



Ākuhata 2024
August 2024

Ngā taunakitanga mō te hauora me te toiora i Aotearoa New Zealand

Evidence for health and wellbeing in Aotearoa New Zealand

He rārangi o ngā huaputa mai i ētahi Kōkiri Pūtaiao ā-Motu e toru:
E Tipu e Rea, He Oranga Hauora, me te Kia eke kairangi ki te taikaumātutanga

An inventory of research outputs from three National Science Challenges:
A Better Start, Healthier Lives, Ageing Well

Kupu whakataki | Introduction

The research of three National Science Challenges – A Better Start, Healthier Lives and Ageing Well – encompasses the life-course, from infancy and teenage years through to middle age and later years.

Achieving equitable outcomes in Aotearoa New Zealand, while improving the health and wellbeing of all New Zealanders, is the central focus of our research.

Many of our research projects strive to encompass kaupapa Māori and Pacific cultural practices and much of our research has been co-designed in partnership with mana whenua and communities. We hope to enrich impact for all New Zealanders through learning from, and giving space and support to, a strong cohort of Māori and Pacific researchers.

In this inventory, research outputs are grouped within the broad priority areas set out in *Te Pae Tata Interim New Zealand Health Plan 2022*, with the addition of two further priority areas – ageing well and climate change.

There is a short description of each output and a link to more information. As well as research outputs that are already available (“ready now”), we have included research that is still underway (“coming soon”) so that you can see what is coming through the pipeline.

Our research teams welcome enquiries about their work and are keen to support its application.

Please get in touch with us if you would like any more information, have feedback to offer us, or wish to discuss any aspect of the research.

Ngā manaakitanga

Wayne Cutfield

DIRECTOR

A Better Start: E Tipu e Rea



Jim Mann

DIRECTOR

Healthier Lives: He Oranga Hauora



David Baxter

DIRECTOR

Ageing Well: Kia eke kairangi ki te taikaumātutanga



Contents

Kupu whakataki Introduction	2
1. Pae ora Better health in our communities	6
TAKING RESEARCH EVIDENCE INTO COMMUNITY PRACTICE	6
Healthier Lives Implementation Network	6
WEIGHT-RELATED HEALTH ISSUES IN CHILDREN.....	6
Healthy Lifestyle Check IT application	6
PREVENTING DIET-RELATED DISEASES.....	7
Evaluation of National Healthy Food & Drink Policy	7
SUPPORTING YOUNGER PACIFIC CARERS	7
Culturally-centred Pacific approaches to support younger family carers	7
CULTURAL AND SOCIAL CONTEXT OF HEALTH AND WELLBEING FOR KAUMĀTUA.....	8
Understanding kaumātua experiences of and responses to health and wellbeing	8
2. Kahu taurima Maternity and early years	9
HAPŪTANGA MATERNAL WELLBEING	9
A Raranga, raranga taku takapau: hapū ora for tamariki	9
MOEMOEĀ SLEEP	10
Infant sleep webinar	10
Moemoeā Sleep Programme	10
EARLY CHILDHOOD.....	11
B4 School Checks: Community-level infosheets	11
Infant growth webinar	11
Words Can POP!.....	11
3. Mate pukupuku People living with cancer	12
CANCER SCREENING AND MONITORING	12
ctDNA technology for cancer detection	12
Cancer prevalence in Aotearoa New Zealand	12
H. pylori clinical pathways	13
4. Māuiuitanga taumaha People living with chronic health conditions.....	14
SUPPORTING HEALTHY LIFESTYLES.....	14
Kimi Ora whānau active lifestyle programme	14
Poutiri Health Challenge lifestyle programme	14
OL@-OR@ healthy lifestyle app	15
PREVENTING PREDIABETES AND TYPE 2 DIABETES.....	15
Factors that protect against pre-diabetes progressing to diabetes	15

Oire Tokoroa Family Diabetes Lifestyle Programme	16
Pasifika Prediabetes Youth Empowerment Programme	16
REMISSION OF TYPE 2 DIABETES	17
Te Kāika DiRECT	17
MANAGING TYPE 2 DIABETES & RELATED CHRONIC CONDITIONS.....	17
Mana Tū: whānau ora type 2 diabetes programme	17
Epigenetics for equitable cardiovascular risk prediction.....	18
DESIGNING & IMPLEMENTING EQUITABLE HEALTH PROGRAMMES.....	18
He Pikinga Waiora Implementation Framework	18
Systems change for health equity	19
Manawataki Fatu Fatu: roadmap for equitable CVD care	19
STROKE PREVENTION AND TREATMENT.....	20
Stroke and CVD Prevention	20
Electrical Stimulators for Stroke Recovery	20
HELPING MĀORI AND PACIFIC PEOPLE LIVE WELL WITH DEMENTIA.....	21
Adapting Cognitive Stimulation Therapy for Māori and Pacific People	21
5. Oranga hinengaro People living with mental distress, illness and addictions	22
E-HEALTH INTERVENTIONS FOR YOUNG PEOPLE	22
Aroha: A chatbot to help young people cope with stress	22
Headstrong: Three chatbots to support youth mental health and wellbeing.....	22
Kia Haumanu: A bicultural hauora app to support rangatahi Māori.....	23
Quest - Te Whitianga.....	23
Tuneln: A goal setting app to reduce suicide ideation	23
TACKLING DISTRESS ASSOCIATED WITH LONELINESS	24
Social isolation and loneliness	24
6. Te pai o ngātau o te kaumātuatanga Ageing well.....	25
FALLS PREVENTION FOR AGEING WHĀNAU	25
Taurite Tū – a kaupapa Māori falls prevention and wellness programme for ageing whānau	25
Using the Drug Burden Index to predict and prevent falls and fractures.....	25
SOCIAL CONNECTION FOR OLDER ADULTS	26
Manawaroa – a film about later life social connection	26
IMPROVING WELLBEING FOR OLDER MĀORI	26
Kaumātua Mana Motuhake tuakana-teina intervention.....	26
ENSURING HIGHEST QUALITY OF END-OF-LIFE CARE	27
Frailty index and trajectories to guide care in retirement villages.....	27
Frailty Care Guides.....	27

Recognising deterioration.....	28
INJURY PREVENTION AND RECOVERY FOR OLDER MĀORI	28
Whaioranga te Pā Harakeke – Māori injury prevention & recovery service	28
HOUSING ISSUES AND RESPONSE FOR OLDER PEOPLE	29
Older renters’ toolkit	29
7. Huringa āhuarangi Climate change	30
HEALTH AND ENVIRONMENTAL CO-BENEFITS OF OPTIMAL DIET AND ACTIVE TRAVEL	30
Sustainable New Zealand Kai.....	30
ACTIVATION: Active and shared travel in neighbourhoods.....	30
Ngā mihi Acknowledgements	31
He kōrero mō mātou About us	31

