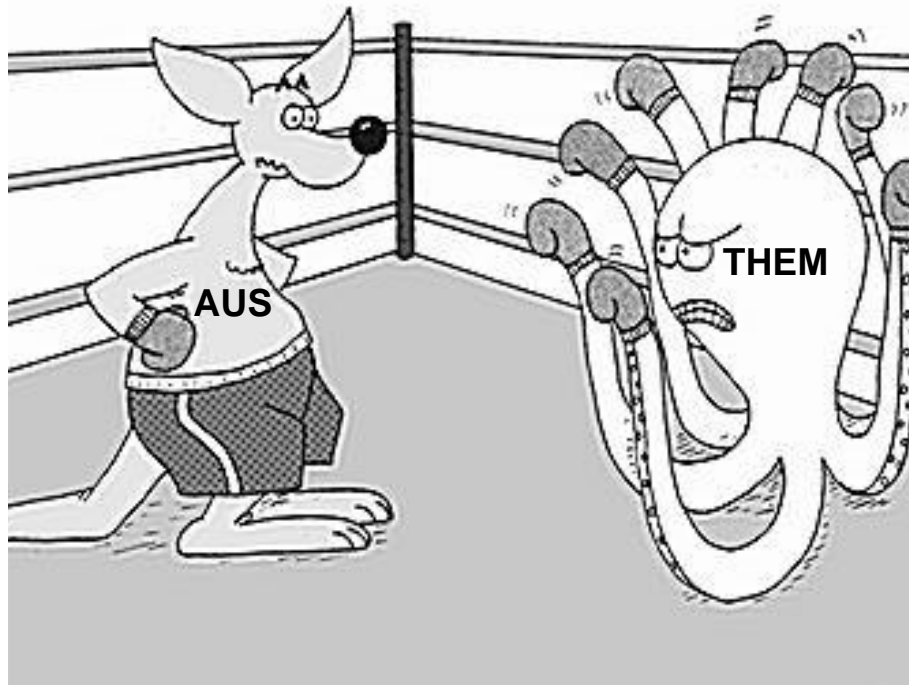


# Challenges facing Australia in preventing and managing chronic disease

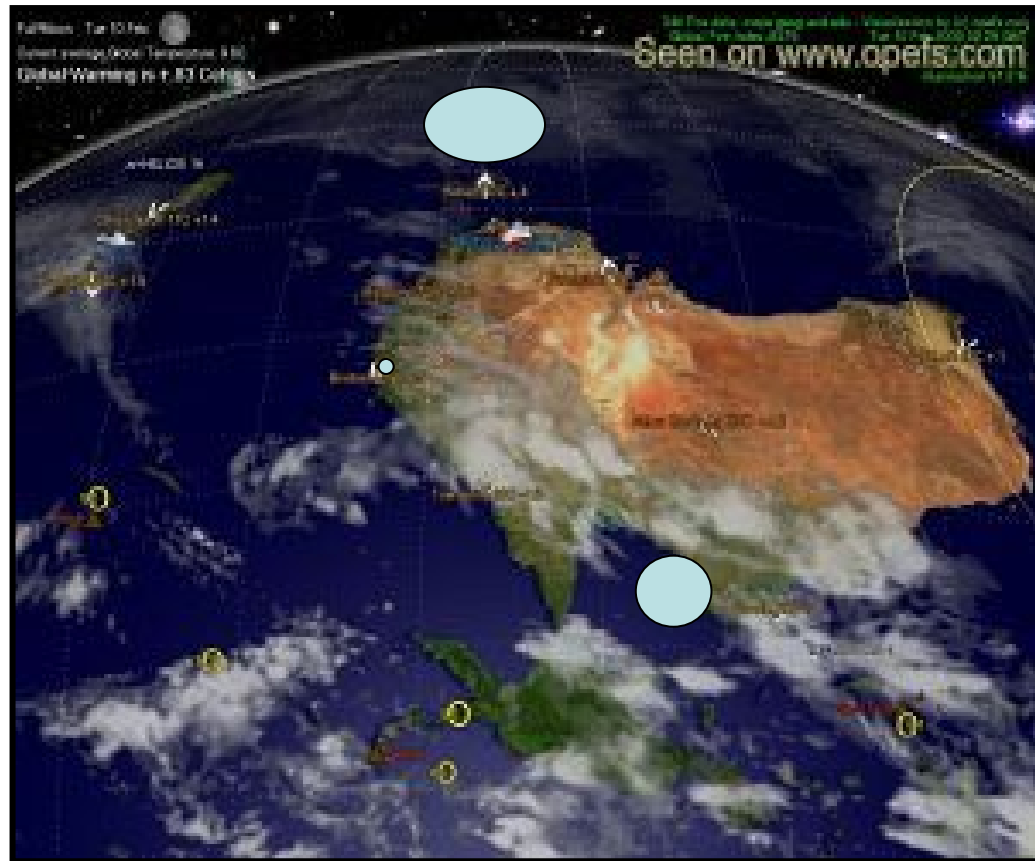


Stephen R. Leeder

Menzies 21<sup>st</sup> Symposium

14 December 2009

And which Menzies Centre is on top?



