellbeing: What are the five-year key performance indicators?

### Engaged and enabled to improve wellbeing: five-year KPIs

- Increase in equitable access to effective behaviour change services (through general practitioners, practice nurses, health improvement practitioners, community services and supports)
- Improvement in patient experience of care
- Reduced suicide rates and inequities by population group

The goal of this theme is that people of all ages are engaged and enabled to improve their physical, mental and social wellbeing. There are numerous life stressors (unemployment, isolation, lack of secure housing or death in the family), parenting issues, living with disability and lifestyle factors (smoking, alcohol, dietary choices and low physical activity) that impact on our physical, mental and social wellbeing. Many of these are also risk factors for downstream long term conditions (LTCs) such as depression, cancer, heart disease, stroke and respiratory diseases and obesity. The Population Health Strategy workshops strongly emphasised a resilience and strengths-based approach towards positive lifestyles, food and movement and effective behaviour change. This included healthy eating (including promoting messages around food as rongoā) and healthy activity (including traditional activities such as waka ama and kapa haka). Three health care topics were highlighted – mental health, smoking and harmful alcohol/other substance use. Harmful drinking is a major avoidable risk factor for neurological and mental health disorders, injury due to violence, road traffic accidents, suicide, and LTCs such as cirrhosis of the liver, cancers and cardiovascular disease.

For mental illness, a nationally representative face-to-face survey carried out in 2003-2004 Te Rau Hinengaro: The New Zealand Mental Health Survey – estimated the prevalence of any DSM-IV disorder in the past 12 months to be 20.7%.<sup>26</sup> This equates to one in five people aged 16 years and over. 'The prevalences for disorder groups were: anxiety disorders 14.8%, mood disorders 7.9%, substance use disorders 3.5%, eating disorders 0.5%.'<sup>26</sup> In addition, the prevalence of mental health disorders was found to be significantly higher among Māori than other ethnic groups reflecting both socio-economic deprivation, and contributing to it.<sup>26</sup> Mental illness therefore compounds the disadvantage for Māori associated with deprivation.

## How are we currently doing?

## What is the baseline performance of the indicators?

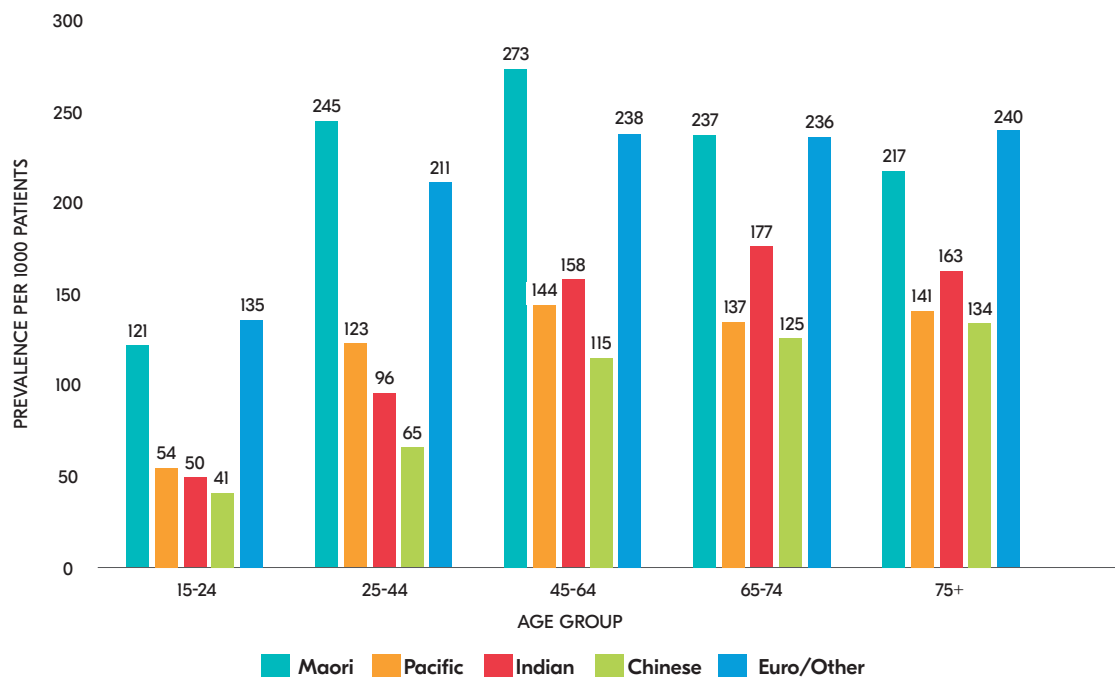
### Mental health disorders

The current prevalence of mental health disorders in ProCare's enrolled population is unknown and Read coding is low. The only indicator currently available is a composite mental health distress measure from *Our Picture of Health*. We identified patients enrolled with ProCare on 1 July 2015 who had 'mental distress' recorded over the previous 10 years. This was defined as any patient who had been recorded with a:

- Mental health Read code
- Prescribed antipsychotic/antidepressive/long-acting anxiolytic medication

- Referral to or seen by Fresh Minds (previously Patient Psychological Services)
- Recorded Kessler score or funded mental health consultation.

The figure below shows that mental health distress rates varied by ethnicity, but we were unable to interpret this finding in a meaningful way without more information. We hypothesised that there is much more mental health distress than that identified by using this indicator. Contributory factors may include lack of access to care, fragmented services, lack of reporting, coding issues, inadequate referral and follow-up processes. Access to mental health services or wellbeing supports is likely to be diagnosis or severity driven, with support available only for those patients experiencing advanced or severe mental health disorders with significant impact on functioning.



#### Age specific rates of mental health distress per 1,000 patients ≥ 15 years by ethnicity

In 2011, it was reported that nearly 1 in 10 adults aged 18 years and over living in Counties Manukau received care for a mental health disorder.<sup>27</sup> Two-thirds of these people were seen only in primary care and about 80% of them were dispensed a psychotropic medication. Depression and/or anxiety was the most common diagnosis occurring in nearly 7% of the CMDHB ≥ 18 years old population.<sup>27</sup> As with *Our Picture of Health*, this study also found that Māori and European/Others were more likely than people of Pacific, Asian or Indian ethnicities to be receiving mental health care.

Māori and people living in socio-economically deprived areas in Counties Manukau were also more likely to have had contact with specialist mental health services or received care for a psychotic disorder in 2011. However, the study investigators were unable to interpret these findings without more information. Key reflections<sup>27</sup> from their study included the need for:

1. A greater understanding of equity in relation to mental health outcomes, treatment and access to mental health services for different population groups
2. Developmentally appropriate mental health care for different age group populations
3. Appropriate care for those with low prevalence (psychotic) disorders as a high priority, alongside improving care for those with high prevalence disorders (depression/anxiety)
4. Greater attention to co-morbidity of mental health disorders with other LTCs.

## Smoking

Currently ProCare has approximately 75,000 adults aged over 15 years who have been recorded as smokers, making up 9% of the total population. By ethnic group, smoking prevalence was 21% Māori, 13% Pacific, 7% European/Other, 5% Chinese and 4% Indian. As of January 2017, 27% of smokers aged 15-74 had been referred for smoking cessation support (Quitline, Choose to be Free and Ready Steady Quit) or prescribed medications.

## Obesity

In 2017, approximately one third of ProCare's enrolled population over 15 years were found to be within a healthy weight range, one third were overweight and one third were classified as obese or morbidly obese. By ethnic group, about half of Māori and 70% of Pacific people were obese or morbidly obese.<sup>28</sup> There is a rising proportion of youth who are overweight and obese. This impacts on their short term and long term health such as the development of type 2 diabetes, gestational diabetes and later on LTCs such as osteoarthritis, cardiovascular disease and cancer.

## Alcohol

Alcohol related health conditions are not confined to the people with alcohol dependence. Even at lower levels of drinking the risk of injury (e.g. motor vehicle crashes, falls) increases as does developing chronic disease such as breast cancer and stroke.<sup>29</sup> There is no New Zealand data on the prevalence of fetal alcohol spectrum disorder (FASD), but international studies suggest that around 3% of births may be affected. Therefore it is estimated that about 30,000 children and young people in New Zealand may have an FASD, with around 1,800 more born each year.<sup>30</sup>

There is no accurate data on alcohol intake for the ProCare enrolled patient population but currently a pilot of alcohol brief intervention (Alcohol ABC) is being conducted in Counties Manukau and will be evaluated. Brief interventions have been shown to be effective. On average for every eight people who receive an alcohol brief intervention, one will reduce their alcohol consumption to safer levels (NNT 1 in 8).<sup>31</sup>

## Youth suicide

The national suicide mortality rate for Māori aged 15–24 years in 2012 was 48 per 100,000, compared with the non-Māori youth rate of 16.9 per 100,000.<sup>32</sup> Inequitable suicide rates among Māori youth are cause for profound national and collective shame. ProCare currently has no accurate data on suicide rates within the enrolled population.

# What are the factors influencing current performance?

Mental health and addiction problems place a high burden of cost on individuals, families, and health and social services. Some patients who experience mental health problems are unable to access effective treatments because they are not easily supported and treated in primary care, or are unable to access specialist care. Typically, this group has complex needs related to both health and wellbeing and social circumstances. When their needs are not addressed in a timely manner, great personal, financial and societal costs are likely to be incurred.

Currently the Ministry of Health funds primary mental health care across all DHBs. Components of this care include:

1. Extended consultations with a general practitioner (or practice nurse)
2. Assessments, brief interventions, and/or counselling sessions provided by primary mental health clinicians or counsellors/psychologists
3. Packages of care for patients, which cover a variety of services such as cognitive behavioural therapy, medication reviews, counselling and other psychosocial interventions.

These services are targeted to the most disadvantaged patients with mild to moderate mental health and/or substance abuse problems. For patients who are eligible, the number of sessions funded may not provide optimal treatment for their needs and may not be culturally appropriate. Therefore treatment options in primary care may be limited to medication, lifestyle advice and online self-management. These are not viable or helpful options for many people and there needs to be better access to both effective treatment options and social support in the community setting. In addition for people with moderate to severe mental health issues, referral pathways and access to secondary services are limited.

## Who are the partners who have a role in improving current performance?

- Patients, whānau and communities
- General practices and their staff, health improvement practitioners, health coaches
- Awhi Ora (supporting wellbeing) NGO community service providers, Māori health providers
- ILOC (integrated locality care) in Counties Manukau DHB
- Fresh Minds (formerly ProCare Psychological Services)
- Māori community support workers
- Ministry of Health and DHB initiatives
- Network 4 – ProCare, Pegasus Health, Compass Health PHO, and Pinnacle Midlands Health Network service model for primary mental health support for moderate need
- Platform Trust – a national network of NGOs that provide services to those with mental health and addiction needs

## What interventions would work to improve the baseline status?

**Enhanced integrated practice teams for behavioural health** take many forms, but in general this model is based on a practice team of primary care and behavioural health clinicians, and community support providers, working together with patients and families to provide patient-centred care. This care may address mental health and substance abuse conditions, health behaviours (including their contribution to LTCs), lifestyle issues including dietary choices associated with obesity, life stressors and crises, socio-economic problems, and poor access to healthcare.<sup>33</sup>

The proposed interventions for improved wellbeing were explored for evidence of effectiveness, and impact on equity, by a review of the national and international literature (Appendix 2).

ProCare in partnership with ADHB and WDHB and their NGO partners have piloted enhanced integrated practice teams and Awhi Ora NGO community support in five general practices across Auckland. The intervention has recently been given the name Te Tumu Waiora - being known previously as the Primary Mental Health and Wellbeing Innovation Programme. This cross-organisation delivery model is still in its early stages of implementation and the change management process is ongoing. In their evaluation of Te Tumu Waiora pilot, Appleton-Dyer et al found that the intervention has:<sup>34</sup>

- Reached the 'missing middle' by engaging with people with a range of mental health needs who would otherwise have fallen through the cracks
- Provided immediate access to a range of support options
- Facilitated equity of access for Māori, Pacific and youth, particularly through location at high-needs or youth-focused practices



- Provided a rapid preventative response that recognised the broader determinants of ill health, including social and economic needs
- Produced high satisfaction and acceptability rates among both patients and providers.

The evaluation<sup>34</sup> found that Te Tumu Waiora had positively contributed to:

1. Outcomes for people accessing services and supports:
  - Improvements in mental health and wellbeing
  - Improvements in the broader determinants of wellbeing, such as housing, money matters and employment
  - Immediate or fast access to services and supports
  - Improved access for Māori, Pacific and youth
  - Access for people whose needs would have gone unmet.
2. Benefits for people providing services and supports:
  - Reducing the burden on general practice teams
  - Improving staff confidence to 'have the conversation' about mental health
  - Able to access community support for practice population via Awhi Ora.
3. Practice and system outcomes:
  - Better use of psychological support services due to reduced demand and wait times.

The evaluation highlighted some important enablers for Te Tumu Waiora.<sup>34</sup> These were:

1. Enhanced integrated general practice teams that include a health improvement practitioner (HIP) and a health coach who provide an immediate gateway to services and support
2. Awhi Ora NGOs providing 'walk alongside' community support for a wide range of psychosocial and economic issues
3. Health coaches and Awhi Ora providing culturally-responsive support
4. Direct links to psychiatrist support, advice and guidance.