1. Pae ora | Better health in our communities

TAKING RESEARCH EVIDENCE INTO COMMUNITY PRACTICE

<p>Healthier Lives Implementation Network</p>	<p>READY NOW Healthier Lives</p>
<p>The Healthier Lives Implementation Network brings together community providers, researchers and people in the health system to help implement novel research programmes and products to meet the health needs of Māori and Pasifika communities. It is a single network with separate branches for Māori and Pacific communities.</p> <p>Health providers can be involved at different levels:</p> <ol style="list-style-type: none"> 1) being informed of novel programmes and products 2) actively adapting and trialling programmes or products 3) identifying research needs or needs for new programmes. <p>The Network is a learning collaborative guided by Te Tiriti and Pasifika practices. It also undertakes research to better understand implementation needs and challenges.</p> <p>More information: https://www.healthierlivesimplementationnetwork.co.nz/ and https://healthierlives.co.nz/research/healthier-lives-implementation-research-network/</p>	<p>Principal Investigators</p> <p>Professor John Oetzel University of Waikato</p> <p>Akarere Henry South Waikato Pacific Islands Community Services</p> <p>Darrio Penetito-Hemara <i>Ngāti Haua, Ngāpuhi, Ngāti Tamaterā</i> Toi Tangata</p> <p>Associate Professor Dianne Sika-Paotonu University of Otago, Wellington</p> <p>Research partners</p> <p>South Waikato Pacific Islands Community Services Toi Tangata</p>

WEIGHT-RELATED HEALTH ISSUES IN CHILDREN

<p>Healthy Lifestyle Check IT application</p>	<p>COMING SOON A Better Start</p>
<p>The Healthy Lifestyle Check is a tablet-based, home health assessment of children (aged 4-16) with weight related health issues.</p> <p>The check is undertaken by a healthy lifestyle coordinator in the user's home. It is a person-centred approach offering individualised care whilst aiming to achieve efficiencies through reduced screening and investigation costs.</p> <p>More information: https://www.tamarikipakari.org/</p>	<p>Principal Investigator</p> <p>Associate Professor Yvonne Anderson University of Auckland and Curtin University</p> <p>Research partner</p> <p>Whanau Paraki</p>

PREVENTING DIET-RELATED DISEASES

<p>Evaluation of National Healthy Food & Drink Policy</p>	<p>READY NOW Healthier Lives</p>
<p>The National Healthy Food & Drink Policy (NHFDP) is a voluntary policy recommended for use in health and public sector settings. A comprehensive evaluation was undertaken to determine if, and where, the NHFDP had been adopted, what its impact had been, and the equity implications for Māori, Pasifika, and low-income New Zealanders.</p> <p>Tools to support policy adoption were developed:</p> <ul style="list-style-type: none"> ▪ a food environment digital audit tool to collect and collate data; ▪ the Healthy Kai Checker database which allows food providers to easily search for and identify products that meet Policy criteria; ▪ a customised framework to report the performance of organisations and identify areas for improvement. <p>The evaluation identified factors that contributed to ineffective implementation of the NHFDP and has made evidence-based recommendations for strengthening it and improving future implementation. The findings of this evaluation have relevance to similar policies in other settings, e.g., schools and workplaces.</p> <p>More information: https://healthierlives.co.nz/research/hype/ or contact: c.nimhurchu@auckland.ac.nz</p>	<p>Principal Investigator</p> <p>Professor Cliona Ni Mhurchu University of Auckland</p> <p>Research partners</p> <p>National DHB Food and Drink Environments Network</p> <p>Te Whatu Ora Health New Zealand</p> <p>Ministry of Health</p>

SUPPORTING YOUNGER PACIFIC CARERS

<p>Culturally-centred Pacific approaches to support younger family carers</p>	<p>READY NOW Ageing Well</p>
<p>This study reveals the challenges faced by the proportionally large number of young Pacific people who are caring for older adults at home, and in response, sheds light on the supports that they might need. These include recognition of their caring role, ongoing education and training, improving the delivery of information, and reviewing assistance eligibility criteria.</p> <p>A service initiative, <i>Tui moe Amanaki</i>, has been rolled out to achieve better health and wellbeing outcomes for carers and their families, health equity, integrated health care and social support, and carer-centred approaches to support ageing in place. The service also includes a carers' network.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/building-</p>	<p>Principal Investigator</p> <p>Dr Ofa Dewes University of Auckland</p> <p>Research partner</p> <p>Tongan Health Society Inc.</p>

[connections-as-we-age/](#) or contact: o.dewes@auckland.ac.nz or ofa.dewes@tonganhealth.com

CULTURAL AND SOCIAL CONTEXT OF HEALTH AND WELLBEING FOR KAUMĀTUA

<p>Understanding kaumātua experiences of and responses to health and wellbeing</p>	<p>READY NOW Ageing Well</p>
<p>This study – named ‘Mā mua ka kite a muri; mā muri ka ora a mua’ – documents the health experiences of older Māori in two Tai Tokerau (Northland) communities, in order to provide a model for the future success of support structures, built on an evidence base of things that older Māori value.</p> <p>Kaumātua deemed practical support and interest from whānau to be important, although kaumātua emphasised that they themselves are in charge of their own health and were reluctant to burden their adult children. For support and understanding, kaumātua looked to other kaumātua, being at a similar life stage.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/building-connections-as-we-age/</p>	<p>Principal Investigator</p> <p>Associate Professor Marama Muru-Lanning University of Auckland</p>

2. Kahu taurima | Maternity and early years

HAPŪTANGA | MATERNAL WELLBEING

A Raranga, raranga taku takapau: hapū ora for tamariki	COMING SOON A Better Start
<p>A co-design approach to understand how Māori communities support maternal wellbeing within a mātauranga Māori worldview.</p> <p>Ngā Māmā o Ngāti Hauā</p> <p>This project is looking at the wellbeing of mothers and whānau in Ngāti Hauā. It is a community-based research collaboration with Te Rau Ora, a Māori workforce and development service in Hamilton, who will be working with Ngati Haua iwi health services to investigate the current use of maternity services in the Cambridge, Matamata and Morrinsville areas.</p> <p>Ngā wai ora o Rāhui Pokeka</p> <p>This project is creating communities for hapū ora in Huntly. It is a community and iwi based collaboration to design maternity wellbeing initiatives in Huntly, Rahui Pokeka.</p> <p>Te Whare Pora</p> <p>This project is looking at Wairua and wellbeing in hapū ora. Te Whare Pora in Flaxmere, which is a hauora ‘clinic’ for pregnant women staffed by weavers, rather than health professionals. Te Whare Pora can be viewed as a concept and a state; people don’t have to be in a specific physical place to be in te whare pora, but need to be able to act and access what it means to them and what nurtures this state.</p> <p>More information: https://turamapractise.com/2020/05/21/raranga-raranga-taku-takapau-hapu-ora-for-tamariki/</p>	<p>Principal Investigators</p> <p>Dr Waikaremoana Waitoki <i>Ngāti Hako, Ngāti Māhanga</i> Waikato University</p> <p>Dr Naomi Simmonds <i>Raukawa, Ngāti Huri</i> Te Whare Wānanga o Awanuiārangī</p> <p>Professor Helen Moewaka-Barnes <i>Te Kapotai, Ngapuhi-nui-tonu</i> Massey University</p> <p>Research partners (Ngā Māmā o Ngāti Hauā)</p> <p>Te Rau Ora Ngāti Haua marae</p>

MOEMOEĀ | SLEEP

<h3>Infant sleep webinar</h3>	<p>READY NOW A Better Start</p>
<p>A webinar outlining the latest research findings about infant sleep, covering:</p> <ul style="list-style-type: none"> • What is normal sleep, helping babies to fall asleep, and keeping them asleep; • The relationship between infant sleep and maternal mental health; • A look at infant sleep through the lens of Māori and Pasifika whānau. <p>More information: https://www.abetterstart.nz/2021/08/04/webinar-help-me-sleep-the-latest-research-on-infant-sleep/</p>	<p>Principal Investigators</p> <p>Professor Rachael Taylor University of Otago</p> <p>Dr Justine Camp <i>Kāi Tahu, Kāti Mamoe, Waitaha</i> University of Otago</p> <p>Research partners</p> <p>Whānau Āwhina Plunket Melbourne’s Murdoch Children’s Research Institute</p>

