



Speaker handouts and presentations from the 11th International Meeting on Indigenous Health posted to the conference website are intended for educational use only.

These conference handouts and presentations may not be distributed, reproduced or cited in other presentations, publications or linked online without written permission from the speaker and the CPS.

CPS Education Department
Tel.: 613-526-9397, ext 263
education@cps.ca

Maaori Child Health Research Collaborative

Kaumatua Robert Clark ManaWhenua I Tamaki Makaurau (Ngāāti Tipa, Waikato – Tainui)

Kaumatua Barry Bublitz Manawhenua I Tamaki Makaurau (Ngāi Tai ki Tāmaki, Ngāti Kōhūa)

Professor Cass Byrnes (Ngāti Raukawa ki te tonga)



Kaumatua Camron Muriwai
(Ngāpuhi, Ngāti Whātua)

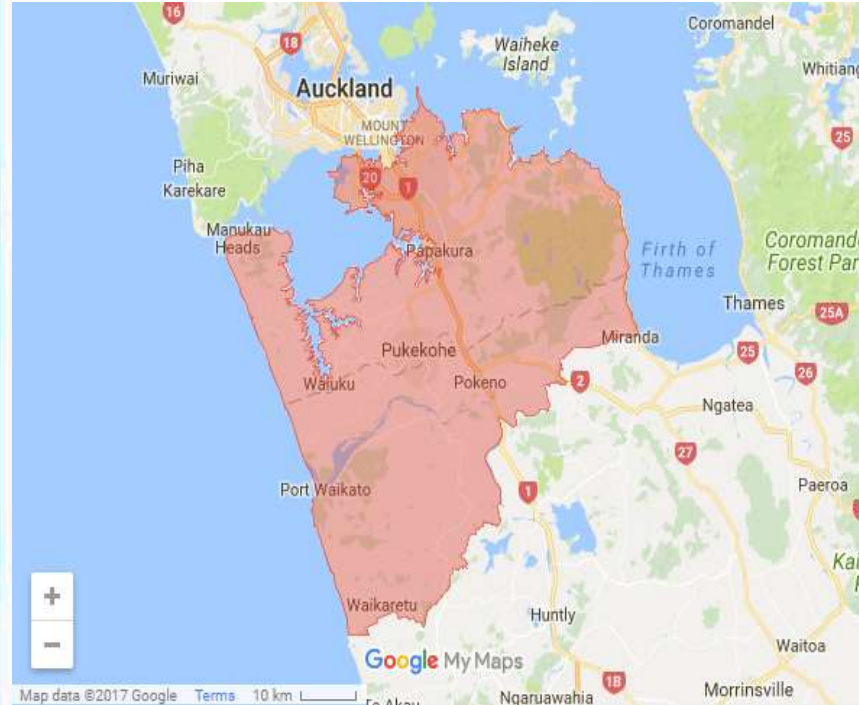
Faculty/Presenter Disclosure

I have (currently or within the past 24 months) the following financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in this CME activity:

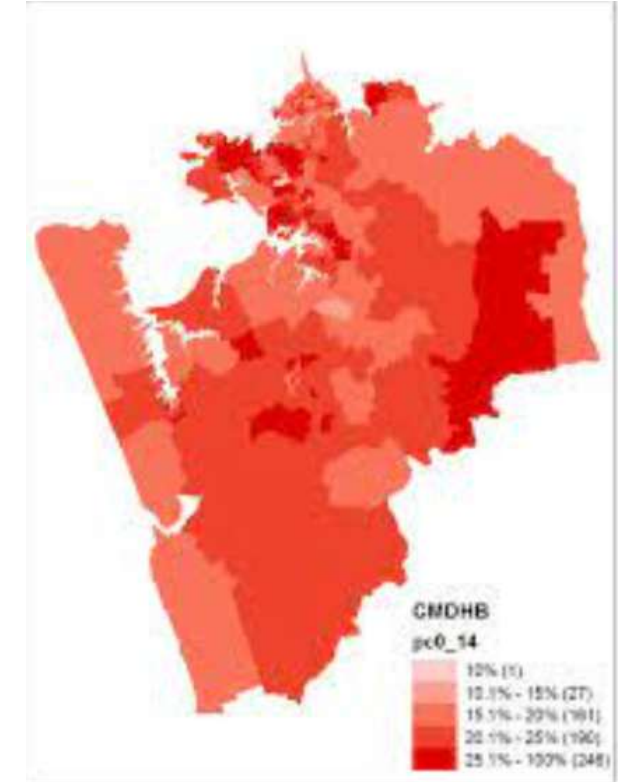
Research Support from: Vertex Pharmaceutical Company

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

Aoteorora New Zealand; setting the scene



>600,00 peoples
Fastest growing region
2030; 17% Maori, 23% Pacific,
33% Asian, 26% Pakeha/other

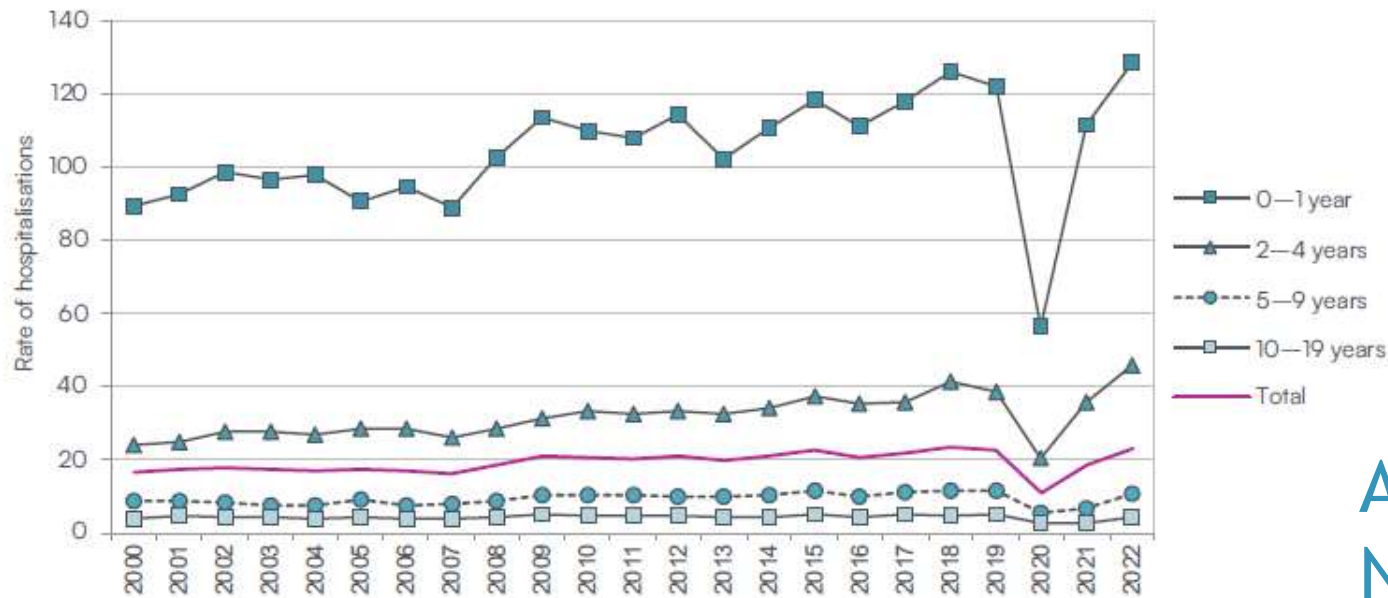


Includes 132,420 children 0-14 years
1 in 2 in 20% most deprived decile

Hospitalisations: 4,500/year
25% Maori, 39% Pacific

CureKids Report 2023

Acute respiratory hospitalisations National data set



Source: NMDS, NZCYES Estimated Resident Population. Rate per 1,000 age-specific population.