## What do we propose to do?

- Continue to deliver Te Tumu Waiora and establish what is required to expand this model of service delivery to other high needs (Māori, Pacific and Q5) practices in terms of:
  - Funding
  - Options to roll model out in a staged approach
  - Support/resource
  - Change management
- Deliver FACT (focused acceptance and commitment therapy) training to GPs/nurses, as well as health coach training and build capability within practice
- Increase referrals to smoking cessation services (especially for Māori/Pacific/NZDepQ5, those with long term conditions and for pregnant mothers) by:
  - Continuing to work with cessation providers and enable access and integrated approaches to care alongside primary and community services

- Investigate the current Alcohol ABC pilot in CMDHB in order to implement Alcohol ABC throughout the network by:
  - Reviewing the CMDHB pilot evaluation report and impact on differing population age/ethnic groups
  - Understanding what support, resources, funding will be needed to implement this to the rest of the network in 20/21
  - What tools are required (referral pathways, at risk tool).
- Collate community programmes for wellness e.g. Big Boys Big Girls, subsidised gym memberships, Green Prescription options, community gardens etc.
- Investigate and pilot digital technologies to enable access to wellbeing services and supporting behaviour change by:
  - Exploring what is available
  - Follow Health Navigator/consumer sector recommendations on patient apps and how these can be linked e.g. to patient's health condition list via portals
  - Investigate what resource/funding is required (social marketing etc.).

## Spectrum of activity for Engaged and Enabled to Improve Wellbeing

Individual focus				Population focus			
Patient and whānau care	Health information	Health education, counselling and skill development	Social marketing	Organisational development	Settings and supportive environment	Community action	Economic and regulatory activities
Te Tumu Waiora  Alcohol brief advice  Smoking cessation support	Digital technologies piloted for behavioural change	Te Tumu Waiora  Digital technologies piloted for behavioural change  Mental health training for clinicians		Expand Te Tumu Waiora  HIP* role development	Partnerships with NGOs  Smoking cessation services	Support and promote community programmes for wellness	Advocate nationally for change to mental health models of care

\*HIP: Health improvement practitioner

# Improved quality of life for people living with long term conditions

## Long term conditions: What are the five-year key performance indicators?

### Improved quality of life for people with long term conditions: five-year KPIs

- Improvement in the care processes for diabetes, primary and secondary prevention of CVD, heart failure, chronic obstructive pulmonary disease and gout and a reduction in inequities
- Improved ASH rates for LTCs including CVD (includes diabetes) and heart failure and a reduction in inequities.

Having a long term condition (LTC) such as diabetes, heart disease, stroke, cancer, asthma, chronic obstructive pulmonary disease, arthritis and musculoskeletal disease, dementia and mental health problems can affect a person's quality of life, limit daily activities and cause long-term disability. It has been estimated that two out of three adult New Zealanders have a LTC, with many (about half) having more than one disease.<sup>35</sup> These chronic diseases account for around 70% of general practice visits and are the leading cause of hospitalisations and preventable deaths. Overall 78% of all health care spending in New Zealand arises from LTCs.<sup>36</sup>

Ageing is a major risk factor for developing LTCs but many of the other key risk factors are modifiable (such as smoking, alcohol, dietary choices, obesity, low physical activity, and cold/damp housing). Addressing these risk factors could prevent the development of disease or reduce suffering after diagnosis.

As with the socio-economic determinants of health, the burden of LTCs is not equitable. Māori, Pacific and people living in New Zealand Dep quintile 5 areas suffer a greater proportion of illness, death and disability associated with LTCs compared to others in the general population. From *Our Picture of Health*, about 10% of our population over 35 years have cardiovascular disease (CVD) and 6% over 15 years have diabetes. CVD (such as heart attack, stroke and peripheral vascular disease) was highest for Māori men and women compared to all other ethnic groups. A history of heart failure was highest among Māori women and men, followed by Pacific women and men. While overall prevalence of diabetes over the age of 15 years was 6%, prevalence among Pacific people was 14% and Indian people 13%. It is urgent that work toward this health goal is targeted toward improving outcomes fastest for priority population groups (Māori, Pacific, Indian and those living in deprived areas).

For this population health goal we will be initially focusing on improving LTC recording, care planning and best practice management of a subset of long term conditions (e.g. CVD, diabetes, COPD, heart failure and gout). This does not mean disregarding other equally important LTCs – particularly cancers and their associated risk factors and prevention strategies (breast cancer, cervical screening, smoking cessation, obesity prevention). However at this time, other LTCs will be managed by existing services and health pathways. In addition, physical and mental disabilities are other 'LTCs' that will require our future attention.

## How are we currently doing? What is the baseline performance of the indicators?

Overall our general practice coding for diabetes, ischaemic heart disease, gout and asthma are similar to national prevalence estimates. However there were large Read coding gaps for other LTCs – including ischaemic and haemorrhagic stroke, peripheral vascular disease, heart failure, renal failure, cancers, COPD and mental health; and for risk factors such as BMI status. These gaps are challenging if we wish to identify and target activities towards patients with one or more LTCs.

ProCare's total expected five year cancer incidence equates to about 1,400 patients (with the top causes being 300 new breast cancer diagnoses among women, and 300 new prostate cancer diagnoses among men). For Māori and people living in quintile 5 areas, the burden of cancer is much higher than for the general population.<sup>37</sup>

In terms of ASH admissions, the figure below shows the contribution of different LTCs by age groups for ProCare's patient population. Note that mental health disorders are not included in the ASH dataset.

**ASH rates per 1,000 by condition and age group** (total average annual volumes in brackets)

ASH FLAG (group)	ASH FLAG	Age group (lp)							Grand Total
		0-4	5-14	15-24	25-44	45-64	65-74	75+	
Cardiovascular	Angina and chest pain			1.5 (158)	3.8 (855)	11.2 (2,354)	15.9 (968)	23.4 (1,011)	6.5 (5,345)
	Congestive heart failure			0.1 (9)	0.2 (43)	1.1 (223)	3.3 (200)	14.0 (608)	1.3 (1,082)
	Hypertensive disease			0.1 (6)	0.2 (43)	0.5 (100)	1.0 (60)	2.1 (92)	0.4 (300)
	Myocardial infarction			0.0 (3)	0.4 (82)	2.9 (607)	6.4 (392)	10.2 (440)	1.9 (1,523)
	Other ischaemic heart disease			0.0 (1)	0.0 (10)	0.5 (101)	1.3 (82)	1.0 (43)	0.3 (236)
	Rheumatic fever/heart disease	0.0 (1)	0.4 (44)	0.2 (22)	0.1 (12)	0.1 (16)	0.2 (11)	0.1 (5)	0.1 (109)
Dental conditions	Dental conditions	3.5 (196)	5.6 (640)	0.4 (47)	0.2 (55)	0.3 (55)	0.1 (7)	0.1 (5)	1.2 (1,003)
Dermatological	Cellulitis	6.1 (346)	3.3 (378)	3.1 (337)	3.3 (746)	3.9 (823)	4.7 (287)	10.2 (441)	4.1 (3,356)
	Dermatitis & eczema	2.0 (111)	0.4 (51)	0.4 (40)	0.3 (57)	0.3 (70)	0.3 (17)	0.5 (24)	0.4 (369)
Diabetes	Diabetes	0.0 (3)	0.0 (3)	0.8 (82)	0.5 (124)	0.9 (195)	2.0 (123)	2.6 (111)	0.8 (640)
Epilepsy	Epilepsy	2.9 (164)	0.7 (78)	1.4 (147)	1.0 (223)	1.1 (224)	1.2 (70)	2.0 (89)	1.2 (994)
Gastrointestinal	Constipation	1.1 (64)	1.2 (137)	0.6 (63)	0.5 (113)	0.8 (177)	2.1 (127)	4.6 (201)	1.1 (881)
	Gastroenteritis/dehydration	11.2 (632)	2.4 (273)	3.1 (330)	2.8 (629)	2.8 (594)	4.3 (262)	9.4 (406)	3.8 (3,124)
	GORD	0.5 (30)	0.0 (3)	0.2 (18)	0.4 (80)	1.0 (205)	2.0 (121)	2.8 (122)	0.7 (578)
	Nutrition deficiency and anaemia	0.2 (13)	0.1 (11)	0.4 (45)	0.8 (175)	1.0 (216)	1.4 (83)	4.0 (173)	0.9 (715)
	Peptic Ulcer			0.1 (7)	0.1 (33)	0.3 (70)	0.8 (48)	1.2 (51)	0.3 (208)
Kidney/urinary infection	Kidney/urinary infection	4.3 (242)	1.0 (111)	2.7 (285)	1.9 (425)	2.3 (493)	4.2 (258)	15.2 (658)	3.0 (2,472)
Other	Cervical cancer			0.0 (2)	0.0 (7)	0.0 (2)	0.0 (2)	0.0 (2)	0.0 (14)
	Sexually transmitted infections	0.0 (1)		0.2 (26)	0.1 (23)	0.0 (7)	0.0 (2)	0.1 (3)	0.1 (60)
	Vaccine-preventable disease – MMR	0.0 (1)							0.0 (1)
	Vaccine-preventable disease – Other*	0.0 (1)		0.0 (1)	0.0 (5)	0.0 (9)	0.0 (3)	0.0 (1)	0.0 (18)
Respiratory	Asthma	15.0 (851)	3.6 (406)	1.3 (141)	1.2 (270)	1.1 (223)	0.9 (55)	1.4 (63)	2.4 (2,007)
	Bronchiectasis			0.1 (13)	0.1 (23)	0.2 (45)	0.8 (46)	2.1 (93)	0.3 (220)
	COPD			0.0 (4)	0.1 (12)	1.8 (372)	6.8 (412)	10.9 (474)	1.6 (1,272)
	Respiratory infections – Pneumonia	8.1 (461)	1.7 (199)	0.7 (74)	1.1 (242)	2.0 (430)	5.2 (314)	14.9 (647)	2.9 (2,366)
	Unsp acute lower respiratory infection	3.4 (190)							0.2 (190)
	Upper respiratory tract and ENT infections	11.1 (632)	1.7 (197)	2.0 (210)	1.3 (285)	0.7 (150)	0.9 (57)	1.3 (55)	1.9 (1,584)
Stroke	Stroke			0.0 (4)	0.2 (40)	1.2 (250)	3.5 (210)	10.7 (462)	1.2 (965)
Grand Total		69.4 (3,934)	22.2 (2,527)	19.3 (2,069)	20.3 (4,603)	37.9 (8,005)	69.3 (4,213)	144.9 (6,275)	38.6 (31,625)

## What are the factors influencing current performance?

There are several strands to LTC prevalence and management and a series of current initiatives:

- Socio-economic and cultural determinants of health result in inequitable LTC health outcomes and access to healthcare

- Health workforce capacity, diversity and cultural competency/literacy impacts on ProCare's ability to provide culturally appropriate healthcare e.g. lack of rongoā (Māori or traditional therapies and therapists)
- New models of primary healthcare delivery (Health Care Homes, Te Tumu Waiora, holistic assessment linked to referral for identified needs)
- Ministry of Health and DHB directives – including System Level Measurement Framework, the revised CVD risk assessment guidelines, Planned Proactive Care and diabetes care programmes (DCIP), enhanced primary care and ADHB/WDHB Safety in Practice collaborative
- CMDHB Safety in Practice collaborative has developed evidence-based packages of care for multiple LTCs
- The lack of data tailored for practices to monitor and take action on ethnic LTC health outcome inequities
- A current narrow focus of Outcomes and Quality Framework (now called *Our Picture of Health* clinical indicators) for LTCs other than CVD and diabetes
- Patients as partners (co-design of services, shared care planning and decision making)
- Community participation and action (Healthy Village Action Zones, Big Boys, Big Girls, green prescriptions, iwi development programmes)
- The need to harness IT to:
  - Address the large information gap for stroke, peripheral vascular disease, heart failure, COPD, renal failure, cancers (especially lung and colorectal), BMI, and mental disorders in the general practice PMS
  - Patient engagement (patient portals, virtual consultations, shared care plans)
  - Co-ordinate care across services
  - Notify general practice of acute hospitalisations and managing transitions of care
  - Measure and monitor overall performance.

## Who are the partners who have a role in improving current performance?

- Patients, whānau and communities
- Practices and staff, HlPs and Health Coaches, Awhi Ora NGO community service providers, Health Care Homes providers, Māori health providers including rongoā Māori therapists
- Other LTC service providers (specialists, rehabilitation clinics, health navigators, health coaches, community organisations)
- Ministry of Health and DHBs
- Clinical Pathways and Regional Clinical Networks
- Quality improvement groups and programmes (Regional Safety in Practice collaboratives, Ko Awatea programmes, HQSC, Atlas of Variation)
- Allied health providers (pharmacies, dieticians, psychologists, physiotherapists, occupational therapists)
- Iwi organisations and Māori health networks
- Other NGOs (e.g. Heart Foundation, Asthma Foundation, HRCNZ)
- Other sector organisations (e.g. Health Literacy New Zealand, Ministry for Social Development).

## What interventions would work to improve the baseline status?

A key enabler to improve the care for people with LTCs is the Health Care Home model as described in Appendix 1. Other opportunities include the following:

**Implement evidence-based packages of care for LTC** – Evidence-based packages of care are structured ways of improving the processes of care and patient outcomes for those with LTCs. They include a straightforward set of evidence-based practices that when undertaken systematically have been found to improve patient outcomes. (Institute for Healthcare Improvement [www.ihl.org](http://www.ihl.org)).

**Shared Medical Appointments (SMAs)** – Combine medical consultations with peer support in a semi-structured group education format. Typically SMAs are led by a practitioner with prescribing privileges (nurse practitioner, pharmacist, general practitioner) and consist of closed group consultations with individual breakouts, opportunity for self-management, and educational coaching paired with medication management advice. See Appendix 2 for evidence of effectiveness and impact on equity.