<h3>Moemoeā Sleep Programme</h3>	<p>COMING SOON A Better Start</p>
<p>Moemoeā aims to promote health and wellbeing by drawing on traditional knowledge from Māori communities to empower whānau. Strengths-based, practical resources and tools are available online:</p> <ul style="list-style-type: none"> • Rongo time tools and resources aim to encourage healthy kai and activities for the whole whānau. Rongo-marae-roa, inspired us help whānau connect to outdoor spaces through a waiata hīkoi, a walking jingle and tātai or short karakia. Rongo-mā-Tāne, has encouraged us to bring ritual into food related activities through karakia, short videos and activities that promote ritual around dinner and connection amongst whānau. • Uru time tools and resources are designed to help pēpi to transition from day to night, sleep well and wake up well rested. We have created waiata and karakia to help pēpi relax during bath time and mirimiri, as well as oriori, karakia and pūrākau to learn and play when putting pēpi to sleep. • Whānau support is an interactive resource which allows you to build your own waka to lean into the strengths within your whānau networks while also helping to identify other potential sources of support at community, regional and national levels. <p>More information: https://www.moemoeasleep.co.nz/</p>	<p>Principal Investigators</p> <p>Professor Rachael Taylor University of Otago</p> <p>Dr Justine Camp <i>Kāi Tahu, Kāti Mamoe, Waitaha</i> University of Otago</p>

EARLY CHILDHOOD

<p>B4 School Checks: Community-level infosheets</p>	<p>READY NOW A Better Start</p>
<p>Infosheets have been developed showing community-level trends in B4 School Check uptake.</p> <p>Analysis of B4 School Checks uptake shows that national level results mask important local variations and potential levers for change. Local level analyses can lead to different conclusions about how to improve service uptake and will help communities to formulate policies to improve screening for childhood problems.</p> <p>More information: Contact PIs.</p>	<p>Principal Investigators</p> <p>Associate Professor Barry Milne University of Auckland</p> <p>Dr Nichola Shackleton University of Auckland</p> <p>Research partner Social Wellbeing Agency</p>
<p>Infant growth webinar</p>	<p>READY NOW A Better Start</p>
<p>A webinar outlining the latest research findings about infant growth, covering:</p> <ul style="list-style-type: none"> • Using BMI as a measure of nutrition in infants, how to interpret it, and what it predicts for the future; • How to approach the conversation with parents whose child is gaining weight too rapidly, how to support caregivers to follow their baby’s cues, and how to separate a demand for food versus a demand for attention. <p>More information: https://www.abetterstart.nz/2021/11/18/watch-watch-me-grow-webinar-the-latest-research-on-infant-growth/</p>	<p>Principal Investigators</p> <p>Dr Lisa Daniels University of Otago</p> <p>Associate Professor Barry Milne University of Auckland</p> <p>Research partners Whānau Āwhina Plunket Incredible Families</p>
<p>Words Can POP!</p>	<p>READY NOW A Better Start</p>
<p>Words Can POP! Is an oral language and foundational literacy knowledge approach for preschoolers.</p> <p>The approach includes teaching mentoring and professional learning, resource development (for kaiako and home) and whānau workshops. Development of culturally responsive storytelling resources and books – in which the culture, language and identity of tamariki Māori is affirmed – is a major part of the project. It leads to enhanced oral language, letter-sound knowledge and cognitive flexibility (a measure of self-regulation) for children.</p> <p>More information: https://www.betterstartapproach.com/families</p>	<p>Principal Investigators</p> <p>Professor Brigid McNeill University of Canterbury</p> <p>Professor Gail Gillon <i>Ngāi Tahu</i> University of Canterbury</p> <p>Research partners Kidsfirst Kindergartens, Māori Achievement Collaborative, Tuahiwi School, Newton Central School, EFKS Parish Hornby</p>

3. Mate pukupuku | People living with cancer

CANCER SCREENING AND MONITORING

<p>ctDNA technology for cancer detection</p>	<p>COMING SOON Healthier Lives</p>
<p>Circulating tumour DNA (ctDNA) technology uses a simple blood test to identify and measure cancer markers in the bloodstream. It delivers more rapid and sensitive results than current methods for monitoring cancer treatment.</p> <p>The utility of ctDNA for the management of colorectal cancer and melanoma has been confirmed, and the feasibility of remote sample collection in New Zealand has been demonstrated.</p> <p>The technology is highly portable, through either the easy transport of stabilized blood samples to centralized laboratories, or the use of low cost, transportable DNA sequencing devices, such as the flow cells provided by Oxford Nanopore Technologies. This accessibility is opening the way for cancer screening and monitoring to take place in rural areas and community settings, away from large hospitals.</p> <p>Potential clinical applications for this technology include:</p> <ul style="list-style-type: none"> • early diagnosis of cancer • detection of residual disease post-treatment • monitoring of patient response to treatment • identification of molecular drug targets • identification of developing mechanisms of drug resistance. <p>More information: https://healthierlives.co.nz/research/ctdna-integration/</p>	<p>Principal Investigators</p> <p>Professor Parry Guilford University of Otago</p> <p>Professor Cristin Print University of Auckland</p> <p>Dr Cherie Blenkiron University of Auckland</p>

<p>Cancer prevalence in Aotearoa New Zealand</p>	<p>READY NOW Healthier Lives</p>
<p>This study produced an estimate of limited duration cancer prevalence in Aotearoa New Zealand.</p> <p>Publication: Brewer N, Atkinson J, Guilford P, Print C, Blakely T, Teng A. An estimate of limited duration cancer prevalence in New Zealand using 'big' data. New Zealand Medical Journal (2020) 133:1514; 49-62</p> <p>More information: https://healthierlives.co.nz/research/big-data/</p>	<p>Principal Investigator</p> <p>Dr Andrea Teng University of Otago Wellington</p> <p>Lead author</p> <p>Dr Naomi Brewer Massey University</p>

H. pylori clinical pathways

COMING SOON | Healthier Lives

This study used data from community laboratories and primary care to understand the full clinical pathway for testing and treatment of *H. pylori* infection.

It examined who was tested for *H. pylori* infection, who was treated, and who was re-tested and treated, both overall and by age and ethnicity; using ten years of laboratory and pharmacy dispensing data from four northern regions (1.9 million population).

It will inform the development of strategies to address *H. pylori* infection in priority populations and will also provide a model for future research using primary care data in New Zealand's health and integrated data system.

