

Findings from LiLACS NZ

Te Puāwaitanga o Ngā Tapuwae Kia Ora Tonu
Life and Living in Advanced Age: a Cohort Study in New Zealand

Dr. Marama Muru-Lanning¹, Dr. Ruth Teh²

¹James Henare Māori Research Centre, University of Auckland

²School of Population Health, University of Auckland



Towards an Age-friendly Auckland: The missing links
Western Springs Community Hall
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Background

85+ is the fastest growing age group (increasing from 1 to 6 percent of the total population by 2050)

Longitudinal cohort study of advanced ageing



Objective: to establish the predictors of successful ageing for Māori and non-Māori

Cultural and academic guidance

LiLACS NZ Leadership team

Ngaire Kerse, Ruth Teh, Anna Rolleston, Marama Muru-Lanning

Te Rōpū Kaitiaki o Ngā Tikanga Māori

Provide cultural and ethical guidance

Co-investigators

Karen Hayman, Carol Wham, Martin Connolly, Tim Wilkinson, Valerie Wright St.Clair, Avinesh Pillai, Janine Wiles, Sally Keeling, Santosh Jatrana, Ian Reid, Robert Doughty, Joanna Broad, Oliver Menzies, Thomas Lumley

Community partners

Western Bay of Plenty Research Centre (WBOPPHO), Nga Matapuna Oranga PHO, (Ngati Awa Research Archives, Awanuiarangi), Ngati Irapua, Ngati Pikiiao/ Korowai Aroha, RAPHS.



Funders



Snapshot

When did we start?

- 2010 (baseline)

How many people were recruited?

- 421 out of 766 Māori (56%)
- 516 out of 870 Non Māori (59%)
- TOTAL: 937 participants

Where do the participants live?

- Bay of Plenty and Lakes DHBs (excluding Taupo)

Measures – Core and Full Questionnaires

- Diagnoses
- Social and cultural
- Nutritional intake
- Mental health
- Health: Quality of life – SF-12, Mortality



Who are the study participants?

Parents who had survived World War I

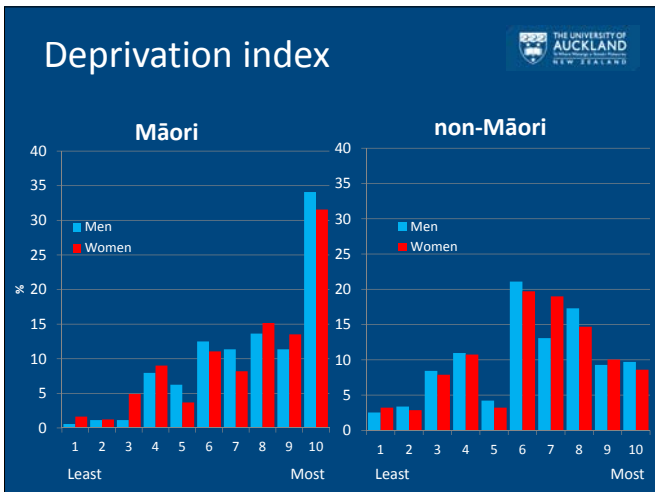
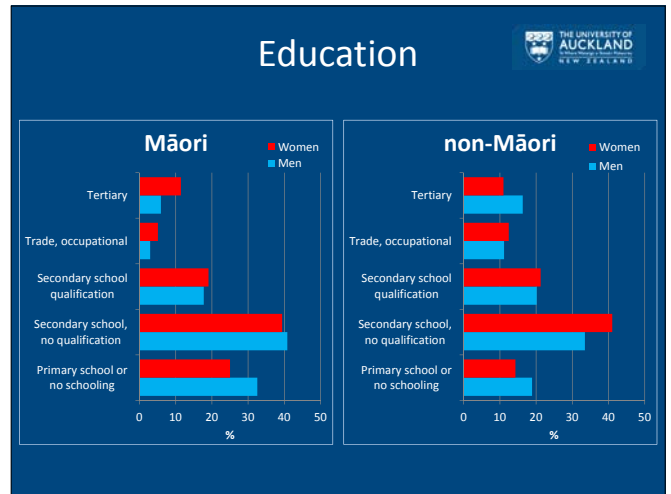
Māori born between 1920 – 1930
Non-Māori born in 1925