**Improve organisational and network health literacy** – Health systems, healthcare organisations and health practitioners are critical to mitigating the effects of low health literacy.<sup>38-40</sup> Because of the way health systems are organised, individuals and whānau can often face a series of demands on their health literacy – i.e. their capacity to obtain, process and understand basic health information and services in order to make informed health decisions. A health literate health system reduces these demands on people and builds the health literacy skills of its workforce, and the individuals and whānau who use its services. It provides services that are easy to access and navigate and gives clear and relevant health messages so that everyone can effectively manage their health. Evidence to support the effectiveness of health literacy interventions and their impact on equity are reviewed in Appendix 2. The Ministry of Health developed a health literacy framework that outlines expectations for the health system, health organisations and all of the health workforce to take action that:

- Supports a ‘culture shift’ so that health literacy is core business at all levels of the health system
- Reduces health literacy demands and recognises that good health literacy practice contributes to improved health outcomes and reduced health costs.

The framework is available at: <https://www.health.govt.nz/publication/framework-health-literacy>.

International best practice also identifies six dimensions to help guide a health system response to health literacy. These are:

1. Leadership and management – how is health literacy an organisational value, part of the culture and core business of ProCare, and how is it reflected in strategic and operational plans?
2. Consumer involvement – how are consumers involved in the design, development and evaluation of ProCare’s values, vision, structure and service delivery?
3. Workforce – how is the workforce encouraged and supported to develop effective health literacy practices? Are ProCare’s workforce health literacy development and capacity needs identified, and is its health literacy performance evaluated?
4. Meeting the needs of the population – how does service delivery ensure that consumers with low health literacy are able to participate effectively in their care and have their health literacy needs identified and met (without stigmatisation). How is meeting the needs of the population monitored?
5. Access and navigation – how easy is it for consumers to find and engage with appropriate and timely health and related services? What assistance is available to help consumers find and engage with services? How well are services coordinated, and are services streamlined where possible?
6. Communication – how are information needs identified? How is information shared with consumers in ways that improve health literacy? How is information developed with consumers and evaluated?

While health literacy is situated as a topic in long term conditions goal, it is a theme across all the health goals for the Population Health Strategy. Health literacy was raised by all community focus groups with specific issues regarding:

- Cultural competency for Māori, Pacific, Asian and refugee subgroups
- The need for the provision of enhanced cultural support for practices accessed by refugee whānau (e.g. culturally and linguistically appropriate health coaches)
- Appointment scheduling (Asian focus group report lack of awareness of 15 minute appointments)
- HCH implementation needs to take into account that some patients have both health literacy and language barriers so acute GP triage for these people is especially difficult
- Other activities suggested by focus groups included a 'wellness toolkit' (topics identified by communities), to use HealthPlus TV more effectively for community needs and consider Pacific radio to support Pacific elders and those with LTCs.

## What do we propose to do?

- Systematise and optimise medical management for CVD, diabetes, COPD, heart failure and gout with a focus on inequities by:
  - Addressing Read coding gaps for LTCs such as linking to national hospitalisations (10 year look-back) for our enrolled population
  - Working with practices to address gaps in practice Read code data and improve data quality
  - Commencement of work of COPD, CHF and gout to benchmark variation in identification and management
  - Continuing audit work to optimise triple therapy for ischaemic CVD
  - Start diabetes clinical audits of care (e.g. optimal medication management for microalbuminuria).
- Optimise care planning with strategies that may include:
  - Proactive care plan for long term conditions
  - Back to work plan: Assisting people on MSD job-seeker medical condition deferred benefits back to work (current pilot Well Plan programme MSD and ProCare)
  - Acute care planning including establishing who the lead care person in the family is, developing a care plan early from time of diagnosis of a long term condition including cancer such as what may be expected and how to deal with issues arising or exacerbations (e.g. pain relief/other symptoms, action plans and resources with simple advice)
  - Advance care planning that enables individuals to make plans about their future health care and end of life wishes.
- Further implement Health Care Home model by:
  - Aiming for 50% ProCare practice certified by 2023
  - Understanding what resources, funding and change management processes are required.
- Implement the updated CVD risk assessment with a focus on Māori men to include:
  - A regional solution
  - Investigate tools and ensure robust testing is performed
  - Implement CVDRA tool in practices

- Understand what resource and funding is required to implement this successfully
- Develop *Our Picture of Health* indicator for high risk primary prevention.
- Pilot and evaluate shared medical appointments
  - Mt Wellington Family Health Centre currently piloting
  - Plus another four practices and evaluate impact.
- Evaluate ProCare PHO and network as a 'health literate organisation and implement changes e.g. consumer involvement, workforce, service delivery, communication, access and navigation by looking at:
  - What we are doing and what are the gaps
  - What resources and funding are required to improve health literacy successfully.

## Spectrum of activity for Improved Quality of Life for People Living with LTCs

Individual focus		Population focus					
Patient and whānau care	Health information	Health education, counselling and skill development	Social marketing	Organisational development	Settings and supportive environment	Community action	Economic and regulatory activities
HCH*  Develop and implement LTC packages of care  Implement updated CVD risk assessment guidelines	Co-ordination of care  Shared medical appointment initiative  Health system response to health literacy	Shared care planning		Health system response to health literacy  HCH enablers including expanded medical teams, IT e.g. care plans, portals, dashboard alerts  Close Read code gaps for LTCs  Develop new KPIs for COPD, CHF, gout	Multisectoral partnerships and referral pathways  Shared medical appointment initiative	Multisectoral partnerships	Advocate for national support for HCH model

\*HCH: Health Care Home



# Improved quality of life for older people (75+ / 65+ Maori / Pacific)

## Quality of life for older people: What are the five-year key performance indicators?

Improved quality of life for older people: five year KPIs:

- Reduction in ASH rates for older people and reduction in inequities
- 80% of the target older population have received a holistic assessment and been offered management or referral to community-based resources centred on healthy ageing and respectful end-of-life care
- Equitable, targeted optimisation of medical management
- Improvement in patient experience of care
- Improved communication and coordination of care via e-shared care plans and care co-ordinators

People over 65 years currently make up about 12% of New Zealand's population – a group that is expected to double in size in the next 20 years.<sup>41</sup> While the percentage of New Zealand adults in good health has increased since 2006/07, it has been most marked among people over 75 years with almost 90% rating their health as good, very good or excellent.<sup>42</sup> Ageing is characterised by heterogeneity.<sup>43-45</sup> While many people suffer from chronic conditions, an increasing number are fit and thriving. Although 65 years is the age of eligibility for superannuation, it is no longer the age of retirement. Currently 22% of people over 65 years are engaged in some form of paid work, and a rising proportion is projected.<sup>41</sup> People are also living longer. Life expectancy has increased by over 10 years in the last 50 years and is projected to rise a further six years by 2051.<sup>46</sup> Current life expectancy for those aged 75 is 14-15 years for women and 12 years for men.<sup>46</sup>

The leading causes of health loss and demand for health and disability services for older people arise from CVD and cancer.<sup>37 47</sup> For example people aged 75-84 years sustain 28% of all IHD deaths in New Zealand, 29% of stroke deaths, 24% of IHD hospitalisations and 30% of stroke hospitalisations and this share of the vascular burden is steadily increasing.<sup>47 48</sup> Ageing and health is not equitable across ethnic groups. Reaching old age is less common for Māori; currently 1.6% of Māori are 75+ compared to 6.8% of all non-Māori.<sup>49</sup> In addition, life expectancy for Māori men and women at age 60 years is five years less than that for non-Māori.<sup>50</sup> For Pacific men and women, it is four years less than for non-Māori.<sup>50</sup> CVDs contribute significantly to this health loss. As achieving equity in health and life expectancy is consistent with the principles of the Treaty of Waitangi (and an important goal for societal well-being), our goal for improving the quality of life for older people includes Māori and Pacific elders from 65 years of age, and New Zealand European and Other ethnicities from 75 years.

The 2016 Healthy Ageing Strategy<sup>51</sup> vision is that *older people live well, age well, and have a respectful end of life in age-friendly communities*. The Strategy sets a framework whereby policies, funding, planning and service delivery:

- Prioritise healthy ageing and resilience into and throughout people’s older years
- Enable high quality acute and restorative care, for effective rehabilitation, recovery and restoration after acute events
- Ensure people can live well with LTCs
- Better support people with high and complex needs
- Provide respectful end-of-life care that caters to physical, cultural and spiritual needs.

## How are we currently doing? What is the baseline performance of the indicator?

There are currently about 4,700 Māori and 7,600 Pacific people over 65 years and 40,700 Indian, Chinese, European and Other over 75 years enrolled in ProCare.

There are marked inequities in average annual ASH rates for Māori and Pacific elders compared to European/Others. At age 65-74 years, Māori and Pacific ASH rates are over two-fold, and at >75 years 1.5 times, those of European/Others.

### Age-specific rates of annual ambulatory sensitive hospitalisations

Uses averages from 2015 and 2016 anonymised NMDS inpatient event data from ADHB, WDHB and CMDHB for ProCare patients enrolled at quarter 4 (1 October) 2017.

	Age group	Grand Total	Māori	Pacific	Indian	Chinese	European / Other
ASH per 1,000 (av frm 2 years)	Total	39	54	57	32	19	35
ASH count per year (av of 2 yr)	Total	31,625	4,762	6,242	1,958	981	17,684
Population	Total	819,681	88,967	108,716	60,735	52,230	509,033
Av Annual LOS (SD = 1) ASH events	Total	84,024	12,023	15,936	4,557	2,079	49,430
ASH per 1,000 (av frm 2 years)	0-4	69	82	118	65	49	52
	5-14	22	29	34	22	18	16
	15-24	19	29	25	11	7	17
	25-44	20	38	35	15	7	17
	45-64	38	76	74	45	15	30
	65-74	69	150	140	77	31	59
	75+	145	229	214	154	74	141

## What are the factors influencing current performance?

A small ProCare working group identified the following factors contributing to the current health of older people:

- General practice model of care:
  - 15 minute appointments are a poor fit for older people who often don’t feel there is time to talk about other issues or social problems
  - Older people often prefer to talk to the general practitioner, rather than other health professionals (where practices are seeking to expand practice teams with nurses, health coaches, HIPs and other practice staff taking on assigned clinical tasks)
  - Lack of continuity of carers especially in larger clinics, or those with part-time staff
  - Care coordination and communication challenges – with multiple providers in a non-integrated and complex health system.

- Financial pressures leading to poor nutrition or inability to heat their homes
- Large variation in social and caring networks – older people may experience significant isolation from family and friends
- Complexity of medical treatment from increasing co-morbidity
- Impact of ageing on activities of daily living
- Inadequate clinical and community support for common clinical problems faced by older people including constipation, falls, continence, cognitive impairment, delirium, dementia, depression, frailty and mobility issues, confusion with medications and polypharmacy, sleep issues, pain issues and lack of social support
- Lack of culturally appropriate or competent services and health care providers including options for rongoā Māori or traditional therapies and therapists
- Whānau expectations and family pressures, including active and passive forms of elder abuse – such as older people being asked by younger generations to assist with paying bills or take on unreasonable childcare duties.

## Who are the partners who have a role in improving current performance?

ProCare needs to foster closer collaboration and relationships with a number of key agencies and the linkages with general practices. These include (but not limited to):

- Ministry of Health, DHBs, Pharmac and other national organisations
- Clinical pathways and regional clinical networks
- Aged residential care services
- General practitioners, nurses, HIPs and health coaches with special interest in older people's health
- Quality improvement groups and programmes
  - KARE Project, Waitemata DHB
  - Safety in Practice collaboratives
  - Ko Awatea programmes
  - HQSC – falls prevention, polypharmacy, high risk medications, Atlas of Variation
- Regional programmes – e.g. Falls prevention, cognitive impairment
- Geriatric nurse specialist groups
- NGOs – e.g. Dementia Auckland, Grey Power and other community organisations
- Care support workers and support groups
- Hospice groups and community palliative care services.

## What interventions would work to improve the baseline status?

There are diverse risk factors for reduced function and loss of independence in old age that stem from the presence of co-morbidities, physical health, psychosocial factors, environmental conditions, social circumstances, nutrition and lifestyle. The need for a preventive strategy around identification and management of these risk factors has long been recognised.

A Kings Fund report in 2014 laid down the challenge; *‘Transforming services for older people requires a fundamental shift towards care that is co-ordinated around the full range of an individual's needs (rather than care around single diseases) and care that truly prioritises prevention and support for maintaining independence.’*<sup>3</sup>

A key enabler is the Health Care Home (HCH) model with service elements relating to proactive care for those with more complex needs including risk stratification, assessment and care planning, care co-ordination and facilitating integrated health and social care. In addition the HCH model provides multiple modes of contact, appointment types, virtual consultations, portal access (including proxy access for care givers), secure messaging to the practice and obtaining laboratory results and repeat prescriptions online.

## What do we propose to do?

The target population for this goal will initially be those at highest risk i.e. all Māori and Pacific aged 65 or older, and non-Māori/Pacific aged 75 or older with a high (10% or greater) risk score of hospitalisation in the next six months (based on Sapere risk stratification tool). This equates to 4,700 Māori and 7,600 Pacific people over 65 years, and 14,000 non-Māori, non-Pacific people over 75 years old.

### Multifactorial intervention

Implement, for the target population across all three DHBs, a holistic assessment of health and social needs of which the key features include:

- Holistic assessment and collaborative health and social care plan developed (shared with the wider healthcare team) with copy to patient/carer. This would include:
  - i. Exercise, strength and balance training as appropriate
  - ii. An acute plan (to plan ahead for anticipated exacerbations or problems)
  - iii. An advance care plan where appropriate or desired
  - iv. Medication review and, if appropriate, a simplified regimen
  - v. Earlier referral to palliative care where appropriate
- A shared electronic health record and care plan
- A named care coordinator
- Develop resource and referral options through multisectoral co-ordination.