Figure 2.1: Trends in hospitalisations of 0–19-year-olds for respiratory conditions, by age group, Aotearoa NZ (2000–22)

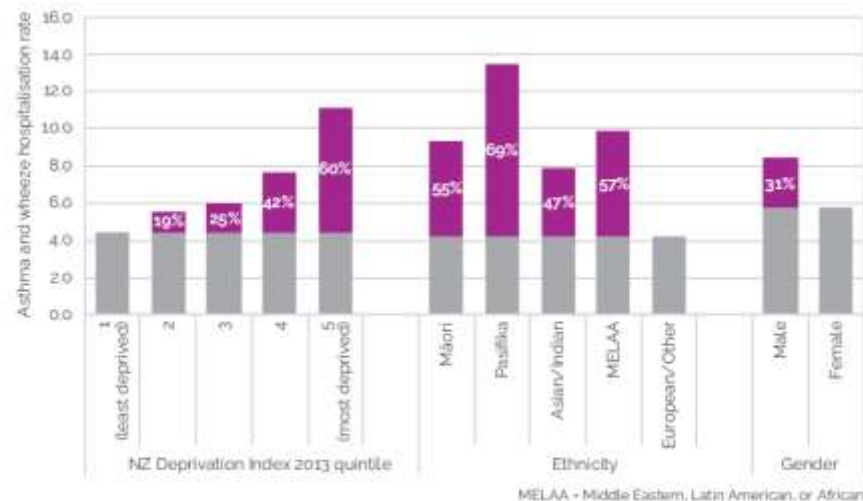
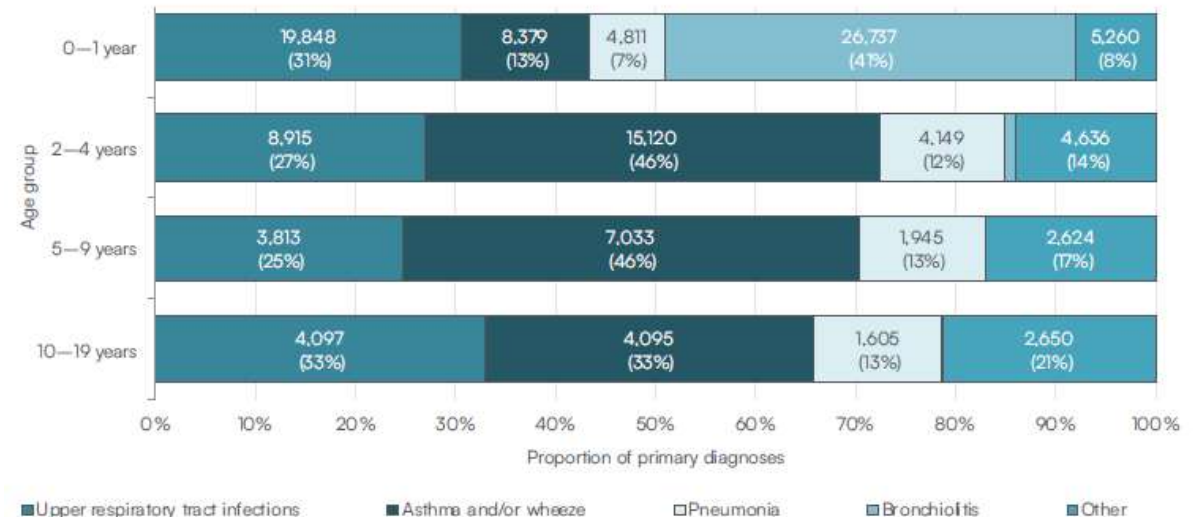


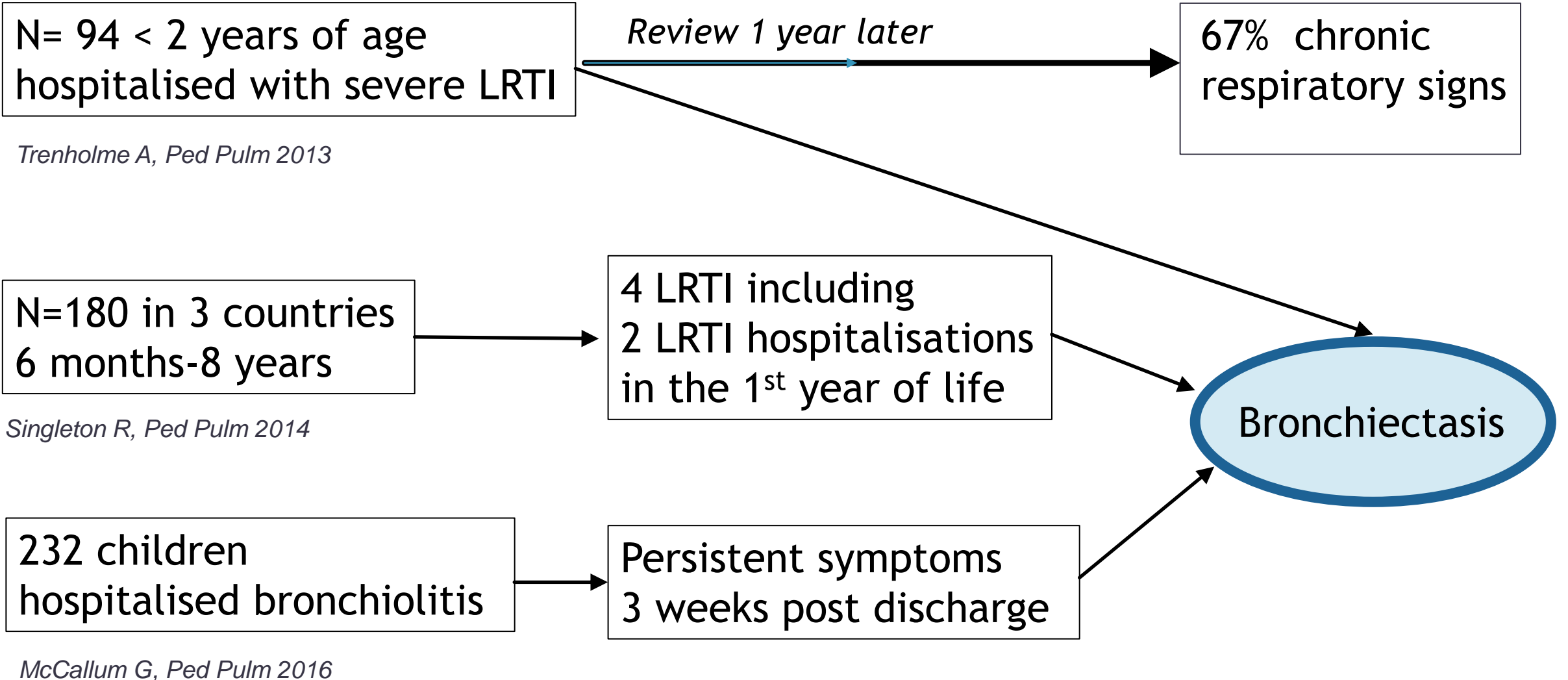
Figure 3.5: Potential reduction (attributable fraction) in hospitalisation rates for asthma and wheeze in children older than 1 year by demographic factors, Aotearoa NZ, 2015–19.