More information:

<https://healthierlives.co.nz/research/integrated-data/>

Principal Investigator

Dr Andrea Teng
University of Otago Wellington

Research partners

Statistics New Zealand
Te Aho o Te Kahu – Cancer Control Agency

4. Māuiuitanga taumaha | People living with chronic health conditions

SUPPORTING HEALTHY LIFESTYLES

<p>Kimi Ora whānau active lifestyle programme</p>	<p>READY NOW Healthier Lives</p>
<p>Kimi Ora is a programme to help whānau lead healthier, more active lifestyles. It was co-designed (using the He Pikinga Waiora Implementation Framework – see p.19) by researchers, Te Kōhao Health, and the participants themselves. In the research phase, the 10-week Kimi Ora programme resulted in significant reduction in weight (4.3%), BMI (1.80) and HbA1c (8%). Weight and BMI reductions were greater than a comparison group (HbA1c measures were not available for the comparison group).</p> <p>Kimi Ora continues to be owned and run by Te Kōhao Health as an 8-week programme offering nutrition and exercise education classes, advice from a nutrition and exercise coach, and access to online resources with motivational tips and healthy recipes.</p> <p>More information: https://www.tekohaohealth.co.nz/kimi-ora and https://healthierlives.co.nz/research/hpw/</p>	<p>Principal Investigator</p> <p>Dr Nina Scott <i>Ngāpuhi, Ngāti Whātua and Waikato</i> Te Whatu Ora Waikato</p> <p>Research partner</p> <p>Te Kōhao Health</p>
<p>Poutiri Health Challenge lifestyle programme</p>	<p>READY NOW Healthier Lives</p>
<p>The Poutiri Health Challenge was a 12-week lifestyle programme for Māori men with BMI > 25, focussed on increasing physical activity and improving nutrition. The programme was co-designed (using the He Pikinga Waiora Implementation Framework – see p.19) by researchers, the Poutiri Trust, and the participants themselves. It consisted of:</p> <ul style="list-style-type: none"> ● free access to a community gym ● an individual training programme ● nutritional information, shared weekly ● a session with a nurse about screening for health conditions. <p>The original focus was on diabetes prevention, but the co-design process resulted in a focus on obesity and related health conditions, including diabetes and cardiovascular disease.</p> <p>The intervention resulted in significant reduction in weight (4.7%) and BMI (1.87), and a significant improvement in health-related quality of life and self-rated health. There was no comparison group but the effect sizes were large. Additionally, the retention rate was high (88%), which was attributed to the co-design processes.</p> <p>More information: https://healthierlives.co.nz/research/hpw/</p>	<p>Principal Investigator</p> <p>Professor John Oetzel University of Waikato</p> <p>Research partner</p> <p>Poutiri Charitable Trust</p>

<p>OL@-OR@ healthy lifestyle app</p>	<p>READY NOW Healthier Lives</p>
<p>OL@-OR@ is a free smartphone app to support healthy lifestyles for Māori and Pasifika. It is designed to support small lifestyle changes – in nutrition, physical activity and spirituality – that can improve overall health and wellbeing. The features and functionality of OL@-OR@ are based on tried and tested behaviour change techniques. They include:</p> <ul style="list-style-type: none"> • goal setting and identifying small steps to reach goals • culturally tailored virtual rewards as goals are achieved • lifestyle trackers to monitor progress • regular reminders and motivational messages • information about food, physical activity, local activities and health services <p>In a large randomised controlled trial, participants who engaged with OL@-OR@ and set behaviour change goals showed significant improvements in health-related behaviours, such as eating more fruits and vegetables, compared with the control group. The findings suggest that while apps are not for everyone, they may support behaviour change in those motivated to engage with them.</p> <p>More information: https://olaora.auckland.ac.nz/ and https://healthierlives.co.nz/research/ol-or/ or contact: c.nimhurchu@auckland.ac.nz</p>	<p>Principal Investigator</p> <p>Professor Cliona Ni Mhurchu University of Auckland</p> <p>Associate Professor Lisa Te Morenga <i>Ngāti Whātua Ōrākei, Te Uri o Hua, Ngāpuhi and Te Rarawa</i> Massey University</p> <p>Associate Professor Rivdan Tupai-Firestone Massey University</p> <p>Research partner</p> <p>South Waikato Pacific Islands Community Services</p> <p>The Fono Health & Social Services</p> <p>Toi Tangata</p>

PREVENTING PREDIABETES AND TYPE 2 DIABETES

<p>Factors that protect against pre-diabetes progressing to diabetes</p>	<p>READY NOW Healthier Lives</p>
<p>This study produced a novel finding that speaking an Indigenous language is associated with reduced risk of progression to diabetes.</p> <p>Publication: Teng A, Blakely T, Scott N, Jansen R, Masters-Awatere B, Krebs J, Oetzel J. What protects against pre-diabetes progressing to diabetes? Observational study of integrated health and social data <i>Diabetes Research and Clinical Practice</i> (2019) 148 119-129</p> <p>More information: https://healthierlives.co.nz/research/big-data/</p>	<p>Principal Investigator</p> <p>Dr Andrea Teng University of Otago Wellington</p>

<p>Oire Tokoroa Family Diabetes Lifestyle Programme</p>	<p>READY NOW Healthier Lives</p>
<p>Oire Tokoroa is a family-centred diabetes prevention programme for the Pacific community. It works by identifying vaevae oro'oro (family champions) and empowering them to support their family unit to adopt healthier lifestyle habits. In the Tokoroa Pacific community, vaevae oro'oro participated in a seven-module training programme and co-designed a 24-week Pacific family-health programme, consisting of:</p> <ul style="list-style-type: none"> • the Kai Tari Cookbook, an intergenerationally-friendly Pasifika cookbook featuring sixteen culturally appropriate, dietitian-reviewed recipes, and monthly food plan • weekly food bags containing ingredients and recipes for four healthy Pacific meals for the family to cook together • options for two or three family physical activity nights each week • a family logbook to record family-specific goals • online support for vaevae oro'oro from Community Coordinators. <p>More information: https://healthierlives.co.nz/research/pacific-diabetes-prevention-programme/</p>	<p>Principal Investigator</p> <p>Associate Professor Ridvan Tupai-Firestone Massey University</p> <p>Research partner</p> <p>South Waikato Pacific Islands Community Services</p>

<p>Pasifika Prediabetes Youth Empowerment Programme</p>	<p>READY NOW Healthier Lives</p>
<p>The Pasifika Prediabetes Youth Empowerment Programme (PPYEP) is a model for delivering community-based health interventions through youth advocacy and leadership. It has been successfully trialled in an intervention aimed at reducing rates of prediabetes but the model could be applied to other health and wellbeing issues.</p> <p>The programme offers training to Pasifika youth to enable them to be leaders for health advocacy in their own community. In PPYEP, young people used the new knowledge and skills they acquired from the nine-module empowerment programme to co-design, deliver and evaluate a health intervention in their community, alongside university and community-based researchers.</p> <p>Relationships of trust and reciprocity, and the capability of youth to design culturally-relevant health interventions for their own community is central to the success of this model.</p> <p>More information: https://healthierlives.co.nz/research/ppyep/</p>	<p>Principal Investigator</p> <p>Associate Professor Rivdan Tupai-Firestone Massey University</p> <p>Research partners</p> <p>South Waikato Pacific Islands Community Services</p> <p>The Fono Health & Social Services</p> <p>Co-funding</p> <p>Ministry of Health Health Research Council</p>

REMISSION OF TYPE 2 DIABETES

<p>Te Kāika DiRECT</p>	<p>READY NOW Healthier Lives</p>
<p>There is good international evidence that a dietitian-supported weight loss protocol (known as DiRECT) is effective for long-term weight loss and can lead to remission of type 2 diabetes. Other benefits can include reduced risk of heart disease, chronic kidney disease, retinopathy, nephropathy and lower limb amputation. The DiRECT protocol involves a period of total meal replacement followed by a weight-loss maintenance phase. The original UK study observed benefits up to five years after the intervention.</p> <p>The 12-month Te Kāika DiRECT study recruited 40 participants with obesity and prediabetes or type 2 diabetes, who were looking to lose weight, of whom 40% were Māori and 40% Pasifika. Participants were randomised to either dietitian-supported usual care or the DiRECT approach to weight loss. The participants who received the DiRECT intervention lost more weight and achieved greater blood sugar control than those in the control group, and they found the intervention culturally acceptable. Study results highlighted the invaluable role of support from a dietitian.</p> <p>More information: https://healthierlives.co.nz/research/te-kaika-direct/</p>	<p>Principal Investigators</p> <p>Dr Andrew Reynolds University of Otago</p> <p>Dr Kim Ma'ia'i</p> <p>Dr Justine Camp <i>Kāi Tahu, Kāti Mamoe, Waitaha</i> University of Otago</p> <p>Research partner</p> <p>Te Kāika Hauora</p> <p>Co-funding</p> <p>Ministry of Social Development Healthy Hearts for Aotearoa New Zealand</p>