The Auckland-based KARE initiative is a multifactorial intervention for older people and includes a well-developed assessment tool. ProCare will review this project (and tools developed) as well as stocktake what is already being used in our practices, other PHOs, Māori Health providers and international organisations sharing a similar primary care context. In the short term we need to reach an agreement on the assessment tool and referral pathways for specialist, community and environmental resources. A progress evaluation report of the KARE project (previous named CARE) and the external Māori evaluation are excerpted below.<sup>52</sup>

A full evaluation of the pilot is to be completed soon.

KARE pre/post data from the Partners in Health scale indicates statistically significant improvements in patients' knowledge of their conditions and treatments, ability to cope, management of symptoms and adherence to treatment.

Initial results for the pre/post data of the available 618 KARE project participants (note: the full cohort will be included in the final report as it is not available currently) 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 KARE participants designating an Enduring Power of Attorney (EPOA) for health and welfare
- Significant increase in the general practice obtaining a record of the EPOA.

Initial results for the pre/post data of the available 618 KARE project participants (note: the full cohort will be included in the final report as it is not available currently) showed positive impacts, including:


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 whanaungatanga (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.

Given that a multifactorial intervention involving shared records, electronic assessment and care planning process is likely to take several years to develop and implement and are not yet measurable, the following interventions are suggested for the first stages of this strategy's implementation:

- Improve coverage of vaccination programme (flu, zoster) by:
  - Improving follow-up and communications supporting free flu and zoster vaccinations
  - Identify barriers with claiming and implement a more stream lined process.
- Optimise medical management of CHF, COPD, CVD, cognitive impairment/dementia by:
  - Managing lists of eligible patients and recall systems
  - Identifying patients who would benefit from medical management
  - Targeting eligible patients for the education, resources or support services from which they are most likely to benefit
  - Identifying patients eligible for structured care plans
  - Providing administrative and clinical support
  - Identifying and referring to services that are accessible to the patient
  - Coordinating a multidisciplinary team
  - Collaborating with a pharmacist to assess and adjust the medicine regimen to reduce the risk of hospitalisation.
- Develop care pathways for common problems e.g. constipation, incontinence by:
  - Aligning education sessions and link to HealthPathways
  - Advocating pathways for common problems not currently covered
  - Investigating apps and other health educational material on Health Navigator/portals.

- Identify and review patients receiving polypharmacy and high risk medications by:
  - Providing timely patient identifiable data to primary care to identify variations in use of high risk medications, review of prescribing patterns and to plan and implement patient recalls
  - Reviewing of medication via Health Care Home.
- Improve Dashboard and integrate with new PMS for primary care to include:
  - Falls prevention screening
  - Advance Care Plan and Care plan
  - Name of care co-ordinator
  - Risk score
  - Polypharmacy.

## Spectrum of activity for Improved Quality of Life for Older People (75+ /65+ Māori/Pacific)

Individual focus								Population focus	
Patient and whānau care	Health information	Health education, counselling and skill development	Social marketing	Organisational development	Settings and supportive environment	Community action	Economic and regulatory activities		
Holistic assessments HCH* Care planning Vaccinations	Simplified regimens  Care co-ordinator	Access to strength and balance training		Developing IT enablers e.g. ACP, care plans, patient portals, dashboard alerts	Multisectoral partnerships and referral pathways  HCH		Advocate for national support of HCH		

\*HCH: Health Care Home

## Implementation of this strategy

### Clinical champions

We have engaged clinical champions who are passionate and enthusiastic for their health goal, have a clear understanding of realities of front line clinical care, the impact of social determinants of health affecting our communities and the need for broader partnerships. Each champion will be fully supported by teams at ProCare such as clinical and equity expertise [Māori, Pacific and Asian], project management, data and analytics and quality improvement science.

HEALTH GOALS	PROJECT LEAD(S)	CHAMPION
Healthy start to life (0-4yrs)	Lisa Callan	Dr Justine Mesui
Youth engagement	Belinda Storey	Dr Janice Brown
Wellbeing	Jess Wood	Dr Tin Htay
Long term conditions	Sara Aprea	Dr John Cameron
Improved quality of life for older people	Jazel Asuncion	Dr Kawshaliya De Silva

*Project leads and champions correct as at July 2019*

All have been involved in the implementation planning of their health goal. The clinical champion will be a key thought leader and reality checker of frontline practice context and needs and we envisage them engaging practices who want to work on one or more of the suite of activities within each health goal, problem solving, spreading bright ideas and successful changes across the network, while the project team, plan, implement, monitor progress towards yearly milestones.

### Implementation plan

An agreed Population Health Strategy and implementation plan will provide ProCare with some clarity on what it needs to do and why – leading to more focused prioritisation, role clarity and consumer and staff satisfaction. It will assist ProCare to be more purposeful in progressing its five health goals. Throughout the strategy therefore we have selected specific conditions and population groups upon which to focus and prioritise our initial efforts. This is not to minimise or discount other disease or population groups, but is rather an attempt to ensure that we take a strong pro-equity stance and direct our activities to those groups who have been identified as having most to gain in the present context of ProCare's enrolled population health. The strategy has also been restricted to areas where general practice can make a difference. For now, attention to population level interventions (e.g. advocacy for social determinants) will remain at the PHO level for ProCare staff to address. This strategy and its implementation plan provides guidance as opposed to absolute direction, and this guidance will be subject to change and influence over time.

An implementation plan has been developed with a particular focus on year 1 milestones commencing 1 July 2019. Activities have been divided according to each of the health goals and high level costings relating to year one milestones towards achieving the five year goals. For the first year, there are very few practice-based changes or new indicators in addition to the existing *Our Picture of Health* (previously called Outcome and Quality Framework) clinical indicators. Instead, the emphasis is on developing systems, processes and tools to support practices and patients/whānau.

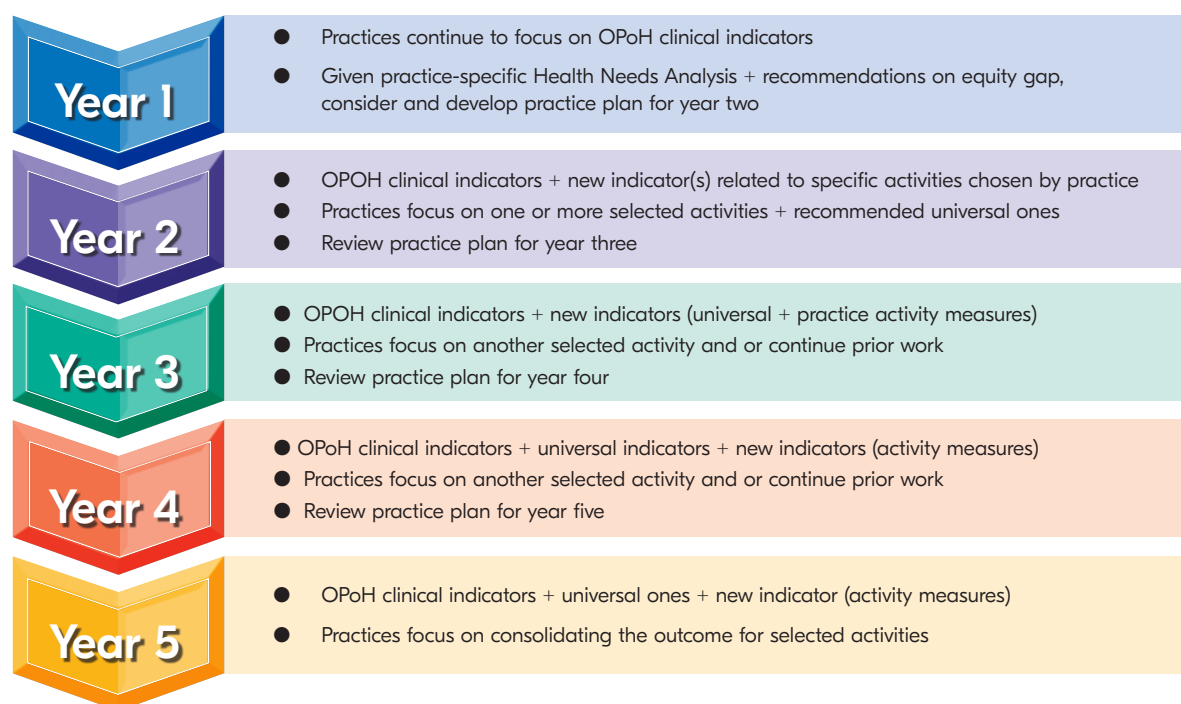
## Tailoring practice activities according to their own population needs

As part of implementation, we propose for each practice to be given the following during year one;

- Their own practice-specific health needs analysis based on the socio-demographic characteristics, access, long term conditions, current clinical performance indicators, processes of care and outcomes
- A commentary on the unique health needs of their enrolled population and where the largest gaps in equity exist
- A suite of suggested activities that they might wish to work on towards improving the health of their enrolled population.

Each practice will be asked when completing their annual ProCare practice plan (and Māori Health Plan) to detail one or more activities chosen by the practice to work on towards their own population health needs. Practices will be encouraged to use the Model for Improvement and rapid small tests of change using the questions; what do we wish to accomplish; how do we know a change is an improvement; and what changes can we make that will result in improvement. Suggested activities will also include regional initiatives already underway or developed such as Counties Manukau Health Early Pregnancy Assessment Tool, WDHB/ADHB Safety in Practice Collaborative or a long term condition change package developed through the previous Counties Manukau Health Safety in Practice programme. This will also align with Maintenance of Professional Standards (MOPS) Continuous Quality Improvement (CQI) annual audit and Foundation/Cornerstone standards i.e. what practices and health professionals are already needing to do in practice but also more aligned to and tailored for their enrolled population health and equity gaps.

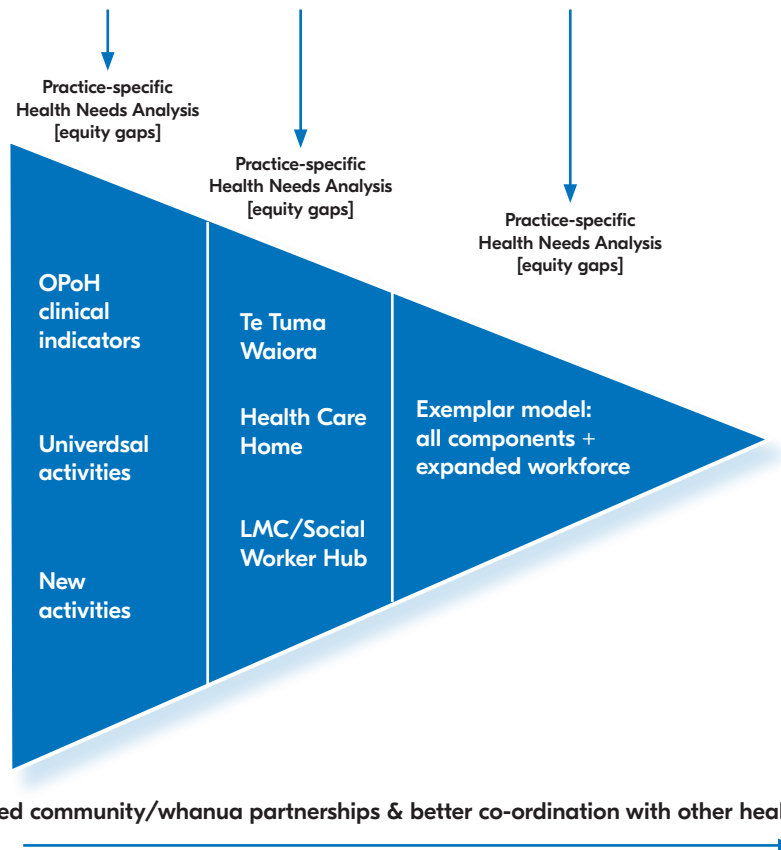
Timely data will be available for them to monitor their progress towards their practice plan using routinely collected data sources and ProCare data analytic capacity. This requires additional costs in person time particularly for the ProCare's Clinical Directorate and the analytics team.



Key operating models of primary care to drive equity and health outcome improvements are Health Care Home and Te Tumu Waiora. In addition, a year one initiative is to pilot 'virtual' hubs which incorporate expanded teams – practices, LMC and social workers. Learnings from the models of care and pilot hubs will inform further practice transformational change.



Exemplars of primary care into the future are likely to include these models with expansion of workforce roles such as health coaches/health navigators/health improvement practitioners to support whānau to plan and connect with support they need to achieve their goals. This will include strengthened community/whānau partnerships and better co-ordination with other health, education, housing and social services. The Whānau Ora approach has led the way on this with a recent review concluding that whānau are experiencing positive and measurable change as a result in participation.<sup>2</sup>



*Working towards an operating model with expanded teams, strengthened community/whānau partnerships and intersectoral co-ordination.*

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# Appendix I

To guide our Population Health Strategy and to create a shared understanding we have used the following resources, frameworks and models of care:

- ProCare's Strategic Plan 2017
- *Our Picture of Health* 2018, ProCare's health needs assessment
- Metro Auckland System Level Measures Improvement Plan 2018/19
- A life course approach for prioritising population health efforts
- ProCare Māori Health Strategy as our equity framework
- ProCare Pacific Health Strategy recognising the diverse cultural needs of Pacific peoples
- Health Care Home model as the enabler for practice change
- Te Tumu Waiora (formally known as Stepped Model of Care)
- High performing primary care system components

## ProCare's Strategic Plan 2017

In 2017, ProCare launched a new strategic plan with the overarching vision that *'Every New Zealander has the right to live well'*. To achieve this vision, we must have an active partnership with our patients and their whānau throughout their lives, seek to achieve healthy outcomes, enable thriving practices and be a transformative network able to meet the challenges of the future.