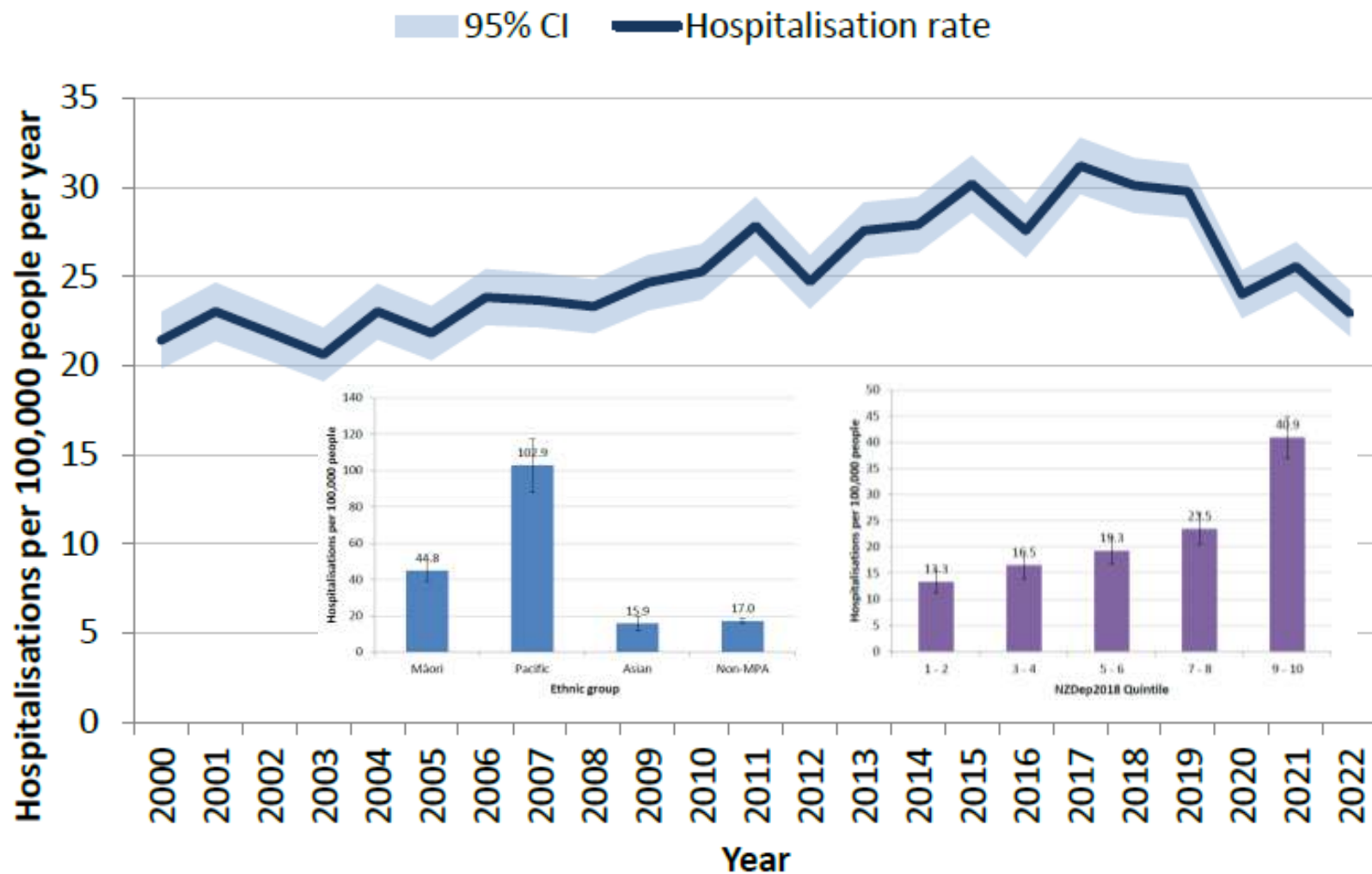
Source: NMDS. Other acute respiratory conditions include influenza, bronchitis, and bronchiectasis (excluding cystic fibrosis).

Figure 2.2: Causes of hospitalisations for respiratory conditions by age group, Aotearoa NZ (2018–22)

Development of Disease



Hospital Admissions for bronchiectasis



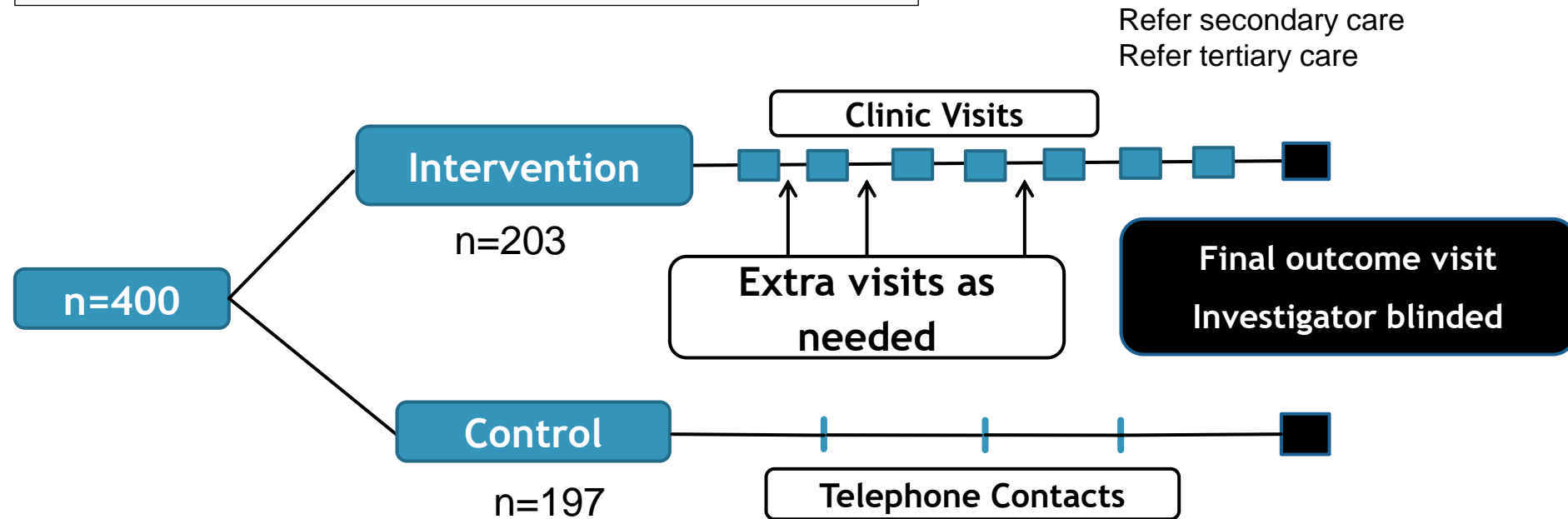
↑ hospitalisation 45%

↑ mortality 88%

Healthy Lungs Study - Trial of Intervention

Enrolment:

- Severe bronchiolitis or pneumonia hospitalisation
- Age < 2 years



Healthy Lungs Study Final results

- ▶ Wet cough 35.2%
- ▶ Crackles/Clubbing 22.7%
- ▶ CXR focal change 17%

- ▶ One or more abnormal outcomes 54.5%

- ▶ 12 with bronchiectasis in intervention group – 0 in control group

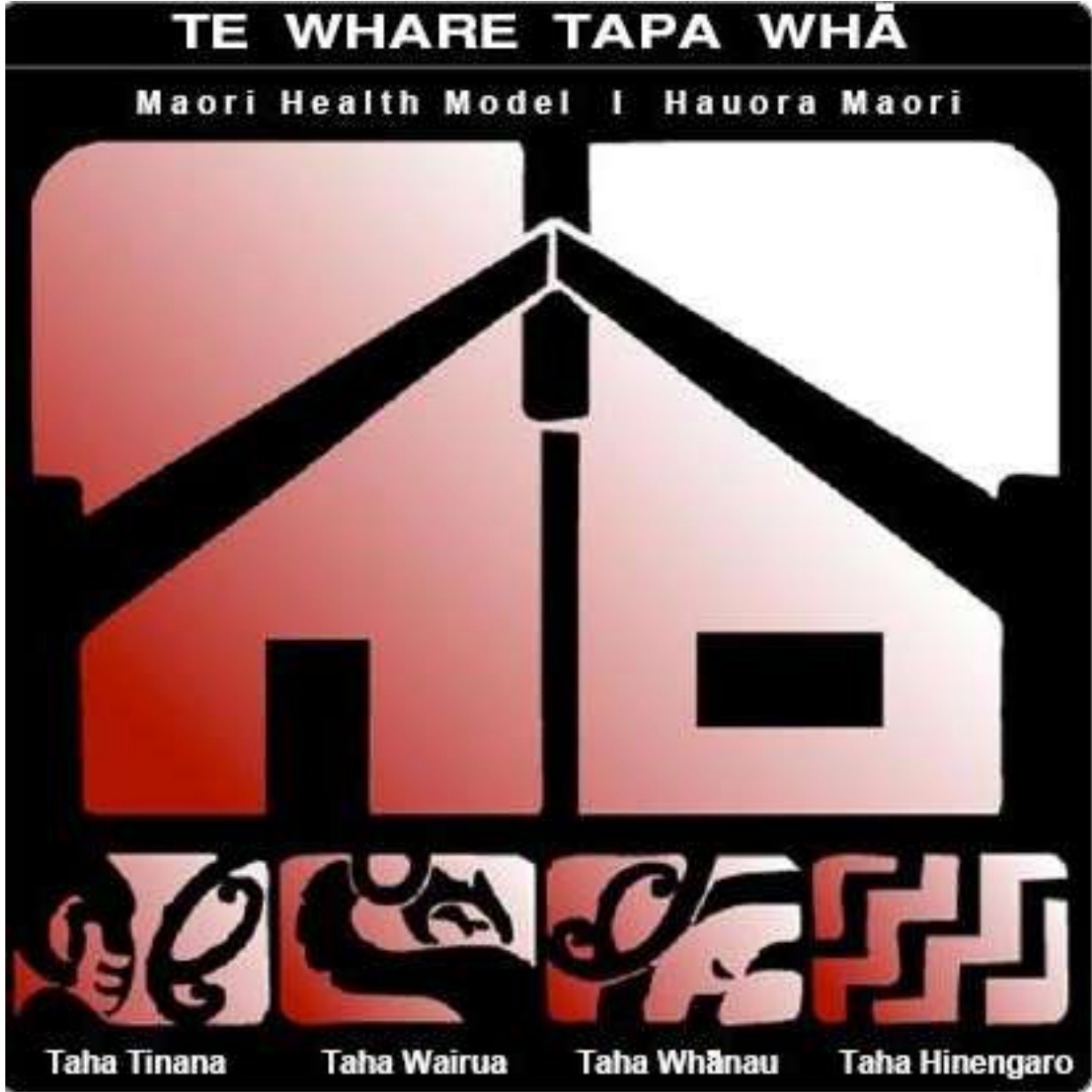
Healthy Lungs Study Final results

- ▶ Wet cough 35.2%
- ▶ Crackles/Clubbing 22.7%
- ▶ CXR focal change 17%
- ▶ One or more abnormal outcomes 54.5%
- ▶ 12 with bronchiectasis in intervention group – 0 in control group
- ▶ *No difference between group except for diagnoses with bronchiectasis*
- ▶ ***Why did the intervention not work?***

Healthy Lungs Study Final results

- ▶ Wet cough 35.2%
- ▶ Crackles/Clubbing 22.7%
- ▶ CXR focal change 17%
- ▶ One or more abnormal outcomes 54.5%
- ▶ 12 with bronchiectasis in intervention group – 0 in control group
- ▶ *No difference between group except for diagnoses with bronchiectasis*
- ▶ ***Why did the intervention not work?***
- ▶ ***Wrong model of care***

A model for understanding
Māori health developed
by Tā Mason Durie.



Physical growth
& development

Spiritual

Family

The mind

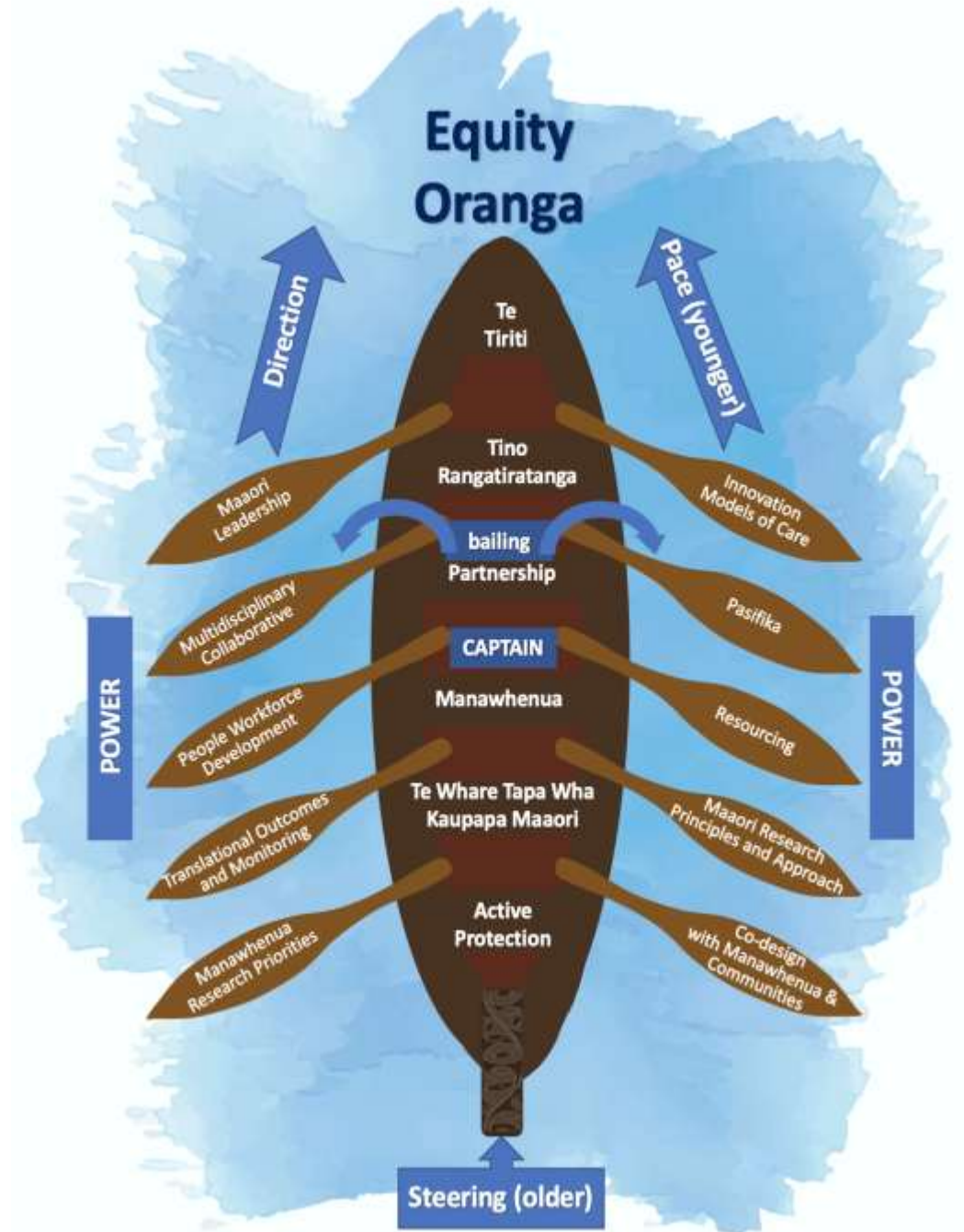
Māori Child Health Research Collaboration