MANAGING TYPE 2 DIABETES & RELATED CHRONIC CONDITIONS

<p>Mana Tū: whānau ora type 2 diabetes programme</p>	<p>READY NOW Healthier Lives</p>
<p>The Mana Tū programme helps people with diabetes (and other chronic conditions) manage their health. Whānau determine their own goals and are supported to achieve these by Kaimanaaki (case managers) who work with services that address the wider determinants of health (e.g. housing, social care). The Kaimanaaki also work closely with General Practice (GP) teams, ensuring clinical input. In turn, they are supported by a central hub offering peer support and ongoing quality improvement.</p> <p>In a randomised controlled trial of 400 participants across ten GP clinics, Mana Tū was found to increase participants' consumption of fruit and vegetables and their level of physical activity as well as improving most participants' diabetes markers. It also improved the way people felt about engaging with the healthcare system; participants' sense of cultural safety and readiness to engage with health and social services rose by 84%.</p> <p>More information: https://healthierlives.co.nz/research/mana-tu/</p>	<p>Principal Investigator</p> <p>Associate Professor Matire Harwood <i>Ngāpuhi, Ngāti Rangī, Te Mahurehure, Ngāti Hine</i> University of Auckland</p> <p>Research partner</p> <p>National Hauora Coalition</p> <p>Co-funding</p> <p>Ministry of Health Health Research Council</p>

<p>Epigenetics for equitable cardiovascular risk prediction</p>	<p>COMING SOON Healthier Lives</p>
<p>Epigenetics studies the modifications to DNA following environmental exposures. A form of epigenetic modification – altered levels of DNA methylation (DNAm) – is enabling identification of precise biomarkers that could surpass the performance of conventional CVD risk prediction.</p> <p>This study identified many potential DNAm-based CVD risk markers and selected some for clinical translation assessment. A marker for smoking exposure accurately predicted lifetime tobacco consumption, length of smoking cessation in ex-smokers, and passive smoking exposure in never-smokers. Its inclusion into statistical risk models substantively improved risk prediction even after adjusting for conventional risk factors and also when self-reported smoking status was included.</p> <p>The research team designed a simple blood test for use in clinical diagnostic settings to measure this marker. Its utility as a screening tool for lung cancer, abdominal aortic aneurysm and peripheral artery disease will also be assessed.</p> <p>Other markers identified in this study hold great promise. Another test (involving multiple DNAm markers) is being developed to assess lifelong diabetes/metabolic syndrome.</p> <p>More information: https://healthierlives.co.nz/research/epigenetics/</p>	<p>Principal Investigator</p> <p>Professor Greg Jones University of Otago</p> <p>Dr Anna Rolleston The Centre for Health</p> <p>Research partner</p> <p>MENZACS Governance Group</p>

DESIGNING & IMPLEMENTING EQUITABLE HEALTH PROGRAMMES

<p>He Pikinga Waiora Implementation Framework</p>	<p>READY NOW Healthier Lives</p>
<p>The He Pikinga Waiora Implementation Framework is a tool for creating, implementing, and evaluating health programmes for Indigenous communities. It can be used to support the autonomy and engagement of community organisations in the design of new health programmes.</p> <p>The Framework is centred on Kaupapa Māori (Indigenous knowledge, methods and philosophy) and based on four pillars: cultural centredness; community engagement; systems thinking; and integrated knowledge transfer.</p> <p>The Framework has been successfully used to design healthy lifestyle programmes such as Kimi Ora (see p.15) and health screening interventions. A toolkit of resources is available to help anyone interested in using it: https://www.hpwcommunity.com/resources</p> <p>More information: https://www.hpwcommunity.com/</p>	<p>Principal Investigators</p> <p>Dr Nina Scott <i>Ngāpuhi, Ngāti Whātua and Waikato</i> Te Whatu Ora Waikato</p> <p>Professor John Oetzel University of Waikato</p> <p>Dr Bridgette Masters-Awatere University of Waikato</p> <p>Research partners</p> <p>Te Kōhao Health Poutiri Charitable Trust</p>

<h2>Systems change for health equity</h2>	<p>READY NOW Healthier Lives</p>
<p>There are persistent inequities in the health of Māori and Pacific peoples when compared with people of other ethnic groups in Aotearoa New Zealand. This project co-designed tools to support the health system to deliver more equitable health outcomes, including:</p> <ul style="list-style-type: none"> • FrEEIA, an equity-focused implementation science framework • The FrEEIA equity readiness assessment tool. <p>The framework and readiness assessment tool were trialed, evaluated and refined during the implementation of a lung cancer screening intervention at Te Whatu Ora Waitematā, Auckland, Counties Manukau and Northland. They are now recommended for use across the mainstream health system.</p> <p>The framework, tool and user guides will shortly be made available on the Implementation Science Aotearoa website.</p> <p>More information: https://healthierlives.co.nz/research/systems-change-for-health-equity/</p>	<p>Principal Investigator</p> <p>Professor Sue Crengle <i>Kāi Tahu, Kāti Māmoe, Waitaha</i> University of Otago</p> <p>Research partners</p> <p>Te Whatu Ora Northern Region</p> <p>Institute for Innovation and Improvement - Waitematā</p> <p>National Hauora Coalition</p>

<h2>Manawataki Fatu Fatu: roadmap for equitable CVD care</h2>	<p>COMING SOON Healthier Lives</p>
<p>Māori and Pacific Peoples encounter barriers in accessing treatment for cardiovascular disease (CVD) and this contributes to a life expectancy gap of 6-7 years. This project created a <i>Quality-Improvement-Equity Roadmap</i> (a living plan) to systematically improve access to CVD care for Māori and Pacific Peoples.</p> <p>Quantitative research identified evidence-practice gaps at the following points along the care pathway:</p> <ul style="list-style-type: none"> • primary care risk assessment and management • pre-hospital care for acute coronary events in the community, and • post-hospital discharge and long-term management of heart failure. <p>The qualitative arm of the study captured stories of people's journey through the health system and their ideas for how it could be improved. Team members conducted in-depth kōrero (conversations) with patients, whānau and kaimahi (health providers) to better understand the barriers to accessing care, to ensure that the research would be mana-enhancing by elevating the voices of patients and whānau in healthcare planning.</p> <p>More information: https://www.manawafatu.org/</p>	<p>Principal Investigators</p> <p>Associate Professor Matire Harwood <i>Ngāpuhi, Ngāti Rangī, Te Mahurehure, Ngāti Hine</i> University of Auckland</p> <p>Dr Corina Grey University of Auckland</p> <p>Professor Shanthi Ameratunga University of Auckland</p> <p>Dr Vanessa Selak University of Auckland</p> <p>Research partner</p> <p>Hato Hone St John Ambulance Service</p> <p>Co-funding</p> <p>Heart Foundation of New Zealand</p>