**We believe every New Zealander has the right to live well**  
To achieve our vision we must:



## Our Picture of Health 2018

In 2018, ProCare published *Our Picture of Health*. This was the first comprehensive health needs assessment undertaken by a PHO whose enrolled patients span three regional DHB catchments. This document provides baseline information on the health of our enrolled population and sub-populations, access to services and inequities of care processes and patient outcomes. The full document can be accessed on the ProCare website. The data derived from *Our Picture of Health* forms our baseline for taking action and improving the health of our communities.

*Data is not taken for museum purposes; it is taken as a basis for doing something ... to provide a basis for action or recommendation for action.*  
W Edwards Deming.

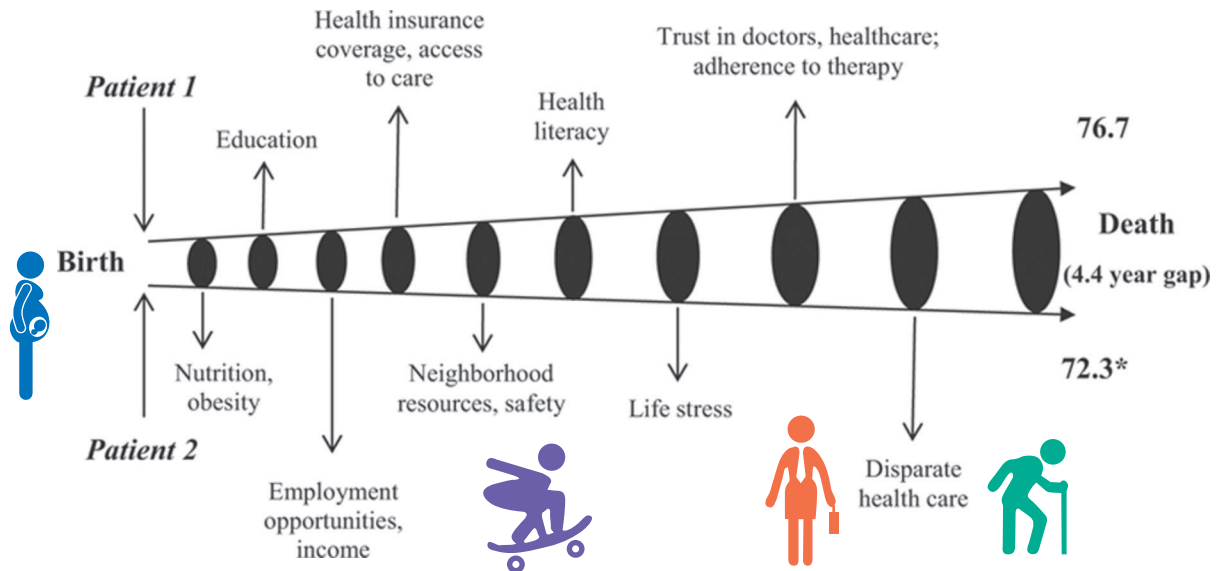




# Life course approach

We took a life course approach to develop this Population Health Strategy. According to the World Health Organisation, a life course approach 'emphasises a temporal and social perspective, looking back across an individual's or a cohort's life experiences or across generations for clues to current patterns of health and disease, whilst recognising that both past and present experiences are shaped by the wider social, economic and cultural context'. A life course of two patients and factors associated with differential life expectancy.

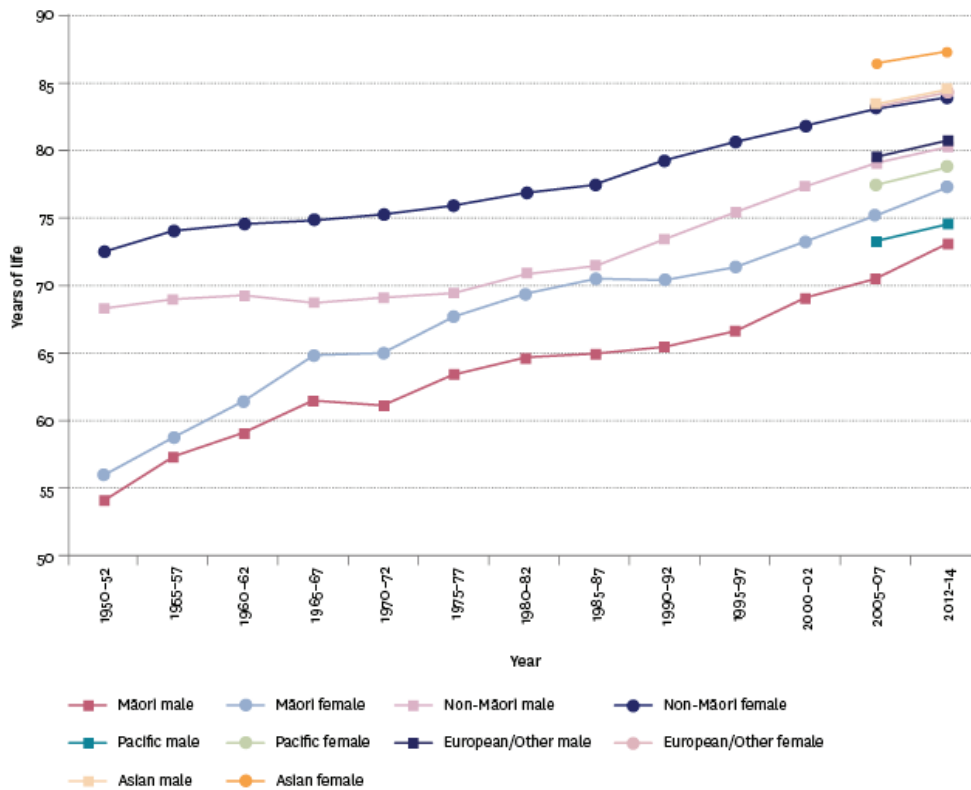
A life course of two patients and factors associated with differential life expectancy



<https://www.ahajournals.org/doi/full/10.1161/circulationaha.116.015361>

These long term influences are key to understanding inequities in life expectancy experienced by Māori and non-Māori populations in New Zealand.

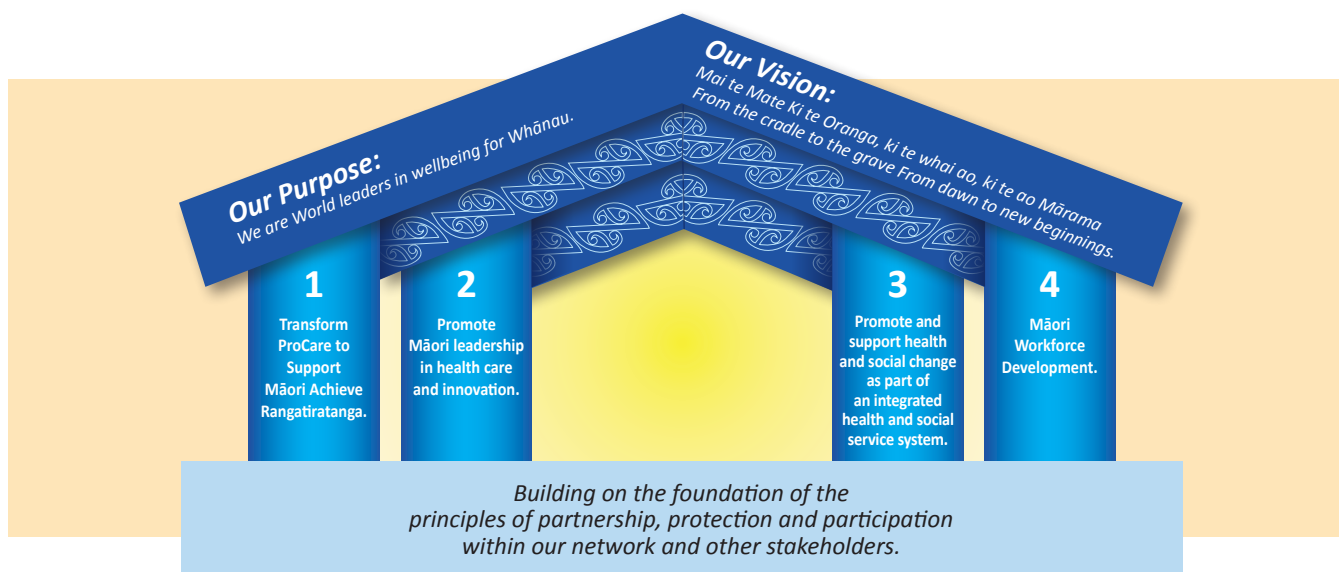
## Life expectancy at birth (years)



Source: Statistics New Zealand

## ProCare Māori Health Strategy 2015–2020

In light of the findings detailed in *Our Picture of Health*, and with a renewed strategic pro–equity focus, the challenge is clear – ProCare has an unrealised opportunity to advance Māori health more fairly. But what does a commitment to Māori health equity mean for ProCare? What changes can we expect to see if ProCare makes good on its pro–equity promise? This Population Health Strategy will help direct and identify how ProCare intends to go about achieving health equity for Māori over the next five years.



The ProCare Māori Strategy 2015-2020 has four goals to achieve:

- Transform ProCare to support Māori to achieve rangatiratanga
- Promote Māori leadership in health care and innovation
- Promote and lead health and social change as part of an integrated health and social service system
- Develop the Māori workforce

To advance Māori health gain more equitably ProCare will also need to co-design, develop and implement programmes based on two cornerstone models of Māori health;

Whānau Ora – a major national health initiative that is driven by Māori cultural values. Its core goals are to empower communities and whānau to support families within the community context (rather than as individuals within an institutional context) and to empower whānau as a whole (rather than focusing separately on individual whānau members and their health problems).

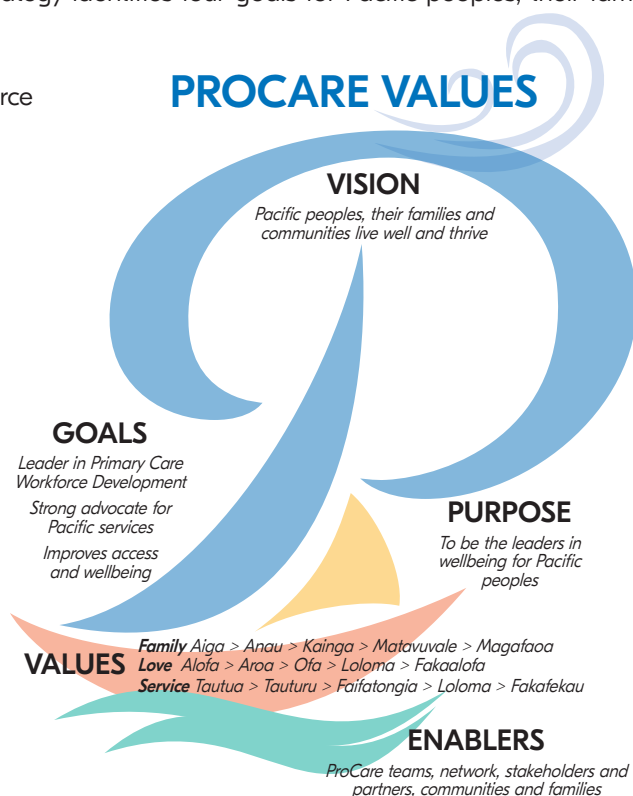
Whare Tapa Whā – a holistic model of health developed and described by Prof Mason Durie. It encapsulates a Māori view of health and wellness that has four inter-connected dimensions: taha hinengaro (mental wellbeing), taha wairua (spiritual wellbeing), taha whānau (family and community wellbeing) and taha tinana (physical wellbeing) – as represented by the different parts of a whareniui.

The Whānau Ora and Whare Tapa Whā Māori models are inclusive approaches to the provision of health services and opportunities to whānau across New Zealand. They each encourage health service planners and providers to think beyond narrow definitions of health to what it means to be wholly well as individuals and as whānau.

## ProCare Pacific Health Strategy 2017-2022

The Auckland region is home for multiple Pacific communities such as Samoan, Tongan Cook Island, Niuean, Fijian, Tokelauan and other groups. Recognising the diverse cultural needs of Pacific peoples and coupled with poorer health outcomes than other communities, the ProCare Pacific Strategy identifies four goals for Pacific peoples, their families and communities to live well and thrive. They are:

1. ProCare is the leader in Pacific primary care workforce development. This includes career pathways for Pacific clinical and non-clinical workforce, and cultural competency training for GPs, nurses and health professionals.
2. ProCare will take an active role in Pacific advocacy requiring proactive advocacy for funding opportunities for new and dedicated Pacific programmes through health and social agencies.
3. ProCare will commit to improve access for Pacific peoples so that they feel welcomed and encouraged to access services that are responsive, timely, family centric and available after hours.
4. ProCare will improve health outcomes and equity for Pacific peoples.





# HEALTH CARE HOME

## Health Care Home – The future of general practice

A key enabler to achieving the goals set out in this strategy is the Health Care Home (HCH) model of care. The HCH aims to improve quality of care with greater efficiency and a better experience for patients and staff. The patient is at the heart of this model. HCHs aims to improve equity for Māori and Pacific patients and achievement towards this aim will be specifically reviewed and documented as part of the model's ongoing evaluation. The programme is supported by the HCH National Collaborative, which has grown to include 17 PHOs across the country.

The model is grouped into four core domains:

1. Ready access to urgent and unplanned care
2. Proactive care for those with more complex need
3. Better routine and preventative care
4. Improved business efficiency and sustainability.

Within each domain a Maturity Matrix is provided with service elements that describe important HCH model of care requirements and characteristics that allow a practice to map their current model of care systems and processes on a developmental scale.