Living off the land, bush or sea

Born into the Great Depression 1929-1930s

Gone through World War II

So: Museum of New Zealand Te Papa Tongarewa



Characteristics

	Māori	Non-Māori
	254/421	400/516
Age (sd)	82.7 (2.8)	84.6 (0.5)
Gender Men	176 (42%)	237 (46%)
Residential Care	30 (7%)	44 (9%)
Lives alone	110 (41%)	195 (48%)
Driving	148 (59%)	287 (73%)
Fell	138 (34%)	205 (40%)
Disability 0-14/22 NEADL	44 (17%)	63 (16%)
Physical activity PASE	111 (81)	99 (66)
	M 113, W 89	M 107, W 77
At risk of undernutrition	126 (49%)	153 (38%)

Teh et al. NZ Med J 2014

Characteristics:

	Māori	Non-Māori
Depressive sx	38 (15%)	42 (11%)
Grip str	M 31, W 20	M 30, W 18.5
Gait sp	0.7 (0.3)	0.8 (0.3)
N meds	5.0 (3.3)	5.4 (3.5)
Comorbidity score	4.7 (2.5)	4.9 (2.2)
Hospital admissions	148 (40%)	89 (34%)
Visual disability	150 (37%)	147 (29%)
Hearing disability	128 (31%)	133 (26%)
Pack yr Hx*	9.3 M 11.5 W 7.9	6.6 M 10.4 W 3.7
Mortality (2.5 years)	100 (24%)	109 (21%)

Cardiovascular disease

	Men		Women		OR (95% CI) [§] Gender (Ref: Men)	OR (95% CI) ^{§1} Ethnicity (Ref: Māori)
	Māori	Non-Māori	Māori	Non-Māori		
HTN	138 (78%)	188 (79%)	215 (88%)	238 (85%)	1.88 [1.31-2.71]	0.82 (0.54-1.25)
Any CVD	119 (68%)	158 (65%)	188 (75%)	205 (74%)	0.87 [1.14]	0.87 (0.62-1.20)
CAD	88 (50%)	110 (46%)	105 (43%)	106 (38%)	0.73 [0.50-1.05]	0.83 (0.61-1.14)
CHD	81 (46%)	103 (42%)	103 (41%)	103 (37%)	0.73 (0.51-1.05)	0.83 (0.61-1.12)
PVD	30 (17%)	41 (17%)	35 (15%)	27 (10%)	1.41 [0.46-0.98]	1.23 (0.52-1.49)
Any AF	58 (35%)	51 (22%)**	62 (27%)	54 (20%)	0.80 (0.59-1.09)	0.62 (0.43-0.89)
AF on ECG	28 (27%)	27 (15%)*	23 (16%)	21 (11%)	0.61 (0.39-0.94)	0.56 (0.32-0.96)

Disparities in cardiovascular disease persist into advanced age

Health conditions



	Men		Women		OR (95% CI) ¹ Gender (Ref: Men)	OR (95% CI) ² Ethnicity (Ref: Māori)
	Māori	Non-Māori	Māori	Non-Māori		
Eye disease	4 (4%)	1 (1%)	1 (1%)	1 (1%)	1.29 (0.95-1.76)	0.54 (0.45-0.89)
Asthma or COPD	62 (36%)	57 (24%)	78 (34%)	77 (28%)	1.29 (0.95-1.76)	0.54 (0.45-0.89)
Type II diabetes	11 (6%)	17 (7%)	53 (23%)	89 (33%)*	5.37 (3.48-8.31)	1.33 (0.87-2.03)
Any arthritis	5 (3%)	7 (3%)	10 (4%)	31 (12%)	3.01 (1.55-5.86)	2.14 (1.03-4.44)
Osteoarthritis	5 (3%)	7 (3%)	10 (4%)	31 (12%)	3.01 (1.55-5.86)	2.14 (1.03-4.44)
RA	0 (0)	0 (0)	0 (0)	0 (0)	0.04 (-0.02-0.10)	0.02 (-0.05-0.09)
Depression	38 (22%)	54 (23%)	71 (30%)	71 (26%)	1.34 (0.96-1.83)	1.19 (0.82-1.71)
Alcohol use disorder	1 (0.5%)	1 (0.4%)	1 (0.4%)	1 (0.4%)	1.29 (0.93-1.79)	0.54 (0.45-0.89)
Dementia	11 (6%)	17 (7%)	53 (23%)	89 (33%)*	5.37 (3.48-8.31)	1.33 (0.87-2.03)
Thyroid disease	5 (3%)	7 (3%)	10 (4%)	31 (12%)	3.01 (1.55-5.86)	2.14 (1.03-4.44)
Chronic conditions	5 (0, 13)	5 (0, 12)	5 (0, 12)	5 (0, 12)	0.04 (-0.02-0.10)	0.02 (-0.05-0.09)

Higher prevalence of chronic lung disease, diabetes, rheumatoid arthritis and dementia in Māori.