# Chronic Disease

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- By **chronic** disease we mean those disorders that generally **increase in frequency with age**, that are **serious and continuing**, such as heart failure and mental illness, that take years to develop, where the causal pathway often starts in social structures and dynamics and where **morbidity is the principal health concern**
  - Chronic diseases **incur costs to individual sufferers and families**, whether formal health care is available or not
  - Chronic diseases are **often linked to serious acute events**, such as death from heart attack at age <50 years, and limit the economic productivity of individuals and nations.
-

# The biggest challenge...

*“...for Australian policy makers is to address the consequences of major success: that Australians are living a lot longer today and are not dying as rapidly as they used to after being diagnosed with...heart disease...”*



Barraclough S & Gardner H (eds.) (2008)  
*Analysing health policy: A problem-oriented approach.*  
Sydney: Elsevier Australia

# Chronic Disease and Sustainability

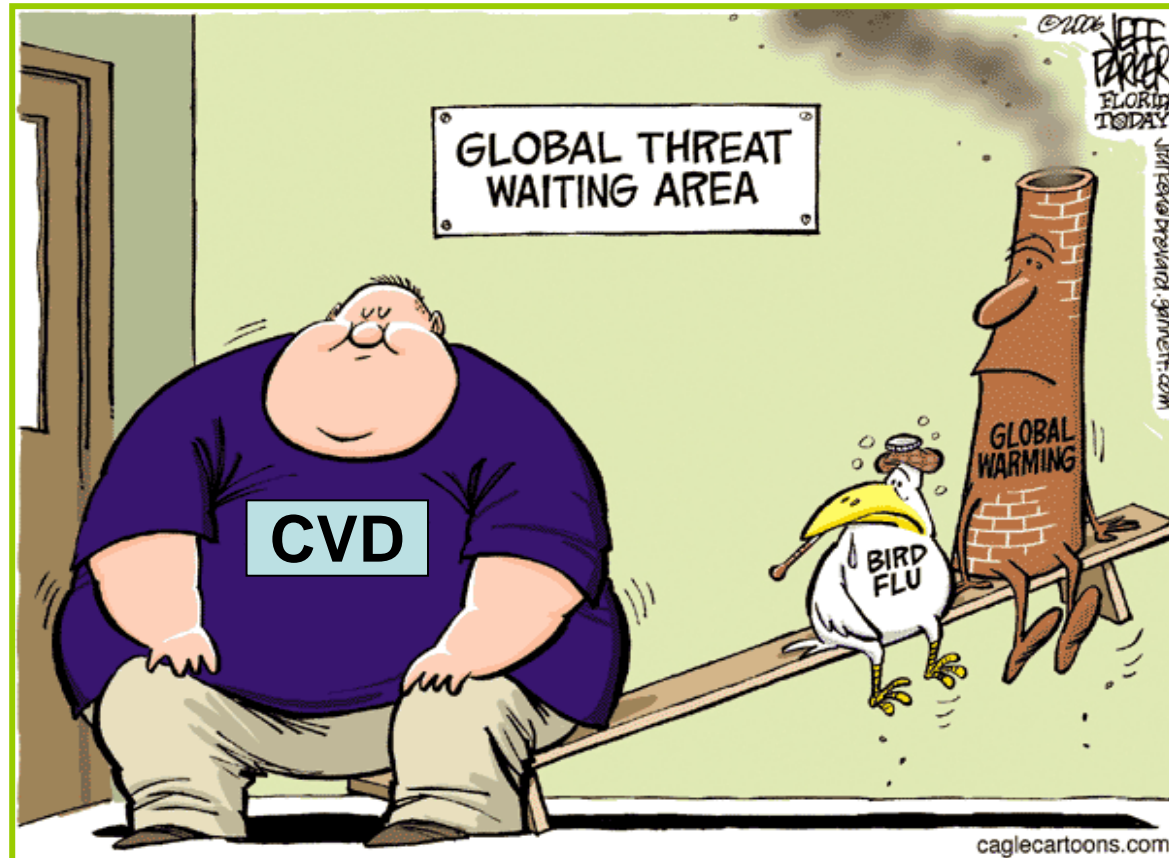
- **Sustainability** has two somewhat different meanings in relation to health:
  - First, it refers to planetary health and means ensuring the future of human habitation and the integrity of earth's biosystems through adjustments to consumption, mitigation and global governance
  - Second, it means ensuring the use of resources committed to health and health care fits coherently with national and global macroeconomic policy and with prevailing notions of social justice and human rights.