ProCare has developed a resource kit for practices with modules to support them to implement different elements of the model. Each module has been developed around a key idea, and outlines how the team could go about introducing the elements to their practice. The move to this model requires transformational change and will require sufficient resource to support practices to achieve the full potential benefits of the service elements. DHB support and integration with secondary care is also necessary to connect care and improve patient experience and outcomes.

A key concept of the HCH model is ensuring practices are sustainable and fit for the future. This includes bringing in new ways of working to ensure practices are able to manage larger and more complex patient panels and increase patient access to care. This involves initiatives such as:

- Full access to electronic health records and patient-practice communications via patient portals (including open notes)
- GPs and nurses working at the top of their scope, to ensure the patient sees the most appropriate person for their health care needs
- Senior clinician triage for same day requests to manage acute demand
- Virtual and shared medical appointments to make the most of patient and clinician time.

Outcomes reported from Tū Ora Compass PHO54 HCH practices are:

- Reduction in emergency department utilisation
- Reduced ASH rates
- Increased patient and staff satisfaction
- Reduced acute admissions and readmissions.

## Te Tumu Waiora

Over the past year, ProCare in collaboration with the three Auckland DHBs, NGOs and other PHOs, has been testing a new model of care approach for mental health and wellbeing that has the potential to be implemented nationwide. Te Tumu Waiora (formally known as the primary mental health and wellbeing innovation programme), has been driven by a clear need within Aotearoa's health system: a primary mental health system that is more accessible, engaging, connected, delivered by people who are personally and professionally motivated, and gives every New Zealander their right to live well.

The vision is the nationwide establishment of a system of holistic care that “supports me to support myself, offers meaningful help when I want it and achieves sustainable positive outcomes that matter to me, my whānau and society, at the first time of asking” (Closing the Loop, 2017).

Te Tumu Waiora was launched in July 2017 with services initiating in December 2017. The ProCare-specific programme has been running in five practices across the three DHBs of Auckland: at Mangere Health Centre, Peninsula Medical Centre, Health New Lynn, University of Auckland Student Health Services and Turuki Healthcare Panmure. It is due to run until June 2019. The practices have a combined enrolled population of 50,000. Te Tumu Waiora means ‘to head towards wellness and health’. This te reo name follows consultation with a number of Māori organisations across Auckland, and the ProCare Māori Advisory Committee (ProMa). ‘Te Tumu Waiora’ has been endorsed by senior leaders of Tainui and Ngāti Whātua Ōrakei, and within ProCare. The pilot has been designed as a holistic model, supporting and addressing the physical, emotional, and social needs of the person, rather than the traditional focus on mental health or addiction needs. The aim of the pilot is to deliver a small amount of targeted, brief intervention to a large number of people, as opposed to a large amount of therapy, to a small group of people, as well as to connect social and specialist support across one continuum of care. The pilot has been producing successful results so far and collaboration has been key to the success of the programme. The pilot stems from a strong collaborative base across local DHBs, other PHOs and NGOs, as well as nationally through Network 4 (ProCare, Pegasus, Tū Ora Compass Health, Pinnacle Midlands Health), and Northland DHB. Funding for the pilot has come from a range of sources: ProCare Health, Waitemata DHB's ‘Our Health in Mind’ primary care programme; Counties Manukau Health's Primary Mental Health Initiative programme; and Auckland DHB's Ministry of Health ‘Fit for the Future’ programme.

The model puts mental health and wellbeing at the heart of general practice, with the introduction of new focused roles – a health improvement practitioner (HIP) and health coach as part of the general practice team. This practice team is further enhanced through linkages to new NGO community support roles and dedicated specialist support from secondary care. It is at this stage, a proof of concept, adapted from a similar model developed and currently in practice in the United States.

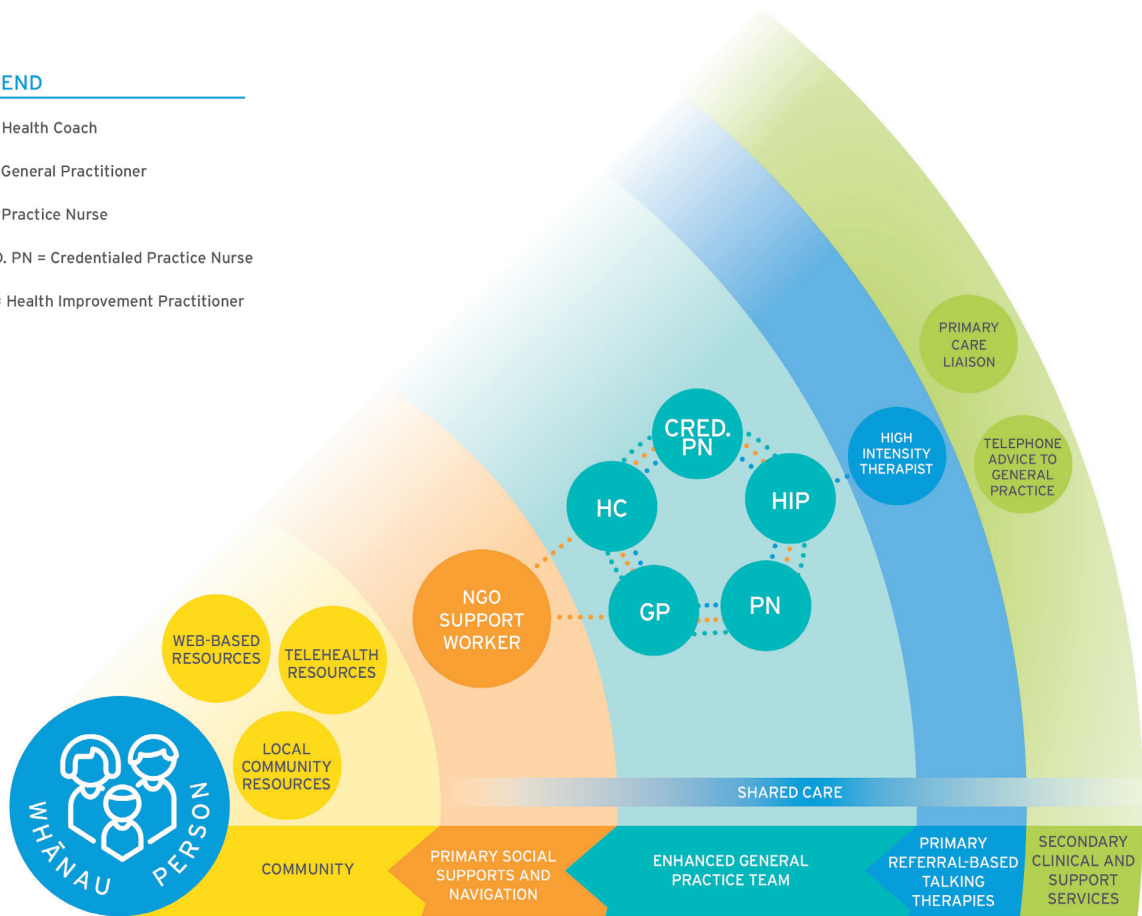
As the model of care diagram below shows, key components of the programme include:

- Enhanced general practice teams
- Health coaches
- Health improvement practitioners
- Confident and capable general practitioners and practice nurses
- Self-management support (e.g. self-help resources, e-therapy)
- Referral-based talking therapies
- Increased access to NGO-delivered community support workers
- Enhanced interface between primary and secondary services; more specifically, enhanced integration and coordination with DHB mental health and addiction services.

For ProCare, the biggest focus has been on enhancing the general practice teams. Other programmes, such as Awhi Ora (NGO support community support work) in Auckland and Waitematā DHBs and the ILOC (integrated locality care) in Counties Manukau DHB, have focused development on different parts of the model.

**LEGEND**

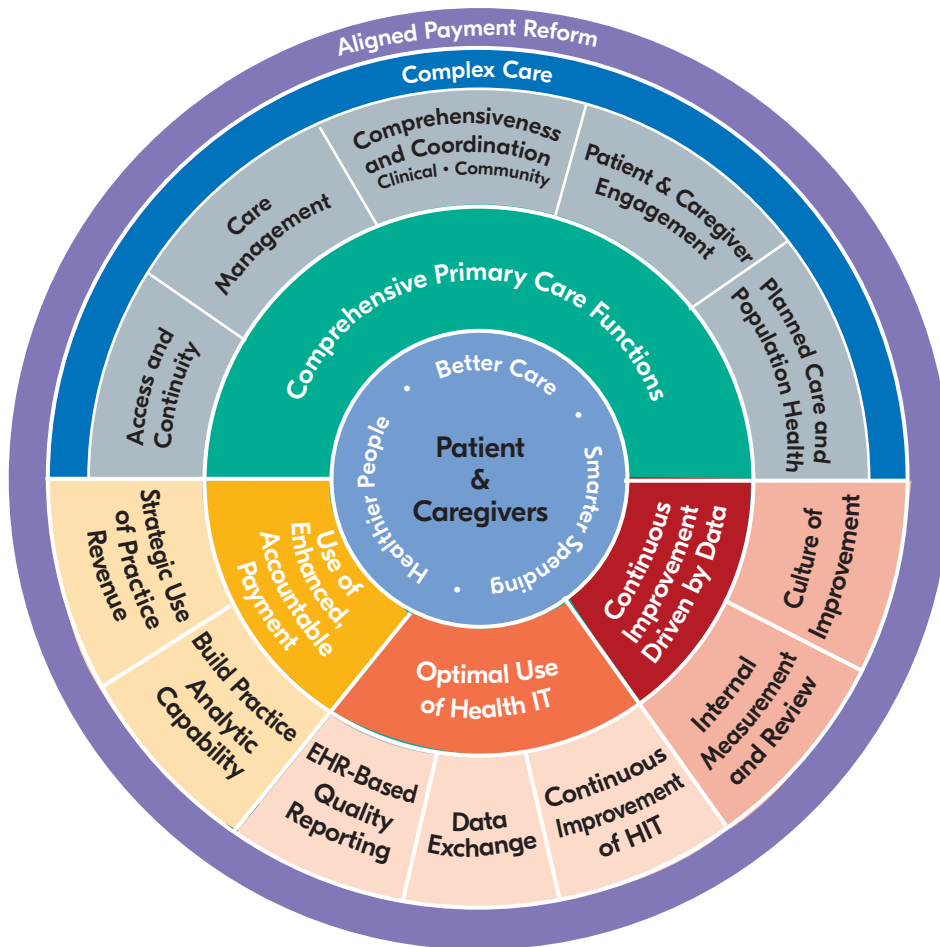
- HC = Health Coach
- GP = General Practitioner
- PN = Practice Nurse
- CRED. PN = Credentialed Practice Nurse
- HIP = Health Improvement Practitioner



*Model of Care Te Tumu Waiora*

# High performing primary care system components

A recent graphic on a high performing primary care system has been published in the USA which helps to see how the population health strategy may fit into the wider context, although key deficits of this graphic are the lack of consideration of the wider socio-economic determinants of health, the central importance of whānau and community and the lack of equity and Māori health components.



Graphic of components of high performing primary care <https://www.milbank.org/guest-post/comprehensive-primary-care-in-ohio-and-kentucky-positive-findings/>

## Appendix 2: Literature reviews and evidence

### Well child primary care practice redesign evidence review for effectiveness and equity

Overall evidence for well child primary care redesign is limited without a clear path for dissemination or sustainability.<sup>13</sup> The rigour of studies varies markedly but stems from inherent difficulties using a randomised controlled trial (RCT) for child health promotion and disease prevention. This is because health behaviours are for the most part mediated through family and community, results may be difficult to measure (e.g. increased family resilience) or are relatively long-term (e.g. school readiness).<sup>55</sup>

A recent systematic review of well child care was published in 2017.<sup>56</sup> This narrative review identified 29 studies all originating from the United States<sup>56</sup> and included one RCT.<sup>57</sup> Ten studies defined their communities as African American, Hispanic, low income, underserved or Medicaid-eligible, 17 studies had diverse populations and only two studies populations were mainly white, college educated or high income. The review found that multi-component interventions (e.g. that combine training of health practitioners, expanded care teams, risk assessment tools, home visits, supportive parent groups, telephone services) may be more effective than single component initiatives. Many of the studies were conducted as quality improvement collaboratives across multiple sites.<sup>56</sup> In the only trial (Healthy Steps), universal, practice-based well child interventions were shown to enhance the quality of care for families with young children, improve selected parenting practices<sup>57</sup> and showed sustained treatment effects 5.5 years later<sup>58</sup> without increasing disparities in utilisation of services among low income families.<sup>59</sup> In a recent trial (not included in the systematic review) investigating a web-based pre-visit screening tool (parent self-administered), a health coach to provide well child services and an automated text message reminder/education service found that 52% fewer intervention children had two or more ED visits over a 12 month period<sup>60</sup> and this model was both acceptable and feasible to parents in a low income urban population.<sup>61</sup>

A different multi-component intervention by Margolis et al<sup>15</sup> involved community, practice and family-level strategies to improve processes of care delivery to families and children. At the community level, its objectives were to achieve policy changes to modify resources available for clinical care, engage multiple practice sites, and to enhance communication between public and private organisations to improve co-ordination and avoid duplication of services. Practice level interventions focused on teamwork and systems to provide preventive care services. At the family-level, pregnant women who were poor (defined as being 100% or less of the federal poverty level) were offered a home visiting intervention (2-4 visits per month of community nurses and educators throughout the new baby's first year of life).<sup>15</sup> US Home visiting programme models for at-risk pregnant women and their children from birth to five years (typically including positive parenting strategies with counselling, provision of learning materials such as toys and books, modelling behaviours etc.) has shown evidence for effectiveness.<sup>16</sup> Similar interventions to reduce or prevent issues related to parenting and adverse childhood developmental outcomes have also been widely implemented in a general practice setting.<sup>16</sup> For example, initiatives to support the development of cognitive and language development, literacy and school readiness (e.g. Reach out and Read in US, Bookstart in the UK and Let's Read in Australia).<sup>16</sup> Another primary care example is Help Me Grow which provides early detection for children at risk for developmental and behavioural problems, provides a centralised call centre as a single point of entry for community-based programmes and services and links children and families with appropriate resources.<sup>16</sup>