STROKE PREVENTION AND TREATMENT

<p>Stroke and CVD Prevention</p>	<p>READY NOW Ageing Well</p>
<p>Traditionally, stroke risk management has focused on those most at risk of stroke, yet the most acute cardiovascular events occur in people with low to moderate risk. Moreover, as many as 80% of strokes are preventable, with adequate control of modifiable risk factors. This research investigates health and wellness coaching as a population wide strategy for risk reduction.</p> <p>The patient-centred approach of coaching overcomes the difficulties in sustaining lifestyle changes, which are often recommended for cardiovascular disease and stroke prevention. The coaching aims to assist participants to increase their self-awareness and feel empowered to set goals and reach their targets.</p> <p>An initial trial with over 300 Māori, Pacific, European, and Asian participants, over a six-week period, appeared to decrease levels of high blood pressure, one of the chief risk factors for stroke. Research over a longer, three-year term has shown the approach can help to reduce the number of people affected by stroke incidents.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/stroke-and-cvd-prevention/ and https://www.ageingwellchallenge.co.nz/research/health-and-wellness-coaching/</p>	<p>Principal Investigators</p> <p>Professor Valery Feigin Auckland University of Technology</p> <p>Professor Rita Krishnamurthi Auckland University of Technology</p>

<p>Electrical Stimulators for Stroke Recovery</p>	<p>READY NOW Ageing Well</p>
<p>Stroke recovery treatment developed from this research was enhanced by applying electrostimulation to the healthy side of the brain, complementing and speeding up traditional rehabilitation therapy.</p> <p>An electrode was placed on the dura covering the motor cortex on the healthy side of the brain, changing the messages from the healthy side to the stroke side, thereby allowing the diseased side of the brain to better recover function.</p> <p>The intervention was surgically very safe and produced positive results in two individuals who volunteered to trial the device.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/electrical-stimulators-for-stroke-recovery/</p>	<p>Principal Investigators</p> <p>Professor John Reynolds University of Otago</p> <p>Professor Dirk de Ridder University of Otago</p>

HELPING MĀORI AND PACIFIC PEOPLE LIVE WELL WITH DEMENTIA

Adapting Cognitive Stimulation Therapy for Māori and Pacific People	READY NOW Ageing Well
<p>Cognitive Stimulation Therapy (CST) is an evidence-based psychosocial group treatment that can help people with mild to moderate dementia cope with the loss of normal brain function. It works by trained facilitators meeting people with dementia in small groups over several sessions of activities, discussions and social interactions that engage and stimulate.</p> <p>The research team has created a Māori CST manual to train facilitators to deliver the therapy in a meaningful way to Māori with dementia, and has conducted similar work to adapt CST to Pacific People's needs.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/adapting-cognitive-stimulation-therapy/</p>	Principal Investigator Dr Gary Cheung University of Auckland

5. Oranga hinengaro | People living with mental distress, illness and addictions

E-HEALTH INTERVENTIONS FOR YOUNG PEOPLE

<p>Aroha: A chatbot to help young people cope with stress</p>	<p>READY NOW A Better Start</p>
<p>Aroha is a chatbot designed during the COVID-19 pandemic to help young people cope with stress in positive ways. It works on Facebook Messenger.</p> <p>Aroha has guided activities divided into different sections:</p> <ul style="list-style-type: none"> • Mood and Emotions covers a selection of calming activities such as breathing exercises and meditation, self-care, and how to distract yourself. • Boost Wellbeing covers getting active, spirituality, staying connected and practicing gratitude. • Practical Support covers getting expert help, alcohol and drugs, violence/abuse, anger and money worries. <p>More information: https://healthify.nz/apps/a/aroha-chatbot/</p>	<p>Principal Investigators</p> <p>Dr Tania Cargo <i>Ngāti Manu, Ngāti Maru, Ngāpuhi ōku iwi</i> University of Auckland</p> <p>Dr Karolina Stasiak University of Auckland</p> <p>Associate Professor Sarah Hetrick University of Auckland</p> <p>Research partner Rush</p>
<p>Headstrong: Three chatbots to support youth mental health and wellbeing</p>	<p>READY NOW A Better Start</p>
<p>Headstrong is a digital app that connects users with a virtual guide to help build resilience and a healthy outlook on life.</p> <p>Using Te Whare Tapa Whā as the holistic wellbeing model, it was developed by and for rangatahi with help from experts. The psychological strategies used in Headstrong are based on culturally responsive cognitive behavioural therapy (CBT), positive psychology (e.g. gratitude), mindfulness, interpersonal skills, and substance use harm-minimisation strategies. Rangatahi can choose from three chatbot courses:</p> <ul style="list-style-type: none"> • Paparahi – Foundations • Aroha • Hiki Taumahatanga - Stress Detox <p>More information: https://www.headstrong.org.nz/about-headstrong</p>	<p>Principal Investigators</p> <p>Dr Tania Cargo <i>Ngāti Manu, Ngāti Maru, Ngāpuhi ōku iwi</i> University of Auckland</p> <p>Dr Karolina Stasiak University of Auckland</p> <p>Associate Professor Sarah Hetrick University of Auckland</p> <p>Research partners Kekeno, Rush</p>

<p>Kia Haumanu: A bicultural hauora app to support rangatahi Māori</p>	<p>COMING SOON A Better Start</p>
<p>Kia Haumanu is a redevelopment of the Aroha chatbot as a bicultural hauora app for rangatahi Māori.</p> <p>It helps support stronger connections with the user’s cultural identity and to their whanau and to hauora using important tikanga Māori content such as purakau, waiata and maramataka knowledge.</p> <p>More information: Contact PI</p>	<p>Principal Investigator</p> <p>Dr Tania Cargo <i>Ngāti Manu, Ngāti Maru, Ngāpuhi ōku iwi</i> University of Auckland</p> <p>Research partners Kekeno, Rush</p>

<p>Quest - Te Whitianga</p>	<p>READY NOW A Better Start</p>
<p>Quest – Te Whitianga is a smartphone game that aims to help young people (10-14) cope with strong emotions.</p> <p>Users learn cognitive behavioural therapy skills via a series of activities and games. The app is set on an ocean and the user travels between islands to learn six evidence-based skills. These include a relaxation/mindfulness activity, activity planning, a gratitude journal plus problem solving and communication skills training.</p> <p>More information: https://apps.apple.com/us/app/quest-te-whitianga/id1438476829</p>	<p>Principal Investigators</p> <p>Dr Tania Cargo <i>Ngāti Manu, Ngāti Maru, Ngāpuhi ōku iwi</i> University of Auckland</p> <p>Dr Karolina Stasiak University of Auckland</p> <p>Associate Professor Sarah Hetrick University of Auckland</p>

<p>TuneIn: A goal setting app to reduce suicide ideation</p>	<p>READY NOW A Better Start</p>
<p>TuneIn is a free smartphone app which takes young users on a journey to positive change using the power of music to reduce suicide ideation and self-harm.</p> <p>It has been tested specifically with rangatahi Māori and modified to increase the use of Te Reo Māori as well as additional content developed from a Te Ao Māori perspective.</p> <p>More information: https://apps.apple.com/nz/app/tunein/id1538861756</p>	<p>Principal Investigators</p> <p>Associate Professor Sarah Hetrick University of Auckland</p> <p>Dr Tania Cargo <i>Ngāti Manu, Ngāti Maru, Ngāpuhi ōku iwi</i> University of Auckland</p> <p>Dr Karolina Stasiak University of Auckland</p> <p>Research partner National Institute of Health Innovation</p>