Mana Whenua i Tāmaki Makaurau

Māori Health Leaders

South Auckland & University of Auckland Clinicians

Started in 2018



Māori Child Health Research Collaboration

Mana Whenua i Tāmaki Makaurau

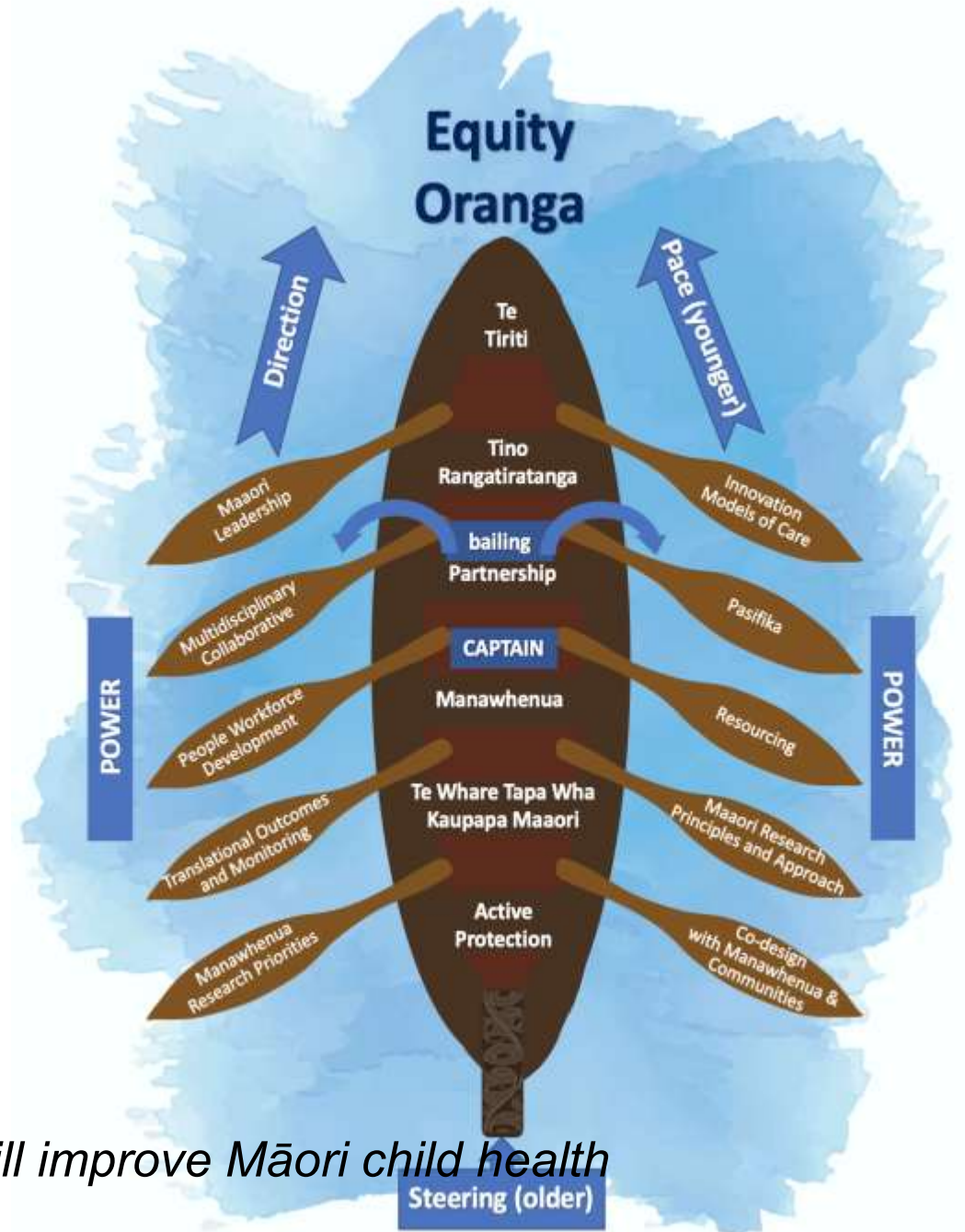
Māori Health Leaders

South Auckland & UoA Clinicians

Māori leadership

Healthcare workforce development

Research important to the community – which will improve Māori child health

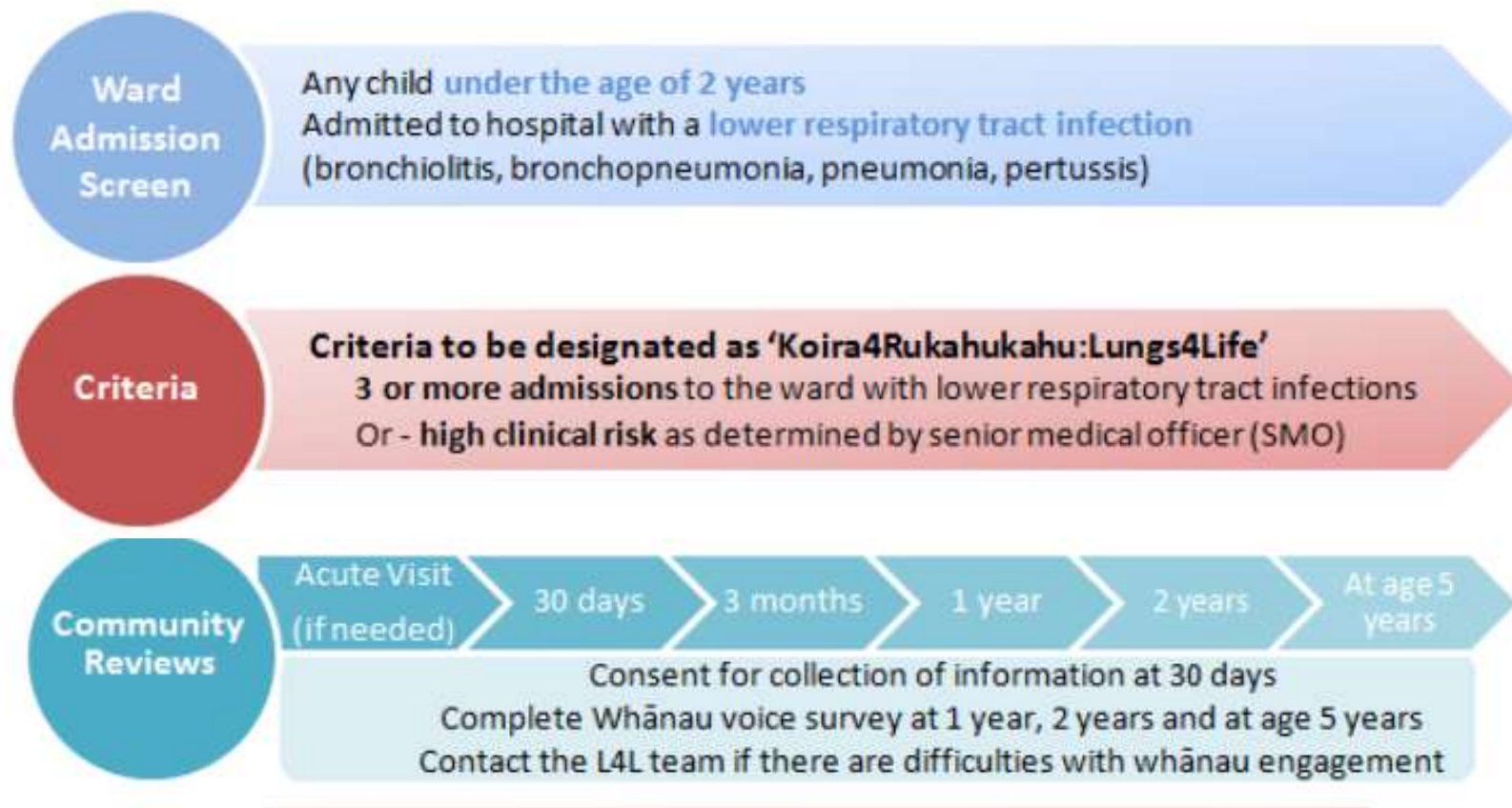
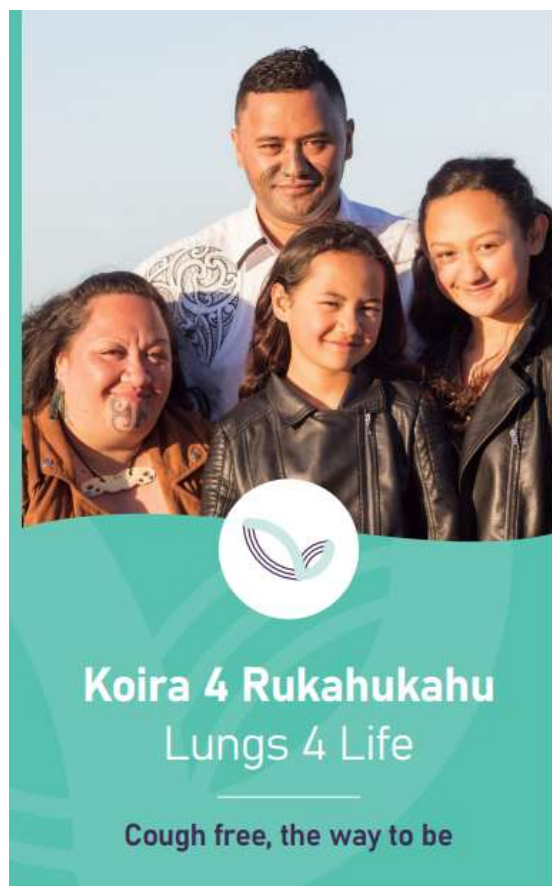