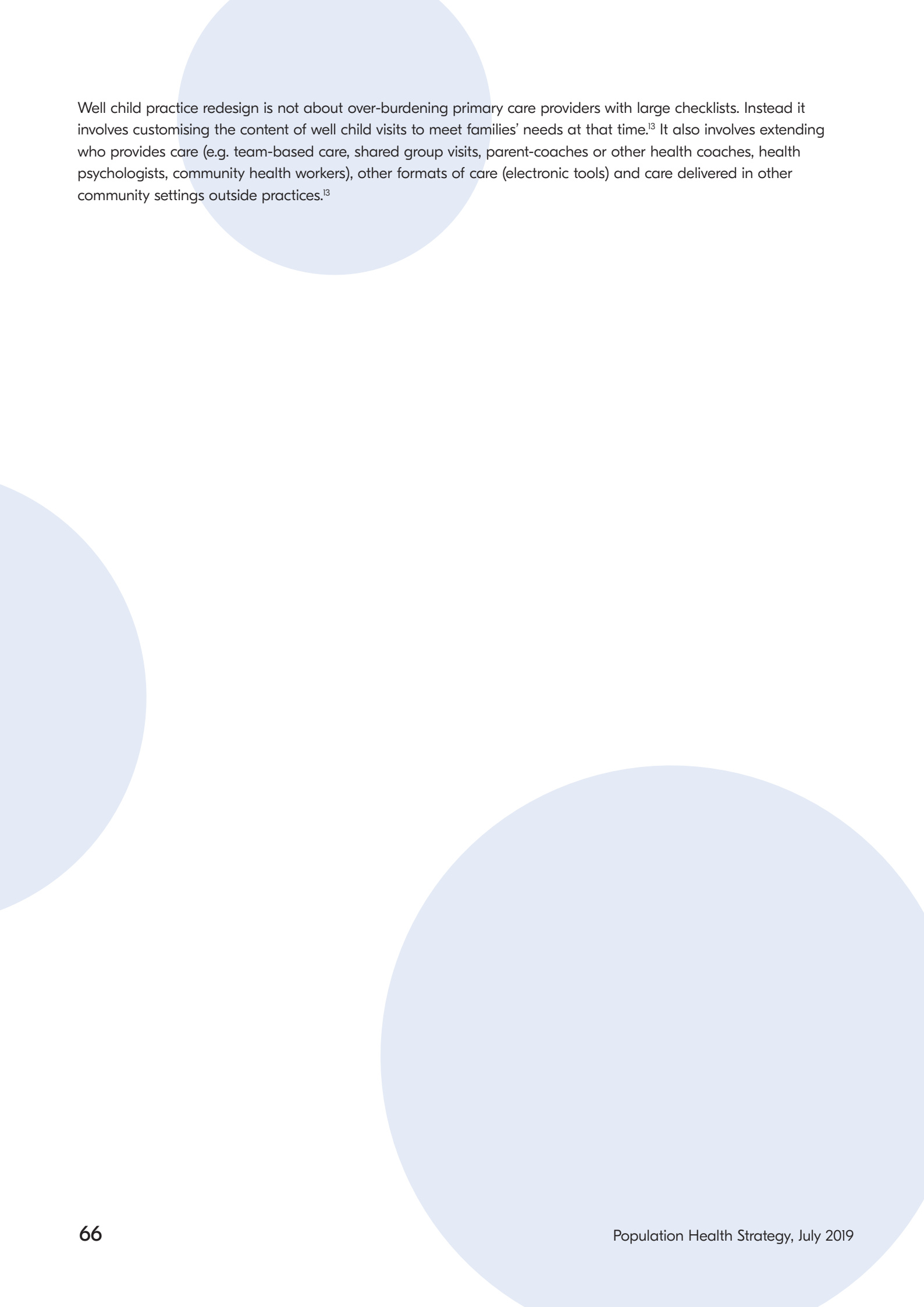


To address equity, well child practices should be designed to specifically meet the needs of the most vulnerable families and disproportionately benefit underserved groups.<sup>17 18</sup> Screening tools for social determinants (e.g. housing, food, transportation, mental health, employment) are available and can detect unmet needs that are outside the scope of usual clinical care. However to be effective, and arguably ethical,<sup>19</sup> this requires a system of effective care co-ordination and cross-sector collaboration. WE CARE is a recent trial of systematic screening for social determinants (parents complete a self-reported screening tool in the waiting room) and referral during well child care compared to usual care.<sup>14</sup> The majority of the families in the study had low household incomes. In the intervention arm 68% of the families attending well child checks had two or more unmet basic needs. Compared to usual care, 70% vs 8% received one or more referrals at the index visit. After 12 months, more intervention mothers were enrolled in a community resource, had greater odds of being employed and receiving fuel assistance and lower odds of the family being in a homeless shelter.<sup>14</sup>

Well child primary care practice redesign links the structure of care delivery (how care is provided, where it is provided, who provides the care, and financing and information systems), to processes of care (screening, diagnosis, management, referral, reassessment) and hence to outcomes.<sup>9 11-13</sup>

For example: <sup>9 11-13</sup>

- Structure of care delivery
  - How care is provided: may be one family with one health provider or shared medical appointments or shared clinical team, customisation of electronic health records (e.g. alerts, referral pathways), use of e-tools (e.g. text messaging, telehealth, patient portals or other internet-based tools)
  - Where care is provided: in a practice, at a community venue, preschool, or home visits
  - Who provides care: may be doctor, nurse, health coach (patient navigator or parent coach), psychologist, care co-ordinator, social worker, community health workers or a combination of providers.
- Processes of care delivery
  - Involves preventive health screening and diagnosis (including use of parental self-report tools or clinician screening instruments)
  - Community referrals (including compiling a resource directory, identifying community partners)
  - Awareness and connection to public benefits (e.g. subsidies, temporary assistance for disadvantaged families, foodbanks, housing insulation referrals)
  - Referral to other health services.
- Outcomes of care delivery – whatever matters to the whānau. Examples could include:
  - Number of unmet social needs identified and referrals made
  - Identification and care management for maternal depression
  - Children enrolled in early childhood education
  - Families engaged in other programmes e.g. positive parenting, literacy and reading at home
  - Timely well child visits and immunisations
  - Identification of children with special health needs
  - Or reliable completion of bundle measures of preventive care<sup>62</sup> (e.g. immunisation, oral health, food insecurity, parental depression). This aims to capture effectiveness of team-based approach, reliability of addressing developmental, emotional and social factors that affect a child's wellbeing and the extent to which system changes can overcome barriers to accessing care.

The page features three large, light blue circles of varying sizes. One circle is at the top center, another is on the left side, and a third, larger one is at the bottom right. The text is positioned in the upper left area, partially overlapping the top circle.

Well child practice redesign is not about over-burdening primary care providers with large checklists. Instead it involves customising the content of well child visits to meet families' needs at that time.<sup>13</sup> It also involves extending who provides care (e.g. team-based care, shared group visits, parent-coaches or other health coaches, health psychologists, community health workers), other formats of care (electronic tools) and care delivered in other community settings outside practices.<sup>13</sup>

# Youth appropriate primary healthcare – evidence review for effectiveness and equity

A 2002 Ministry of Health commissioned literature review<sup>24</sup> found that the evidence strongly supports enhanced access and utilisation of primary care and mental health services within primary care, by young people through youth-specific services. It suggested youth-specific primary care can reduce emergency department use. However, there was insufficient evidence from this review to demonstrate changes in physical or mental health status through youth-specific primary health care. The author concluded there was an urgent need for further New Zealand based and international research to determine the effectiveness of youth-specific primary health services.

Another rapid review of youth health services, commissioned by Waitematā DHB in 2010<sup>25</sup> found that school-based health services increased access to health care, particularly among young people who have poor access to care outside of school. They found evidence that comprehensive full time or nearly full time school health services led to improvements in school attendance and education outcomes for some students. This review found that school based health services also led to modest gains in health outcomes for young people – although other studies did not demonstrate improvements in health outcomes.

Fleming and Elvidge (2010) found very little literature to evaluate youth specific health services that were not school based.<sup>25</sup> What literature was available suggested that:

- Young people generally want and like youth specific health services
- Youth one stop shops or community based youth specific health services are good at engaging young people (including young people who are not in school, training or in work)
- Youth one stop shops or community based youth specific health services are likely to increase access to health care, particularly among groups of young people who are not well served by mainstream health services such as Māori youth.<sup>25</sup>

This review also found that most New Zealand high school students have seen a general practitioner within the last year, and that most use family doctors as their first choice when seeking health care. Where young people did see general practitioners it was often for short term illnesses and not for issues such as mental health or health risk behaviours. This was the case even when young people had mental health difficulties and wanted help for them. General practitioners often reported difficulties in providing youth friendly care (due to lack of training or time). This review found that there are a range of actions (such as increased utilisation of trained practice nurses, routine psychosocial screening and continuity of care approaches) that enhance general practice care for young people; however few of these approaches had been implemented and evaluated in the literature.<sup>25</sup>

# Te Tumu Waiora evidence review for effectiveness and equity

A robust evidence base is needed to determine whether a model of primary care behavioural health (PCBH), such as Te Tumu Waiora, is fit for their primary care practices in New Zealand as a sustainable and appropriate model of integrated care. A recent narrative review on whether patients benefit from receiving PCBH services concluded that existing research indicates good patient satisfaction and decreases in psychological symptoms.<sup>63</sup> However, the authors noted the methodological rigour of the cited research was poor.<sup>63</sup> A systematic review undertaken by Possemato et al (2018) included access and utilisation of PCBH services, patient health status and satisfaction as outcomes of interest.<sup>64</sup> PCBH was associated with shorter waiting times for treatment, higher likelihood of engaging in care and attending a greater number of visits, and high patient satisfaction. There was positive preliminary evidence that global functioning, depression and anxiety improved over time in patients who received PCBH care. There was no evidence of greater improvement in health status when PCBH was compared to other active treatments. The limited available evidence supported high patient satisfaction with PCBH services. The authors concluded that the implementation of PCBH services is 'ahead of the science' and that more rigorous research is needed.<sup>64</sup>

A number of reviews and meta-analyses have shown that behavioural interventions applied to adult populations within an integrated primary care context result in consistent modest benefits across a variety of conditions such as anxiety,<sup>65</sup> depression,<sup>66</sup> smoking cessation,<sup>67</sup> and improved diet and physical activity for CVD prevention in adults without known CVD risk factors.<sup>69</sup>

Lewis and Myhra (2017) recently conducted a systematic review of integrated care interventions with indigenous people in the US.<sup>70</sup> Their review demonstrated wide-ranging and positive results including improved overall wellbeing, physical and mental health symptoms, reduced substance use, improvements in education and employment status, and decreased involvement in the criminal justice system. Integrated behavioural care also resulted in system-wide changes including increased access and mental health assessment, medication adherence, and patient retention. They found that healthcare services that added culturally relevant health practices and social interventions experienced the largest gains in health outcomes among indigenous people. These targeted forms of integrated care required community collaboration and provider training and education – specifically understanding the impact of historical trauma and inter-generational patterns of psychosocial trauma and substance abuse among indigenous patients and communities.<sup>71</sup>

Taken as a whole the PCBH literature provides a basis for cautious optimism. However more research is needed to understand how the model works in different population groups by age (early childhood, adolescents and the elderly)<sup>72</sup> and ethnicity (particularly under-served ethnic groups and indigenous populations),<sup>70</sup> and the effects this model of care may have on health inequities. We also lack an understanding of the operational and workflow changes that occur in a practice when it moves to using a PCBH model. With the expanding use of the model happening in response to organisational directives, and operational and clinical needs on the ground, the research base needs to similarly expand in order to help structure and optimise future PCBH work.

## Implementation

Primary care providers often attend to their patients' myriad of concerns and health problems both in a brief context and at a high volume. In addition, the scope, demands and expectations of primary care providers have increased considerably over the last decade. Quality incentive metrics and clinical benchmarks have become part of the nomenclature of primary care practice in New Zealand. The advent of Health Care Homes is another driver in the transformation of primary healthcare.

Increased interest in integrated primary care by policy makers and funders is opening the door for inter-professional health practitioners to develop systems that ensure patients receive the behavioural healthcare that so many of them need, but cannot access. Implementing Te Tumu Waiora can assist general practitioners to meet these goals, as well as achieve incentive based health and quality outcome targets. According to its proponents, the PCBH model offers a tremendous opportunity for changing the delivery of healthcare in primary care settings.<sup>63 74</sup> By taking on delegated clinical responsibilities and tasks, effective HIPs can increase the time available for general practitioners to see more patients and/or increase their scope and level of care to other patients or patient groups. Thus these models have the potential to create a primary care delivery system with individuals working at the top of their license.