In non-Māori eye disease, osteoarthritis and thyroid disease is more prevalent

Clusters of conditions



- Groupings of conditions rather than number
- Clustered by person to identify profiles of conditions

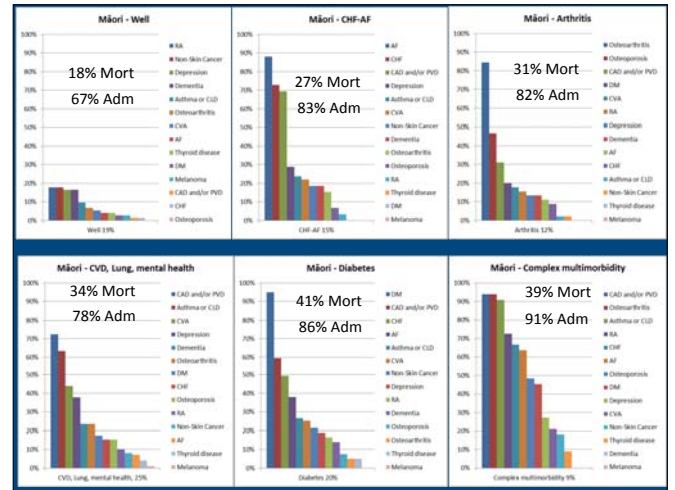
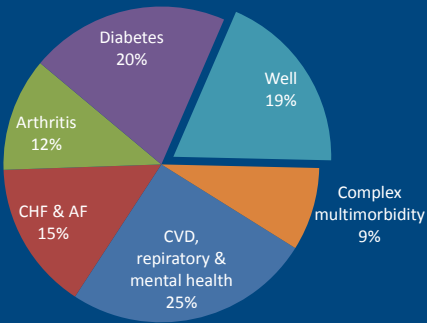


Multi-morbidity

Māori



Cluster of conditions

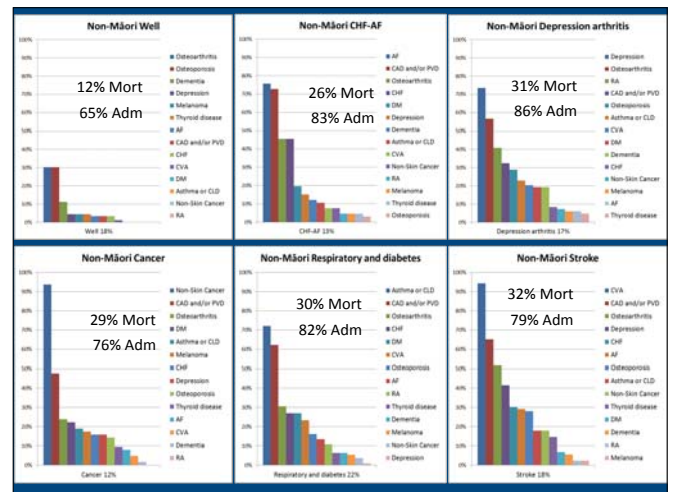
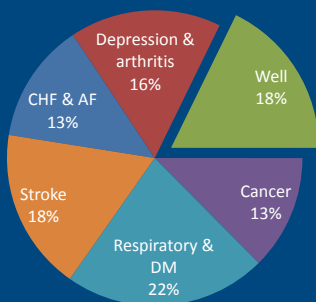


Multi-morbidity

Non-Māori



Cluster of conditions



Multi-morbidity

Findings

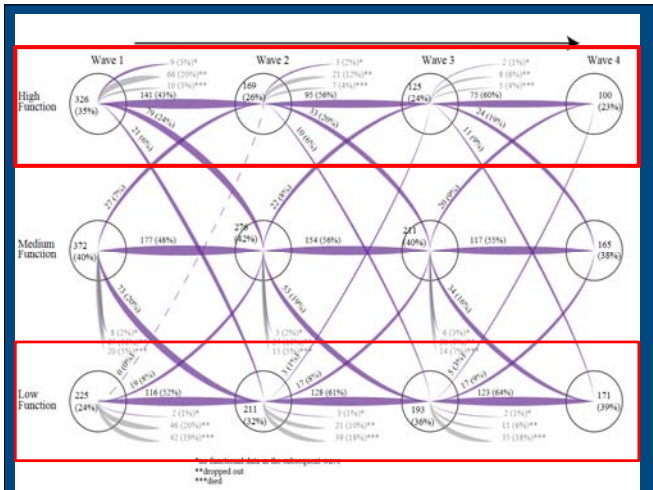
- Personalised care is needed
- Evidence Based Medicine guidelines dealing with single condition may be inappropriate in older people