Implicit bias study & changing the discourse

- ▶ Health Research Council Grant *(Dr Adrian Trenholme)*
- ▶ Training in recognizing implicit bias and looking for system change *(Anton Blank & Minerva Ikimau)*
- ▶ Evaluation of implicit bias in clinical notes & by interviews *(Kimi Tangaere, Equity Evaluation Officer)*
- ▶ Inpatient paediatric service at Kidz First Hospital, South Auckland

Deficit discourse	Reframing
Māori are vulnerable	Māori are underserved
Māori have high health needs	Māori are prioritised
Māori are a minority	Māori are minoritised
Closing the gap	Achieve Māori health equity
Māori are underrepresented	Māori are systematically excluded

“alleges” “mum doesn’t work” “bloods unremarkable” “mum was asleep” “failure to thrive”



<https://starship.org.nz/guidelines/koira4rukahukahu-lungs4life/>



NORTHLAND DISTRICT HEALTH BOARD
Te Puni Hauora A Rōhe o Te Tai Tokerau



Te Tuapapa Mate
Rukahukahu o Aotearoa



Lungs4Life

4 Hospitals - total 524 children enrolled
(147 now been in for 2 years, 48 not under active review)

- Complete 2 year review
- Qualitative interviews to get the whānau voice



Lungs4Life - prelim

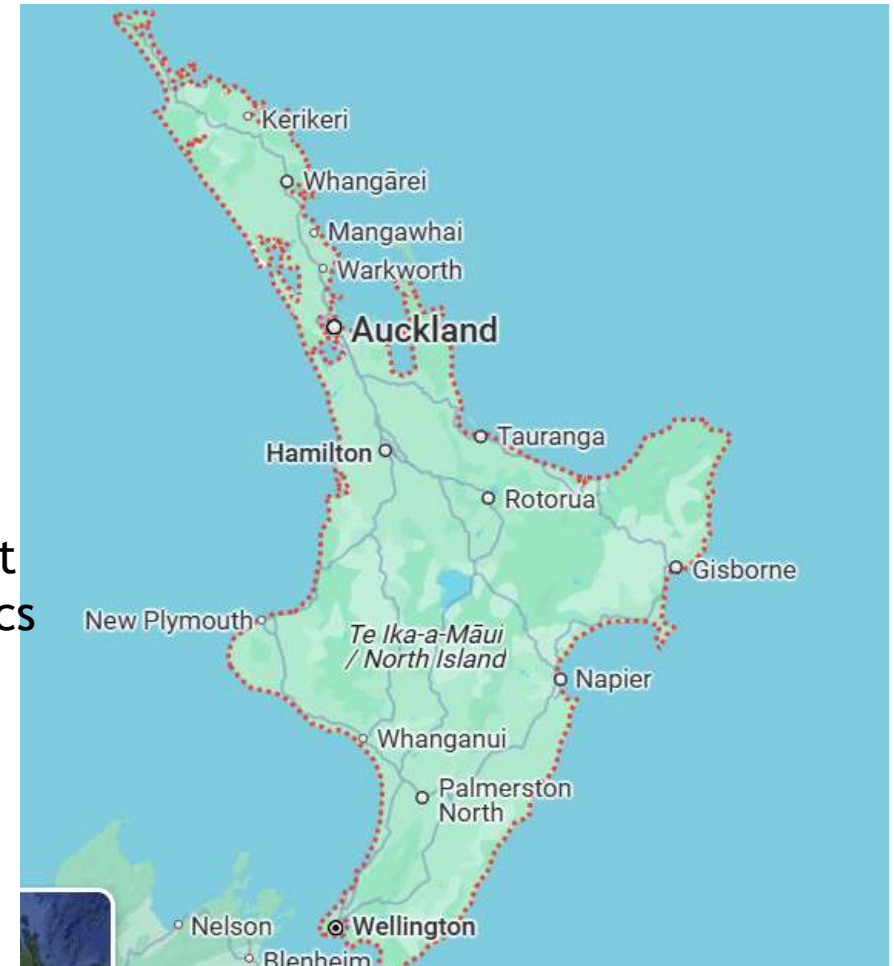
524 children enrolled - 147 in for 2 years

Quantitative

- Immunisations from 20% to 95%
- Asthma action plans 85% - more preventative medication
- Earlier follow-up of chronic wet cough
- Earlier referral to appropriate investigations or management e.g Speech language therapy, physiotherapy, general paediatrics
- Link antenatal care - midwives

Qualitative - whānau voice

- more confident with managing at home
- know who to contact
- Better access to timely care
- Why isn't this available for all



*High bar to enrolment
Resourcing an issue*

Healthy lungs follow-up

205/403 (51%) followed up 2022-2023

Mean age 11.5 years
(10.3 – 12.9)
43% female
57% male

Ethnicities:
29% Māori
62% Pacific
8% European-other

70% in the most
deprived quintile

Immunisations
up to date
79%

80% had 5 or more
people living in the
house

Smoke exposure:
ever 61%
current 44%

Healthy lungs follow-up

- ▶ 93% have own GP, 57% have seen GP >2 last 12 months
- ▶ Mean 1.1 hospital admission since original study

current medications	
bronchodilators	23%
IHCS	8%
Oral steroids	51%
antibiotics	56,1% (mean 2.1 courses