TACKLING DISTRESS ASSOCIATED WITH LONELINESS

Social isolation and loneliness	READY NOW Ageing Well
<p>Social isolation and loneliness are growing problems in Aotearoa, causing illnesses such as depression and in the worst cases, premature death.</p> <p>This research conducted interviews with different ethnic groups (especially Asian, Māori and Pacific peoples) to gauge how they experienced and understood loneliness. It also evaluated Age Concern’s Accredited Visiting Service, which seeks to provide companionship and reduce loneliness amongst socially isolated older people.</p> <p>The visiting service was found to be cost-effective and there is a strong argument for the integration of such services into Te Whatu Ora / Te Akai Whai Ora and Council service provision. The service was found to be particularly successful when relationships between the volunteer and the isolated individual were based on mutual respect and shared cultural knowledge.</p> <p>The research also yielded an animation short film, which draws on participants’ own words to convey the effects and feelings of social isolation and loneliness.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/social-isolation/</p>	<p>Principal Investigator</p> <p>Professor Merryn Gott University of Auckland</p>

6. Te pai o ngātau o te kaumātuatanga | Ageing well

FALLS PREVENTION FOR AGEING WHĀNAU

<p>Taurite Tū – a kaupapa Māori falls prevention and wellness programme for ageing whānau</p>	<p>READY NOW Ageing Well</p>
<p>Taurite Tū is a kaupapa Māori falls prevention and wellness programme, designed specifically for ageing Māori. It encompasses mātauraka Māori and other evidence-based science, that aims to empower Māori to age stronger.</p> <p>Results show statistically significant reductions in falls risks for Māori participants, and numerous other wellness benefits. Attendance (79%) and retention (86%) rates indicate the programme is successful in engaging Māori.</p> <p>The programme is currently delivered by trained workers in 26 rūnaka and Māori health providers in several rohe including and beyond Ōtākou, as an effective kaupapa Māori solution to injury prevention and rehabilitation.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/taurite-tu/ or contact: katrina.bryant@otago.ac.nz or tauritetu@tro.org.nz</p>	<p>Principal Investigator</p> <p>Katrina Pōtiki Bryant <i>Kāi Tahu, Kāti Māmoē, Waitaha</i> Te Rūnanga o Ōtākou</p> <p>Research partner</p> <p>Te Rūnanga o Ōtākou</p>
<p>Using the Drug Burden Index to predict and prevent falls and fractures</p>	<p>READY NOW Ageing Well</p>
<p>Falls and fractures are common for people over 65 and can have damaging impacts such as loss of mobility, independence and quality of life, as well as early admission into residential care, or hospitalisation. This project explored the link between the Drug Burden Index (DBI) – a tool that calculates the total exposure of medications that sedate or affect cognition – and likelihood of falls and fractures. A big data approach used data on over 71,000 older New Zealanders from interRAI – International Resident Assessment Instrument, an evidence-based clinical assessment questionnaire used widely across the motu.</p> <p>Those taking three or more high-scoring DBI medications (especially sedative and cognitive medications) were almost twice as likely to fall and break their hip. The effect is due to each medication reacting with others, creating often unforeseen consequences.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/drug-burden-index/</p>	<p>Principal Investigator</p> <p>Associate Professor Hamish Jamieson University of Otago, Christchurch</p>

SOCIAL CONNECTION FOR OLDER ADULTS

<p>Manawaroa – a film about later life social connection</p>	<p>READY NOW Ageing Well</p>
<p>The film <i>Manawaroa</i> was co-created by older people of diverse cultural backgrounds, and younger filmmakers. It addresses stereotypical ideas of older people as a burden, which are contrary to research evidence that shows what older people contribute to society.</p> <p>It does this through Arts-Based Knowledge Translation, recognizing that creative arts can make people think differently about important and complex social issues, and that engaging people’s hearts can open their minds to change.</p> <p>The film is part of Age Concern New Zealand’s campaign to end loneliness and plans are underway to include it in the University of Auckland Nursing Programme. One of the most effective ways to increase health and wellbeing is to raise awareness, particularly with our future health workforce, of the broader determinants of wellbeing, such as the importance of social connection to overcome loneliness.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/promoting-social-connection/</p>	<p>Principal Investigators</p> <p>Professor Merryn Gott University of Auckland</p> <p>Dr Lisa Williams University of Auckland</p>

IMPROVING WELLBEING FOR OLDER MĀORI

<p>Kaumātua Mana Motuhake tuakana-teina intervention</p>	<p>READY NOW Ageing Well</p>
<p>Kaumātua Mana Motuhake is a kaupapa Māori peer education programme that empowers older Māori to navigate challenges associated with ageing. The Programme draws on the Māori view of ageing, that encompasses ever-accumulating mātuaranga - which can be passed on to younger peers, benefiting both mentor and mentee.</p> <p>The Programme was implemented in partnership with Hamilton’s Rauawaawa Kaumātua Charitable Trust, and was cost effective in improving wellbeing measures such as tribal identity (for teina/mentees) and sense of purpose (for tuakana/mentors).</p> <p>The scope and reach of the project is currently being expanded through new research involving up to 350 kaumātua across Aotearoa.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/kaumatua-mana-motuhake/</p>	<p>Principal Investigator</p> <p>Professor Brendan Hokowhitu University of Queensland</p> <p>Co-Investigators</p> <p>Professor John Oetzel University of Waikato</p> <p>Rangimahora Reddy Rauawaawa Kaumātua Charitable Trust</p> <p>Research partner</p> <p>Rauawaawa Kaumātua Charitable Trust</p>

ENSURING HIGHEST QUALITY OF END-OF-LIFE CARE

<p>Frailty index and trajectories to guide care in retirement villages</p>	<p>READY NOW Ageing Well</p>
<p>This study yielded a frailty index tool which can, on an individual level, lead to direct referral for those with high scores to a geriatrician/frailty team, and also help make decisions regarding interventions with significant risk (e.g. chemotherapy, surgery).</p> <p>The tool is based on data from interRAI – International Resident Assessment Instrument, an evidence-based clinical assessment questionnaire used widely across the motu. At a population level, the tool allows frailty to be measured and compared across Aotearoa/facilities, so that policy makers and care facility operators can better plan infrastructure, funding, and support.</p> <p>The research also measures changes in frailty of retirement village residents over 2.5 years and the concurrence of health events, and explores the relationship between frailty, quality of life and resilience.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/frailty-trajectories/</p>	<p>Principal Investigator</p> <p>Dr Katherine Bloomfield University of Auckland</p>

<p>Frailty Care Guides</p>	<p>READY NOW Ageing Well</p>
<p>The Frailty Care Guides are a set of 26 decision support tools that provide guidance to nurses providing end-of-life care. They cover topics such as advance treatment planning, dementia, enduring power of attorney, and pain assessment and management.</p> <p>The guides promote early intervention and communication with the older person’s multidisciplinary team. They were developed in collaboration with the Health and Safety Quality Commission, the government agency that works to improve health and disability support services. The Commission released an updated version in September 2023, to include more Māori material.</p> <p>The guides can be used, alongside clinical best practice, in any setting where people at risk of frailty receive care, including aged residential care, primary health care, community care, hospice and acute hospitals.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/neurodegeneration-and-individual-interventions/ and https://www.hqsc.govt.nz/resources/resource-library/frailty-care-guides-nga-aratohu-maimoa-hauwarea-2023-edition/</p>	<p>Principal Investigator</p> <p>Associate Professor Michal Boyd University of Auckland</p>

