

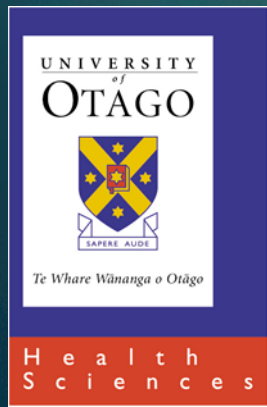
# Dr Hamish Jamieson

Senior Lecturer in Medicine UO  
and Geriatrician Canterbury DHB

NATIONAL SCIENCE CHALLENGE

AGEING WELL

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# InterRAI in New Zealand

82,000 New Zealand Home care InterRAI assessments  
47,000 with NHI linkage to hospital and residential  
care admissions and mortality

Two projects in Ageing Well Challenge

Project G: Risk factors for social isolation

Project H: Evaluation of the Drug Burden Index to  
predict adverse outcomes in older people

# Project G: Risk factors for reduced social engagement

**Aim 1:** Determine the prevalence of varying measures of social engagement in older people in New Zealand and the medium term outcomes associated with them.

**Aim 2:** Identify risk factors for reduced social engagement of older people from different demographic groups.

**Aim 3:** Use other interRAI-related data to determine the effect of potential confounding factors (such as continence, mobility and depression) on reduced social engagement.

**Aim 4:** Use data from other national datasets to determine the effect of geospatial factors on social engagement.

# Polypharmacy in New Zealand

The issues:

Inappropriate prescribing leads to adverse outcomes in older people (falls, fractures, increased hospital admissions).

We have an opportunity to examine this through use of the big data available in New Zealand's world leading interRAI database on older people . The key advantage of using the interRAI data is that potential confounding factors can be accounted for.

Exclusion of this data has been a major deficiency of previous polypharmacy research

# Project H: Evaluation of the Drug Burden Index to predict adverse outcomes in older people

Will an increased Drug Burden Index (DBI) score predict poor medium-term health outcomes (e.g. falls, residential care admissions, and mortality) for New Zealand elderly people?

Is the DBI independent of other potential confounding factors (such as gait speed)?

What poor medium-term outcomes will the DBI predict for New Zealand Māori and other minority ethnic groups in New Zealand?

Could the DBI be added to New Zealand hospitals' new electronic prescribing system as a decision support aid?

# New skillsets

- ▶ Emphasis on big data and using novel ways to understand New Zealand's rich databases
- ▶ Upskilling of a multidisciplinary team of researchers from Medicine, Nursing, Māori Health, Mathematics

# High engagement of Māori involvement

- ▶ The proposed projects have been developed with a strong focus on embedding the principles of Vision Mātauranga
- ▶ Extensive Māori consultation was carried out in the development of the interRAI in New Zealand the Māori strategy work stream of the National DHB interRAI implementation project. A meihana model was developed for an overarching clinical assessment framework for Māori. All 1800 interRAI clinical assessors are given cultural training
- ▶ This project
- ▶ Engagement Dr Cameron Lacey (Te Atiawa) a clinical who has familiarity with the interRAI and in delivery and planning of health services for Māori.

# Engagement with health service and community groups



National InterRAI Board

Canterbury DHB

Ministry of Social Developments

Office of Older Persons

National Health IT Board

Age Concern

interRAI clinical assessors



# Linkages with other projects

- ▶ Part of Ageing Well vision
- ▶ Prof Martin Connolly, Dr Michal Boyd and Prof Merry Gott all named investigators in the projects

# Summary

- ▶ Two interRAI-related projects using existing big data to model ageing in New Zealand

Project G: Risk factors for social isolation

Project H: Evaluation of the Drug Burden Index to predict adverse outcomes in older people

- ▶ Multidisciplinary project teams aiming to up skill researchers in health big data
- ▶ Reputable international collaborators
- ▶ Strong engagement with Māori, the health system and community groups
- ▶ Clear plan to translate research into action

# Research team

## ▶ New Zealand

Dr Hamish Jamieson, Dr Sally Keeling

Prof Philip Schluter, Dr Nigel Millar, Prof Martin Connolly, Dr Cameron Lacey,  
Dr Michal Boyd, Prof Merryn Gott, Prof Simon Kingham, Dr Prasad Nishtala,  
Assoc Prof Matthew Doogue

## ▶ International

A/Prof Ruth Hubbard (University of Queensland, Australia)

Prof Sarah Hilmer (University of Sydney, Australia)

Prof David Le Couteur, University of Sydney

Prof Len Gray (University of Queensland, Australia)

Prof John Hirdes (University of Waterloo, Canada)

Prof Vince Mor (Brown University, USA)

Prof Darrell Abernethy (FDA & Johns Hopkins University, USA)