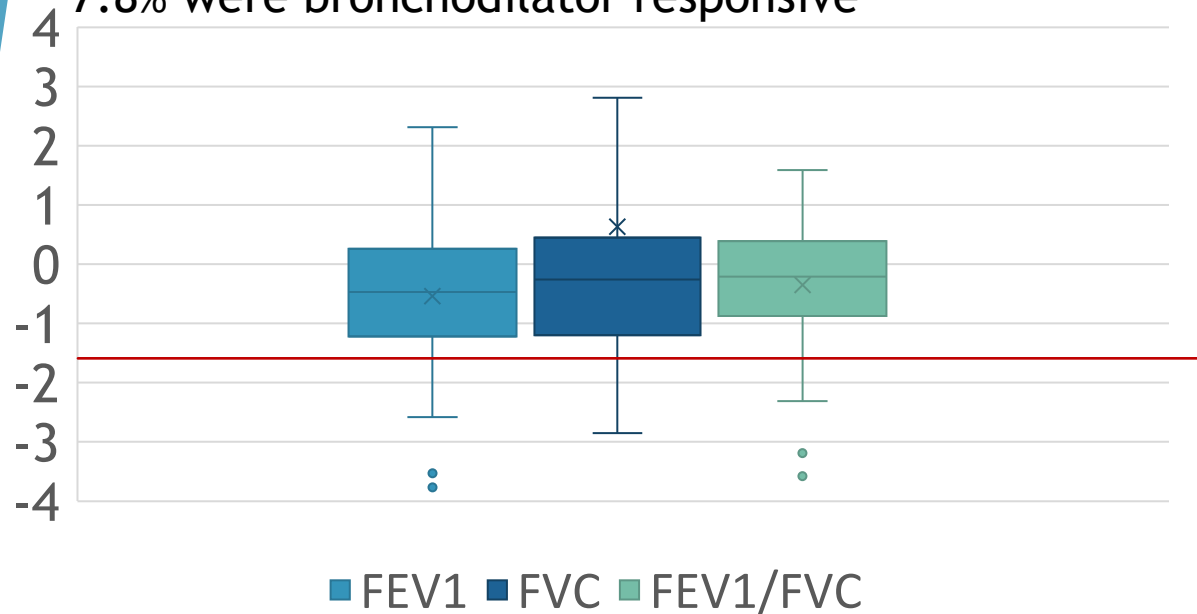
- ▶ 24% positive Obstructive Sleep Apnoea questionnaire
- ▶ 25% skin issues

Healthy lungs follow-up

Spirometry

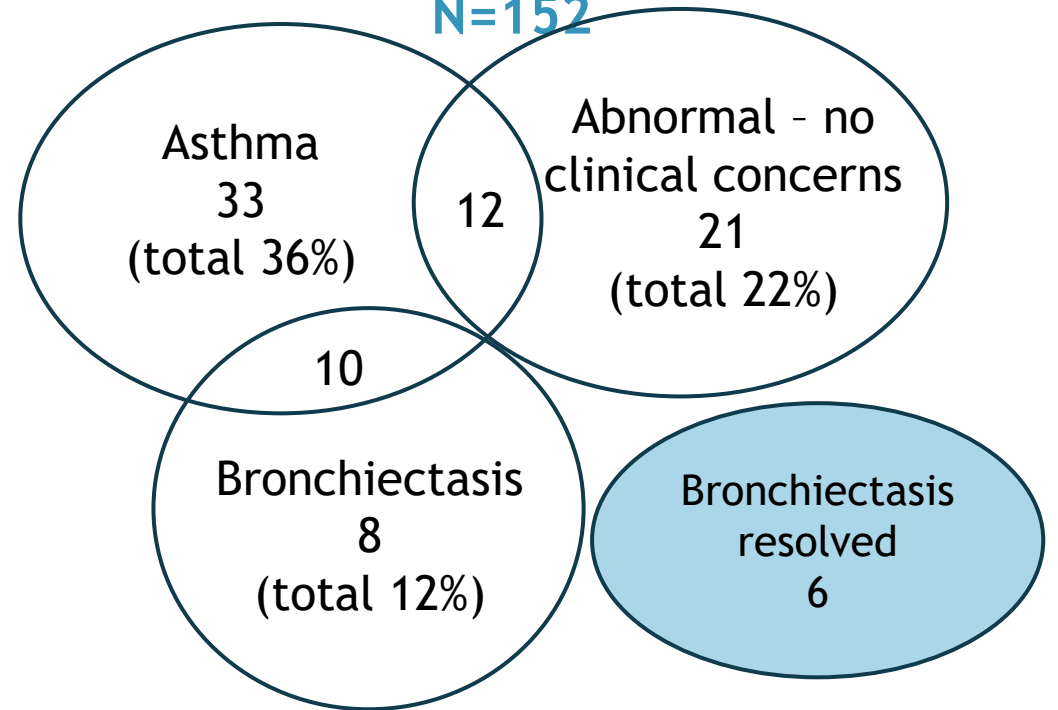
15% abnormal lung function ($FEV1 < -1.64$ z score)

7.8% were bronchodilator responsive



Including only those that had Chest CT scan

N=152



Only difference between groups was in new diagnosis bronchiectasis in the original control group

Bronchiectasis:

Usual Care:

- Regular (daily) chest physiotherapy
- Intermittent oral antibiotics - prolonged

Once it is decided hospital admission is needed to treat an infective exacerbation

Current recommendation:

- Intravenous antibiotics for 12-14 days
- Chest physiotherapy - 2x daily with paediatric physiotherapy oversight