<p>Recognising deterioration</p>	<p>READY NOW Ageing Well</p>
<p>In developing the Frailty Care Guides, a gap became apparent between care practices and operational management of residents' health in aged residential care facilities. To address this, the Deterioration Early Warning System (DEWS) was developed to help clinical staff recognize health deterioration early for those in residential aged care.</p> <p>The DEWS tool is based on statistical data from the interRAI (International Resident Assessment Instrument) database combined with qualitative data from interviews with residents, families, facility staff, nurses, general practitioners and geriatricians, and was co-designed with clinical and non-clinical expertise, including Māori cultural expertise.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/recognising-resident-deterioration-in-residential-aged-care/</p>	<p>Principal Investigator</p> <p>Associate Professor Michal Boyd University of Auckland</p>

INJURY PREVENTION AND RECOVERY FOR OLDER MĀORI

<p>Whaioranga te Pā Harakeke – Māori injury prevention & recovery service</p>	<p>READY NOW Ageing Well</p>
<p>Research suggests older Māori in Te Arawa iwi area may be at more risk of age-related, unintentional injury than other Māori nationally, and non-Māori regionally. Also, there is a need to provide whānau with choices and options to experience an ACC-funded injury prevention and recovery care service as Māori, where Te Ao Māori worldviews and preferences are prioritised.</p> <p>In response, an injury prevention, rehabilitation, and recovery workforce with iwi and communities was developed, and the impact of the new workforce on individuals and communities measured. Central to the workforce are paeārahi (community navigators) who centre their approach on mātauranga Māori and are welcomed by whānau and communities.</p> <p>132 koeke (older people) were part of a 12-week intervention with support from paeārahi, and improved wellbeing was recorded across all four aspects of the Te Whare Tapa Whā model, as well as, for a proportion of koeke, greater confidence around accessing injury care.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/whaioranga-te-pa-harakeke/ or contact: j.hikaka@auckland.ac.nz</p>	<p>Principal Investigator</p> <p>Dr Joanna Hikaka University of Auckland</p> <p>Research partner</p> <p>Te Arawa Whānau Ora Collective</p>

HOUSING ISSUES AND RESPONSE FOR OLDER PEOPLE

Older renters' toolkit	READY NOW Ageing Well
<p>With lack of effective state-wide provision of affordable housing for seniors, a rapidly increasing proportion of over-65s are having to live in rental accommodation – known as the “Tenure Revolution.”</p> <p>As part of a wide set of research questions and findings covering the impact of this phenomenon on older people’s health, wellbeing, independence, dignity and social engagement, a suite of tools for older renters has been produced:</p> <ul style="list-style-type: none">▪ Going for Good Renting: A Guide for Renting in Later Life;▪ Rapid Reference for Older Renters;▪ Housing and Supporting Older Tenants: A Landlords Guide. <p>The suite of tools covers information on rental options available, tenancy advice, moving to another rental or other living arrangement, and sources of support.</p> <p>More information: https://www.ageingwellchallenge.co.nz/research/independence-and-housing-tenure/ and https://renting.goodhomes.co.nz/tools-for-you-renting/</p>	<p>Principal Investigator</p> <p>Dr Kay Saville-Smith Centre for Research, Evaluation and Social Assessment (CRESA)</p>

7. Huringa āhuarangi | Climate change

HEALTH AND ENVIRONMENTAL CO-BENEFITS OF OPTIMAL DIET AND ACTIVE TRAVEL

<p>Sustainable New Zealand Kai</p> <p>This study identified several versions of theoretical diet to meet the nutritional needs of Aotearoa New Zealand’s population while reducing greenhouse gas emissions, at minimal additional cost to individuals. Epidemiological modelling showed that population-wide adoption of this diet would result in significant benefits: improved health outcomes, increased equity of health outcomes, cost-savings in the health system, and reduction in greenhouse gas emissions.</p> <p>The research team consulted policymakers, academics, industry representatives and community members to identify five feasible policy interventions which could create a population-level shift towards a more sustainable diet. The impact of these interventions was modelled: all five policies would result in health benefits and more equitable health outcomes; three would result in overall cost savings while the other two would be cost-effective or borderline cost-effective.</p> <p>More information: https://healthierlives.co.nz/research/sustainable-nz-diets/</p>	<p>READY NOW Healthier Lives</p> <p>Principal Investigators</p> <p>Dr Cristina Cleghorn University of Otago, Wellington</p> <p>Dr Christina McKercher <i>Ngāti Kahungunu, Tūhoe, Ngāti Porou</i> University of Otago, Christchurch</p>
<p>ACTIVATION: Active and shared travel in neighbourhoods</p> <p>This research explored ways of retro-fitting the design of urban neighborhoods and increasing residents’ mobility choice, to encourage more active and shared modes of travel. It was undertaken at two separate sites:</p> <ul style="list-style-type: none"> • in Māngere, South Auckland, the project investigated the impact of locally co-designed activities aimed at increasing the connectivity and use of walking and biking infrastructure; • in central Christchurch, it investigated how shared transport options and housing design can be integrated to encourage active mobility. <p>The research team worked closely with community stakeholders and policymakers to develop evidence to inform future housing and transport policy.</p> <p>More information: https://healthierlives.co.nz/research/activation/ or contact: K.Witten@massey.ac.nz</p>	<p>READY NOW Healthier Lives & Ageing Well</p> <p>Principal Investigators</p> <p>Professor Karen Witten Massey University</p> <p>Professor Simon Kingham University of Canterbury</p> <p>Dr Hamish Mackie Mackie Research</p> <p>Professor Alistair Woodward University of Auckland</p> <p>Dr Angela Curl University of Otago Christchurch</p> <p>Research partners</p> <p>Waka Kotahi; Auckland Council; Time-to-Thrive; Ōtautahi Community Housing Trust; Te Whatu Ora Canterbury; Christchurch City Council</p>

Ngā mihi | Acknowledgements

We acknowledge the commitment of communities, research partners, study participants and research teams, and thank them for creating the evidence base for improving health and wellbeing in Aotearoa New Zealand presented in this document.

He kōrero mō mātou | About us

National Science Challenges (NSCs) are collaborative research programmes with a mission to address some of the biggest science-based issues and opportunities facing Aotearoa New Zealand. Three NSCs focus on health and wellbeing across the life-course:

- ◆ **A Better Start: E Tipu e Rea** is working to find practical, evidence-based solutions that make a measurable and impactful difference in the lives of our tamariki and rangatahi. Researchers are creating the tools and methods to predict, prevent and intervene early so children have a healthy weight, are successful learners, and can access the tools they need to look after their mental health.
- ◆ **Healthier Lives: He Oranga Hauora** investigates equitable approaches to the prevention and treatment of four major non-communicable diseases – cancer, cardiovascular disease, diabetes and obesity.
- ◆ **Ageing Well: Kia eke kairangi ki te taikaumātuatanga** tackles the most important ageing-related themes facing Aotearoa’s older generations - kaumātuatanga, hāpori, tātai hono and tinana (age friendly, community, connection and wellbeing).

We aim to deliver equitable outcomes by working towards Te Tiriti Partnership and by building enduring relationships between stakeholders and researchers.

A Better Start is hosted by The University of Auckland. Healthier Lives and Ageing Well are hosted by the University of Otago. NSCs are funded by the Ministry of Business, Innovation and Employment.

Note: This inventory was first published in September 2023 and updated in August 2024.



**A Better Start:
E Tipu e Rea**

www.abetterstart.nz



**Healthier Lives:
He Oranga Hauora**

www.healthierlives.co.nz



**Ageing Well: Kia eke kairangi ki
te taikaumātuatanga**

www.ageingwellchallenge.co.nz