However, translating integrated models of care into a clinical setting can be challenging. In their systematic review, Grazier et al (2016) identified several key barriers to integrated care implementation including patient factors (for example, multiple physical comorbidities and mental illness), provider factors (for example, resistance to change, limited capacity) financing and costs, and other organisational concerns (such as lack of culturally-competent mental healthcare providers).<sup>75</sup> Their findings suggested that organisations that had overcome or accommodated such barriers shared certain commonalities. These were: the prioritisation of under-served vulnerable populations; extensive community collaboration; a team-based approach that included patients and family members; support from influential leaders and institutions; use of data-driven best practices; and diversification of funding streams.<sup>75</sup>

For further information, Reiter et al (2018) provide a detailed overview of the PCBH model including its key components, clinical strategies and practice examples.<sup>76</sup> Sandoval et al (2018) provide guidance for initiating PCBH clinical pathways for patients facing depression, chronic pain, alcohol misuse, obesity, insomnia, and social barriers to health.<sup>77</sup> Robinson et al (2018) address what the rest of the primary care team need to know and do to work effectively in the PCBH model by providing a set of competency tools for clinical leaders and primary care practitioners.<sup>78</sup> The competency domains cover clinical pathways, practice management, consultation, documentation, team performance and administrative skills. They also provide information on how two very different healthcare systems approached PCBH model implementation and expansion.

# Shared Medical Appointments (SMAs) – evidence review for effectiveness and equity

SMAs began in the US more than two decades ago and were designed to support health practitioners' demanding schedules and provide opportunities for patients to share both successes and struggles with others experiencing similar health challenges. Early studies showed that monthly non-disease specific SMAs for geriatric patients resulted in decreased hospitalisations, improved patient satisfaction and reduced costs.<sup>79</sup> SMA popularity has increased in Australia where a shift toward the Health Care Home model for managing LTCs in clinical practice has commenced.<sup>80</sup>

A number of systematic reviews have previously reported on the use of SMA interventions for patients with type 2 diabetes.<sup>81-84</sup> Edelman et al (2015) found that patients who attended SMAs had improved clinical indicators (HbA1c and systolic blood pressure) compared to patients who attended usual or enhanced care.<sup>81</sup> In this review non-clinical outcomes such as patient experience, utilisation and economic outcomes were too infrequently reported to draw conclusions.<sup>81</sup> Another systematic review<sup>85</sup> evaluated SMAs for patients across seven different LTCs (heart failure, hypertension, breast cancer survivorship, Parkinson's disease, carpal tunnel syndrome, chronic kidney disease, and stress urinary incontinence) excluding diabetes and mental illness. The authors of this review found that SMA patient outcomes (clinical indicators, quality of life, knowledge, self-management and symptom control) exceeded or at least were comparable to standard consultation patient outcomes.<sup>85</sup> Fewer hospitalisations for heart failure patients were also reported.<sup>85</sup> In relation to depression, Riley (2013) found a reduction in depression and loneliness among the participants of their SMA study.<sup>86</sup> In an under-served Latino community, Geller et al (2011) showed that participation in depression SMAs for one year improved quality of life and decreased depressive symptoms in a dose-response manner.<sup>87</sup> Reed et al (2015) in a review of the literature for cancer survivorship concluded that although evidence for SMAs in cancer care is limited, SMAs offer an effective model to address the complex medical and psychological needs among this growing group of patients.<sup>88</sup>

Stevens et al (2016) undertook a pilot project of SMAs among Aboriginal and Torres Strait Islander men.<sup>89</sup> Satisfaction with SMAs among these men was unanimously positive, with numbers in the group increasing over time. Participants valued the 'sharing circle' peer support of SMAs which reduced the culturally-intimidating nature of one-on-one consultations with general practitioners. The health practitioners involved in this study saw SMAs as an effective way of improving the cultural competence of their healthcare services.<sup>89</sup> Though not generalisable, this pilot suggests that SMAs have the potential to offer an accessible, culturally appropriate and safe approach to primary healthcare for Australia's indigenous peoples.

There remains a gap in the SMA literature for studies analysing illnesses other than type 2 diabetes. Additional work is also needed to examine the effect on patient reported quality of life, health system and practitioner outcomes, cost implications, and the effectiveness of SMAs to mitigate health inequities among under-served population groups. Further research should focus on these areas.

## Implementation

Trickett et al (2016) endorsed that for patients in whom social support is important, SMAs may prove particularly useful.<sup>90</sup> LTCs suitable for proof of concept trials include obesity, smoking cessation, diabetes, CVDs, COPD, chronic pain, depression and cancer survival.<sup>80</sup>

For those who are interested, SMAs are discussed in detail in the literature.<sup>80 81 83 91-94</sup> Barriers, limitations, implementation issues and potential solutions have been explored in these publications as well. Issues arising from the group consultation format, such as confidentiality and group dynamics are also discussed in various articles and

manuals.<sup>92-94</sup> Bartley and Haney (2010) describe patient selection for group membership, how SMAs are conducted and criteria for implementation success.<sup>91</sup> These authors propose that SMAs provide an outstanding method for nurse practitioners to demonstrate their role as primary care providers. Kirsh et al (2017) reviewed over 70 high quality primary research articles to determine how, for whom and under what circumstances SMAs work.<sup>95</sup> They describe nine mechanisms to inform the implementation of SMAs in a variety of settings.

# Health Literacy interventions

## — evidence review for effectiveness and equity

A systematic review by Berkman et al (2011) found a consistent association between low health literacy and poor health outcomes including: health-related knowledge and comprehension; ability to interpret health labels and messages, and to take medications as directed; increased hospitalisations and emergency care use; suboptimal use of preventive services resulting in delays in diagnoses (mammography screening and vaccinations), and among elderly people, poorer overall health status and higher mortality.<sup>96</sup> In an update on health literacy and diabetes research, Bailey et al (2014) found that literacy was associated with diabetes-related knowledge, self-care and adherence, self-efficacy and communication; but not with more distal patient outcomes such as glycaemic control, diabetes related complications, quality of life or healthcare utilisation and cost.<sup>97</sup> They concluded that promising interventions are available to improve diabetes outcomes for patients with low literacy but that more research is needed to determine their effectiveness outside of research settings.

Other research suggests that improving patients' health literacy leads to improved treatment adherence and LTC disease management. Miller et al (2016) in an extensive review and meta-analysis of the literature found health literacy to be positively associated with both medication and non-medication (lifestyle, exercise, diet) adherence.<sup>98</sup> This review showed that health literacy interventions had a strong positive effect on adherence. Moreover the interventions were found to be more efficacious among lower income and ethnic minority groups than among higher income and non-minority patient groups. In relation to ethnic health disparities, Berkman et al (2011) also discussed the potential mediating effect that health literacy has upon health knowledge, self-reported health status, physical and mental quality of life, health service enrolment and flu vaccination rates among under served population groups.<sup>96</sup> They concluded that addressing the burden of low health literacy among these groups warrants the attention of policymakers, health practitioners and other stakeholders.

Although the evidence shows that health literacy is important for optimal LTC management, many questions remain about how to best measure health literacy in practice; whether to measure literacy as part of routine care; which LTC health outcomes are most strongly associated with health literacy; the mechanisms by which inadequate health literacy affects these outcomes; and how interventions enhance patient outcomes.

## Implementation

In everyday practice, clinicians should consider the implementation of strategies to accommodate patients with low health literacy. These strategies include improving the usability of health information by employing plain language, limiting the number of messages, using multi-media to convey key messages, addressing cultural, ethnic or language differences, developing uncomplicated care plans with patients, and using the 'teachback' method to check patient comprehension.<sup>99</sup>

A conceptual framework and logical model on which to base health literacy enhancing interventions is presented in a systematic review by Sorensen et al (2012).<sup>100</sup> The literature describes a range of simple and complex interventions to improve the health of people with low health literacy. In a systematic review Sheridan et al (2011) found good evidence that intensive health literacy programmes specifically related to LTC self-management and medication adherence were effective and could be implemented by health practitioners now.<sup>101</sup> Efficacious interventions appeared to weaken the effect of low health literacy by increasing self-efficacy and knowledge or by changing behaviour.<sup>96</sup>




Another systematic review evaluated the effectiveness of interventions used specifically in primary care to improve health literacy to support change in smoking, nutrition, alcohol, physical activity and weight behaviour.<sup>102</sup> These authors concluded that both group and individual interventions of varying intensity, in both primary healthcare and community settings, may be efficacious in supporting sustained change in health literacy for change in behavioural risk factors. Their analyses suggested that primary healthcare interventions that used individual counselling may be more effective for smoking cessation, while group interventions in the community may be more effective in changing nutrition and physical activity. This review also reported that less intense interventions may be as effective as more intensive ones. They surmised that health literacy initiatives do not necessarily have to involve extensive and potentially expensive interventions that require large resource commitment from practitioners. Kiser et al (2011) in a randomised controlled trial of COPD patients, showed how a brief focused literacy-sensitive self-management intervention lead to improvements in inhaler technique, with benefits for patients with both low and higher health literacy.<sup>103</sup>

In New Zealand a higher proportion of Māori have lower levels of health literacy compared to non-Māori (MOH 2010). Crengle et al undertook a multi-site pre-post design health literacy trial among indigenous peoples from New Zealand, Australia and Canada.<sup>104</sup> In a recent article, they reported the effect of a customised structured CVD health literacy programme on medication knowledge among indigenous people at high risk of CVD. Their intervention was culturally appropriate, community specific and customised to each patient according to their medication regimen. The intervention was implemented in indigenous primary healthcare services and included education sessions delivered by trained health practitioners and interactive resources (electronic tablet application, pill card and booklet). Adjusted analyses showed that baseline medication knowledge scores were low. The intervention was shown to be highly effective resulting in significant increases in medication knowledge at all post-assessment time points.<sup>104</sup> These findings demonstrate the benefit culturally-competent health practitioners and healthcare organisations can have on supporting the development of indigenous patients' medication knowledge and health literacy practices.

In another systematic review Wali et al (2016) concluded that the most effective interventions to improve medication knowledge and adherence were those that included additional aids to reinforce written information (graphics, pictograms, specialised labels and verbal counselling), information that was personalised and easy to navigate, and tools that could be accessed when needed (i.e. sent home with patients for future reference).<sup>105</sup> They recommended that simple educational tools that make few assumptions about patient abilities and that can be individually tailored such as illustrated guides, podcasts and videos are needed. Kim and Xie (2017) in their systematic review of eHealth (electronic health technologies) and mHealth (mobile health technologies) found barriers to online health information for low health literate people resulting from poor readability or usability of these technologies.<sup>106</sup> They argued that efforts should be made to make eHealth and mHealth more accessible to people with low health literacy and that mobile applications hold great potential for services to be tailored to this population.

In a recent review paper, Batterham et al (2016) examined how health literacy affects health equity and outcomes through various causal pathways.<sup>107</sup> They consider approaches to applying health literacy in the daily practice of healthcare providers in many settings, and how new insights and tools – including approaches based on an understanding of diversity of health literacy needs in target communities – can contribute to improvements in the care of patients and communities.

The page features three large, light blue circles of varying sizes. One circle is at the top center, another is on the left side, and a third is at the bottom right. The text is positioned to the right of the top circle.

These authors concluded that improving clinical, community and population health responses to low health literacy has enormous potential to increase access to healthcare, improve health outcomes and advance health equity. Structural changes in the way primary healthcare is delivered, such as the Health Care Homes model, may have important benefits for patients with low health literacy.

# Multi-factorial intervention of planned proactive care for the elderly – evidence review for effectiveness and equity

A systematic review in 2008 identified 89 trials of community based multifactorial interventions (compared with usual care or minimal intervention) in older people with a mean age at least 65 years and living at home (or being discharged home after a hospital admission).<sup>108</sup> This review included general elderly populations, frail elderly, those recently discharged from hospital, those at risk of falling and group education and counselling. A multifactorial intervention was defined as a personalised assessment and provision of or referral to appropriate specialist, medical or social care.<sup>108</sup> The outcomes of interest were living at home at follow-up, nursing home admission, hospital admission, death, falls and physical function.

Multifactorial interventions;

- Reduced the risk of not living at home by 5% (relative risk [RR] 0.95, 95% CI 0.93–0.97)
- Reduced nursing-home admissions by 13% (RR 0.87, 0.83–0.90)
- Did not impact on the risk of death (RR 1.00, 0.97–1.02)
- Reduced hospital admissions by 6% (RR 0.94, 0.91–0.97)
- Reduced falls by 10% (0.90, 0.86–0.95)
- Physical function was better in the intervention groups than in other groups (standardised mean difference –0.08, –0.11 to –0.06).

In terms of the number needed to treat (NNT) for one person to achieve outcome of interest, the higher the risk the greater benefit from interventions. The NNT for continuing to live at home for the general elderly population was 263 (i.e. 263 older people need to receive multifactorial intervention for one extra person to benefit compared to usual care) vs NNT of 40 for people receiving community based care after hospital discharge.<sup>108</sup> Extra benefit was not noted from any specific type of intervention, including who intervened or number of disciplines involved or the intensity of intervention (scheduled visits or duration of intervention). Therefore evidence suggested that all elderly might benefit from a comprehensive assessment and appropriate health and social interventions and the greater the risk (e.g. frail or recent hospital admission vs general population), the greater the benefit from interventions.

A recent randomised controlled trial in The Netherlands<sup>109</sup> provides extra support for this systematic review. The intervention was a proactive model of care that is similar to New Zealand models which initially identified frail elderly and then put into place a nurse-led care programme consisting of a comprehensive geriatric assessment at home, evidence-based care planning, care co-ordination and follow-up.<sup>109</sup>

Exercise is also very important for older people. Three systematic reviews of home based and group based exercise interventions for frail older people have shown that exercise can improve mobility and functional ability.<sup>110-112</sup> The optimal intensity (duration and frequency) is uncertain. A further systematic review of exercise training (e.g. tai chi, structured exercise training or telephone exercise counselling) has been shown to improve frailty indicators (balance, gait, physical performance).<sup>113</sup>

Internationally, there are several older peoples' assessment tools that have already been developed and evaluated.<sup>114-118</sup>

No systematic review specifically addressed equity of health outcomes by ethnicity.