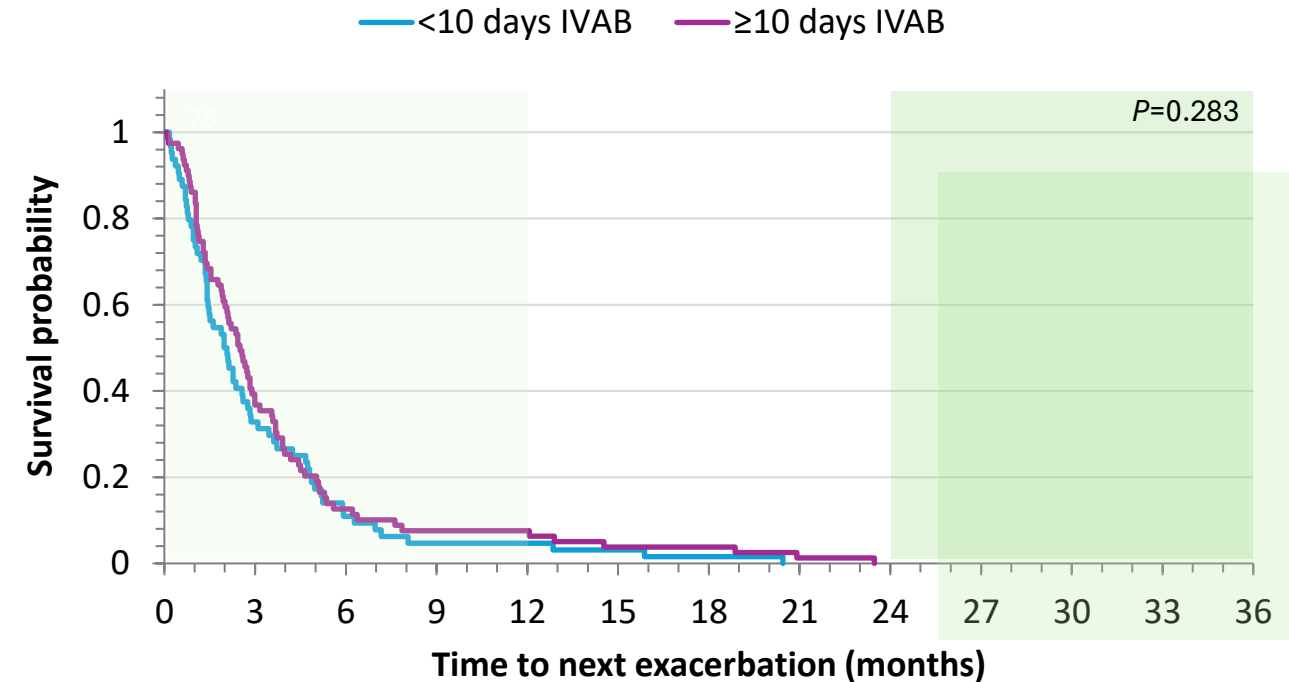
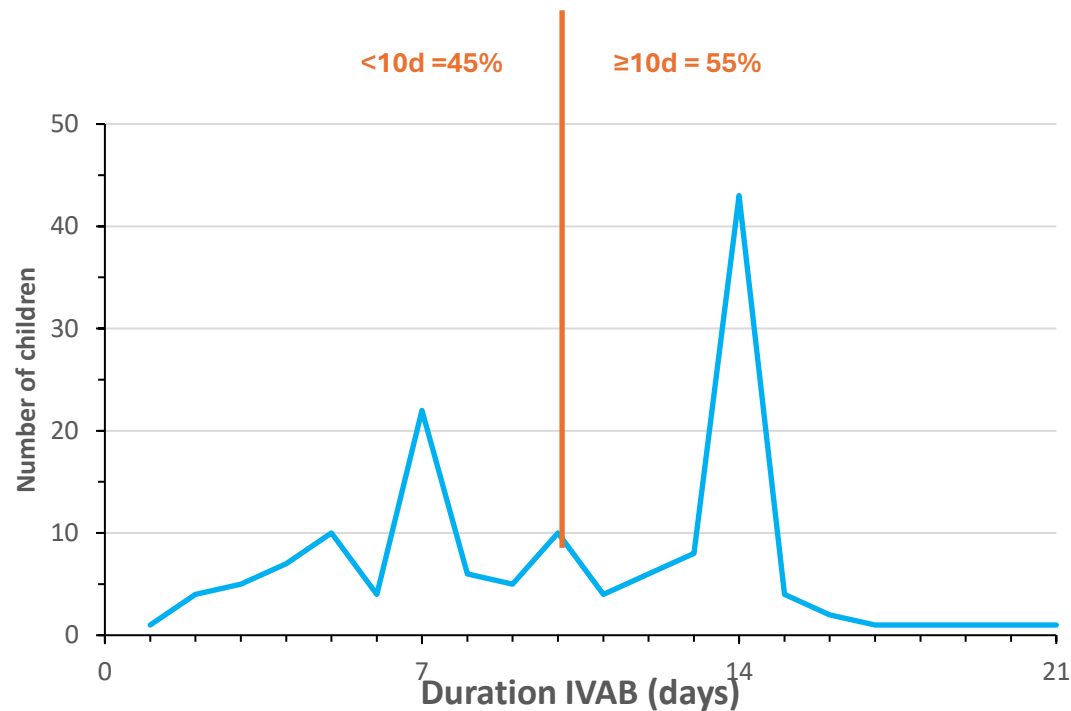
From recommendations for cystic fibrosis care - a largely European /North America disease

Bronchiectasis:

but ... 'Hospital is an inhospitable place...'

- Onerous on children & family
- Youth don't understand why they can't go home once feeling better (often within 5 days)
- Children miss average 12 days of school, parents 3.5 days of work
- Expensive (for family), (for healthcare)
- People with bronchiectasis and parents of children identify shorter stays in hospital as a key research priority

- Retrospective audit of bronchiectasis hospitalisations (2018-2022)
- Children aged ≤ 16 years old (n=143)

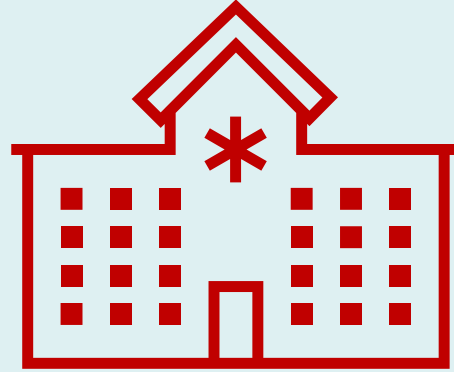


Miriam Manga (Ngāti Kahungunu)
 Ayla Te-Riina Greaves (Ngāti Kahu, Ngā Puhi)
 Cath Gilchrist

Next steps: Randomised Controlled Trial

Children (3-18y) hospitalised with exacerbation of bronchiectasis

Standard Care



1d

Hospital + IV Antibiotics + Chest Physio

14d

1d Hospital + IV Antibiotics + Physio

7d

Home + Oral Antibiotics + Physio 14d



Early
Discharge

Summer studentship Programme

Te Tiriti o Waitangi partnership with Manawhenua I Tamaki Makaurau

- ▶ Primary Aim: to offer opportunities to Māori and Pacific medical students (and now nursing students) for a first-time research experience
- ▶ Research topics important to benefit the Tamariki Maaori and South Auckland communities - to improve the heath and outcomes of Tamariki Maaori & Pacific children
- ▶ All have a drive for health equity
- ▶ Experience working in paediatrics & child health
- ▶ Often setting ground-work or feasibility for future projects

Summer Studentship Programme

- ▶ 46 students have now taken part
- ▶ Wide range of topics
- ▶ Often stayed connected with supervisors
- ▶ Has included presentations at national conferences and papers for many
- ▶ Word of mouth continues to mean we are oversubscribed each year

tes

Sense of accomplishment for my small contributions to this kaupapa Māori, Pacific and tamariki from the most deprived areas are unjustly experiencing a substandard level of care

Implicit bias is hard to see, but it's still powerful! Transformation is coming...

Never applied before as thought I would never get one Remembering my reason why? I hope I am leaving behind a small difference to youth health in this region

I am especially grateful to the **children and their whanau** Limited number of research have explored Pacific voice and lived experience

Grateful for the opportunity There were challenges Eager for other research opportunities

Why aren't services working with Maaori and Pacific patients to understand and prioritize their needs when creating and rescheduling appointments? I've come understand that ARF and RHD is a far more complex health issue

Improving the future

- ▶ Abiding by Te Tiriti o Waitangi principles
- ▶ Partnership in setting clinical and research priorities
- ▶ Develop co-design for health services and health delivery
- ▶ Improving health literacy
- ▶ Increasing Māori and Pasifika health workforce
- ▶ Reducing implicit bias (recognizing it, system changes)
- ▶ Increasing resources in cultural competencies

Acknowledgements

- ▶ Children & their Families
- ▶ Manawhenua I Tamaki Makaurau
- ▶ Bronchiectasis Foundation
- ▶ Hapai te Hauora
- ▶ Moana Connect
- ▶ Summer students
- ▶ Research medical and nursing fellows
- ▶ PhD & Masters Students
- ▶ Supervisors

Sponsors



Whakataukī (a Māori proverb)

He aha te mea nui o te ao?

What is the most important thing in the world?

He tangata, he tangata, he tangata

It is people, it is people, it is people

