
 Australian Government
 National Health and Medical Research Council
NHMRC/ARC
AGEING WELL, AGEING PRODUCTIVELY PROGRAM
Optimal Ageing for People with Multiple Chronic Conditions
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 Australian Government
 National Health and Medical Research Council
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 Australian Government
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In Partnership


 Australian Government
 Department of Veterans' Affairs
Department of Veterans' Affairs
Medication Management Section


CAS ALSA
 The Australian Longitudinal Study of Ageing


Flinders University
Centre for Ageing Studies
The Australian Longitudinal Study of Ageing – Flinders University



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Our Broad Aim...



► To provide a better understanding of the complex issues surrounding the management of multimorbidity of chronic diseases in older Australians

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Chronic Diseases

- Chronic diseases are the leading cause of illness and disability in those aged 65 years and over
- In 2000-01 accounted for nearly 70% of all health system expenditure in Australia (over \$AUS 35 billion)

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 World Health Organization
Preventing CHRONIC DISEASES a vital investment



Chronic disease accounts for 60% of deaths worldwide

Projected main causes of death, worldwide, all ages, 2005

TOTAL DEATHS 2005 58 million

Cause	Percentage
Cardiovascular diseases	30%
Other chronic diseases	26%
Cancer	13%
Injuries	9%
Other chronic diseases	9%
Diabetes	2%
Chronic respiratory diseases	2%



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Multi-morbidity

- ▶ The co-existence of multiple diseases within an individual
- ▶ 2004-05 NHS reported almost all Australians aged 65 years or older have at least one chronic condition, with 80% reported as having 3 or more chronic conditions



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Consequences of Multimorbidity

- ▶ Multimorbidity is associated with a decline in many health outcomes
 - quality of life
 - functional ability
 - mobility
- ▶ and increases
 - hospitalisations
 - psychological distress
 - use of health care resources
 - mortality

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Polypharmacy in the elderly is common

- ▶ Almost 88% ≥ 65 years use at least one prescription
- ▶ 43-55% take 4 or more medications regularly
- ▶ ↑ numbers of medications
=
 - ▶ ↑ risk of adverse drug events

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“It is more important to know what sort of person has a disease than to know what sort of disease a person has”.

Hippocrates (c.460 BC – c.370 BC)






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AWAP research project objectives

- Objective 1 ▶ To analyse two large Australian datasets to determine prevalence and patterns of common multi-morbidity of chronic disease.
- Objective 2 ▶ To investigate current treatment and management strategies for the two or three most common combinations of conditions.
- Objective 3 ▶ To determine the concordance of management strategies with available disease specific guidelines.
- Objective 4 ▶ Examine the prevalence of conflicting treatment recommendations in individual patients.
- Objective 5 ▶ To examine expected and actual outcomes in selected multi-morbid cohorts and establish predictors of healthy ageing.
- Objective 6 ▶ To develop and evaluate algorithms which consider actual outcome data, poly-morbidity and patient preferences in formulating ongoing care plans.



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Health Databases

- ▶ Access to two unique Australian health databases
 1. **DVA health data**
 - Provides data on medication dispensing and medical, nursing, allied health and hospital services for 320,000 Australian war veterans.
 - 80% > 70 years old, 54% male
 2. **ALSA data**
 - Longitudinal population based bio-psych-social study, comprising of 8 waves of data collection from 1992-2004.

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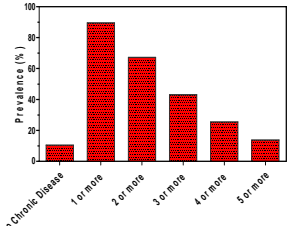
Prevalence of Multimorbidity of Chronic Disease

Using 18 major diagnostic categories:

- 90% of people ≥ 65 years had one or more chronic diseases
- 67% two or more
- 43% three or more
- 25% four or more
- 14% five or more



• On average those aged ≥ 65 years have 2.5 chronic diseases

Prevalence of Multimorbidity in the Elderly



Number of Chronic Diseases	Prevalence (%)
No chronic disease	10
1 or more	90
2 or more	67
3 or more	43
4 or more	25
5 or more	14

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Patterns of Common Multimorbidity

Using 18 major diagnostic categories:

- 21% aged ≥ 65 years had Arthritis and Cardiovascular Disease
- 19% Arthritis and Hypertension
- 18% Arthritis and Gastro-Intestinal Disorder
- 17% Arthritis and Mental Health Disorder
- 17% Hypertension and Cardiovascular Disease



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The Big Picture.....

- ▶ This research will provide a better understanding of the complex issues surrounding the management of multimorbidity in older Australians
- ▶ Will better enable health care professionals in consultation with their elderly patient to ensure best quality of health and quality of life

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"At your age, good health is pretty much a thing of the past. My advice is, find an illness you enjoy."

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