Medication prescribing quality

	Māori (n=267)	Non-Māori (n=404)	P Value
Prescribed medicines per person mean (range; ±SD)	4.63 (0-14; ±3.24)	4.92 (0-15; ±3.18)	0.288
Inappropriate meds. PIM STOPP n (%)	65 (24%)	113 (28%)	0.171
Omissions PPO START n (%)	155 (58%)	198 (49%)	0.013
PIM or PPO n (%)	175 (66%)	251 (62%)	0.207

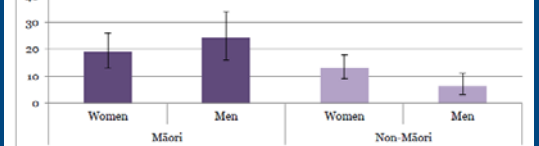
STOPP/START criteria in the LILACS NZ cohort
Key: PIM = Potentially inappropriate medicine; PPO = Potential prescribing omission;

Omission more closely related to outcomes than inappropriate meds

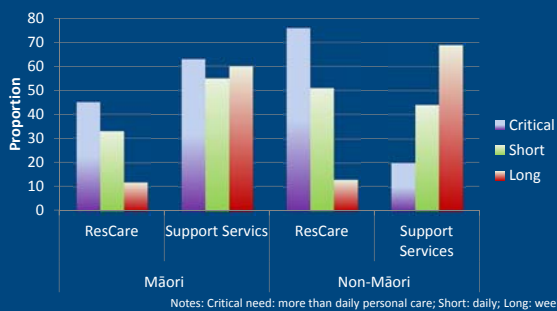


Extra practical support – unmet need

- Daughters and spouses main supporters
- More non-Māori men nominated home help as *main support*
- More Māori men living with 'other' expressed unmet need
- Unmet need assoc with HRQOL

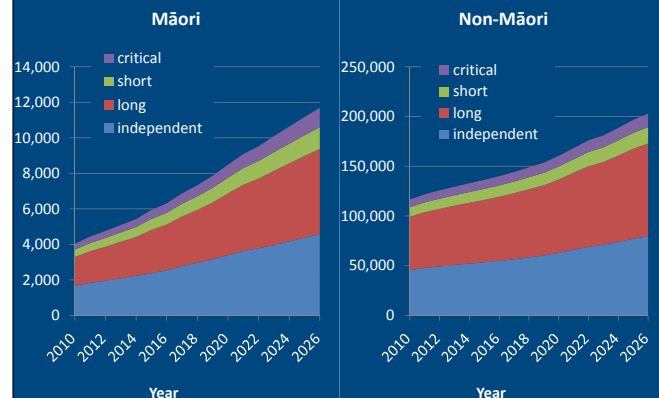


Needs and residential care placement



More Māori with critical needs in the community setting

Projections



Conclusions – LiLACS NZ



Findings

- Disparities in CVD persist into advanced age
- Outcomes from multi-morbidity vary by cluster rather than number of condition
- Omissions of medications related to hospitalisation
- Functional recovery possible
- Frailty and falls closely related
- Unmet needs differ by gender and living arrangement
 - Men living inter-generationally have higher unmet needs
 - Māori with high needs in the community may need more support
- Patterns of care differ by living arrangement and ethnicity
- Caregivers wellbeing – knowledge gaps
- One size does not fit all



- Born in 1922
- Deliver MOW fortnightly, among other activities
- Getting a bit wobbly, still not slowing down
- “keep walking to keep the brain going”



How can our community support maintenance of good quality of life for All ages?



How can our community support and encourage healthy lifestyle for All ages?



Baby boomers born 1946 - 1964, different life course exposures. What are their needs??



So: Museum of New Zealand Te Papa Tongarewa



Thank you...

Contacts



Prof. Ngaire Kerse¹, Dr. Ruth Teh¹, Dr. Marama Muru-Lanning²

¹School of Population Health, University of Auckland

²James Henare Māori Research Centre, University of Auckland

Email: n.kerse@auckland.ac.nz; r.teh@auckland.ac.nz
m.murulanning@auckland.ac.nz

LiLACS NZ Website

<https://www.fmhs.auckland.ac.nz/en/faculty/lilacs.html>

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