## nature calls



We are part of a global problem...



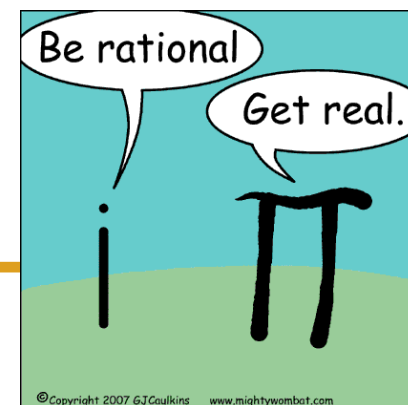
# The health and economic burdens



- Cardiovascular diseases are the **leading cause of death** worldwide
- CVD is still the **major cause of premature death** in Australia
- People with established cardiovascular impairment generally require a combination of:
  - Pharmacological, and
  - Lifestyle modification therapy.

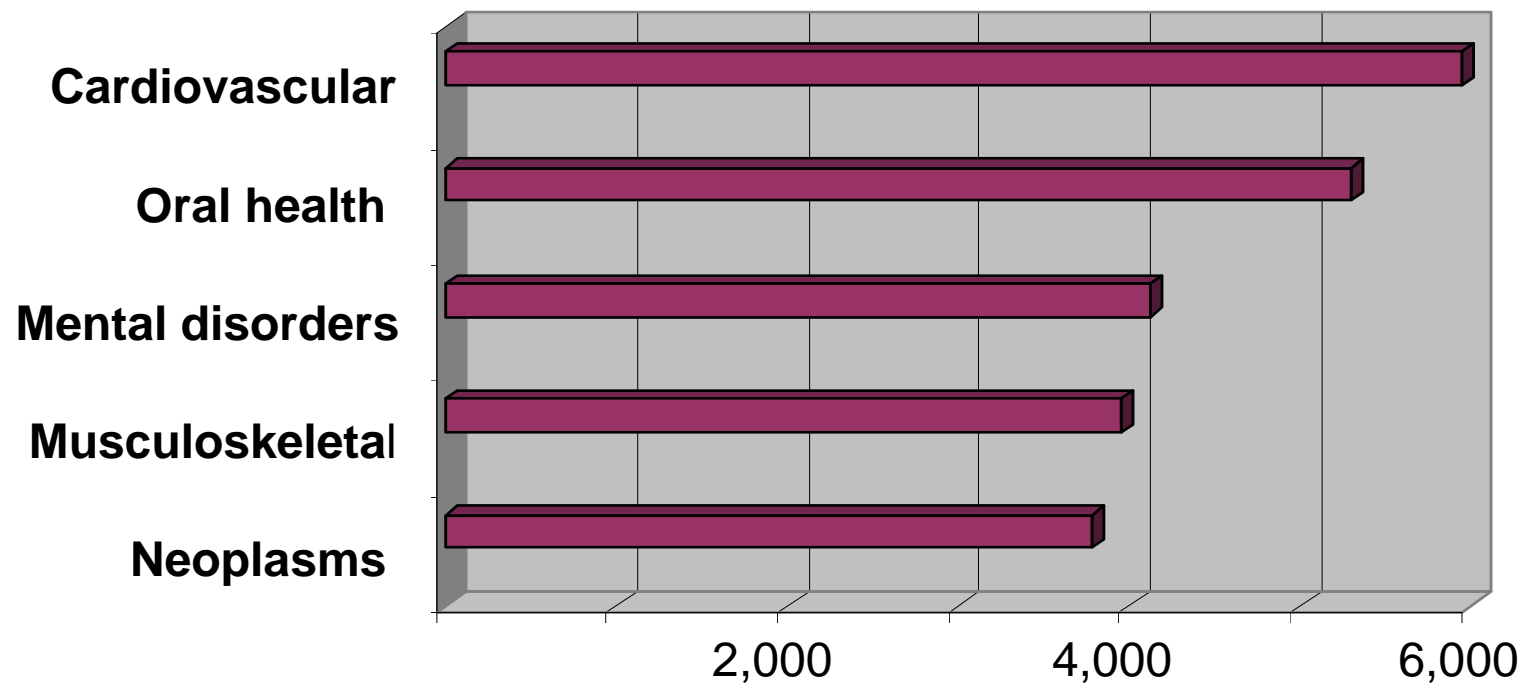


## For the number crunchers...



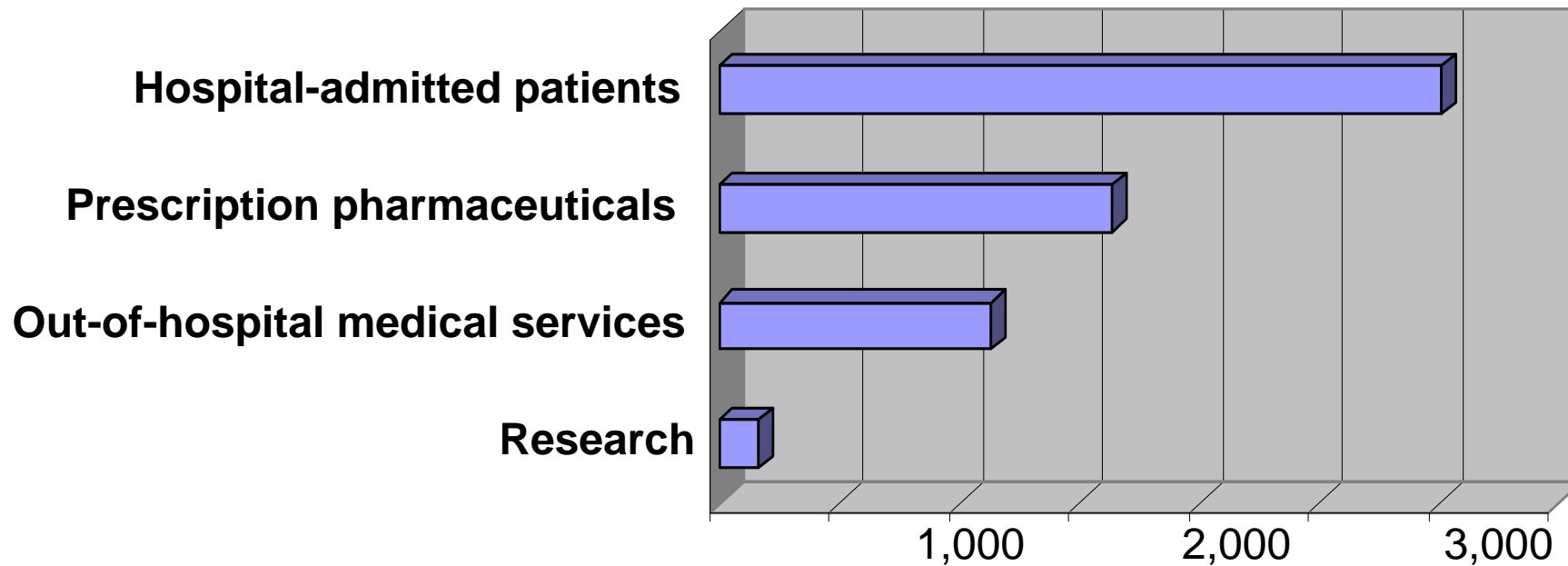
- In Australia, **18% of the total burden of disease** and injury resulted from CVDs (in 2003)
- **Coronary heart disease** and **stroke** were more than **four-fifths of this burden**
- In 2007-08, there were **19.3 million Medicare encounters** where a cardiovascular problem was managed in that year.

## Health care expenditure by disease group (\$ m)



\$ million (in 2004-05); Source: AIHW

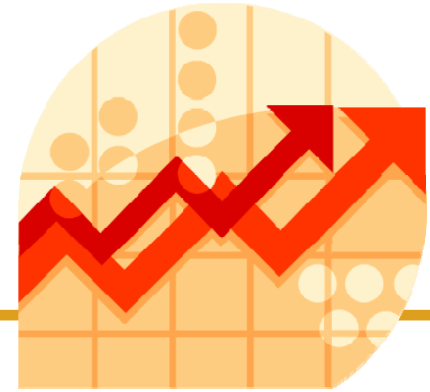
# Health care expenditure on CVD by area (\$ m)



\$ million (in 2004-05); Source: AIHW

# The BEACH study results

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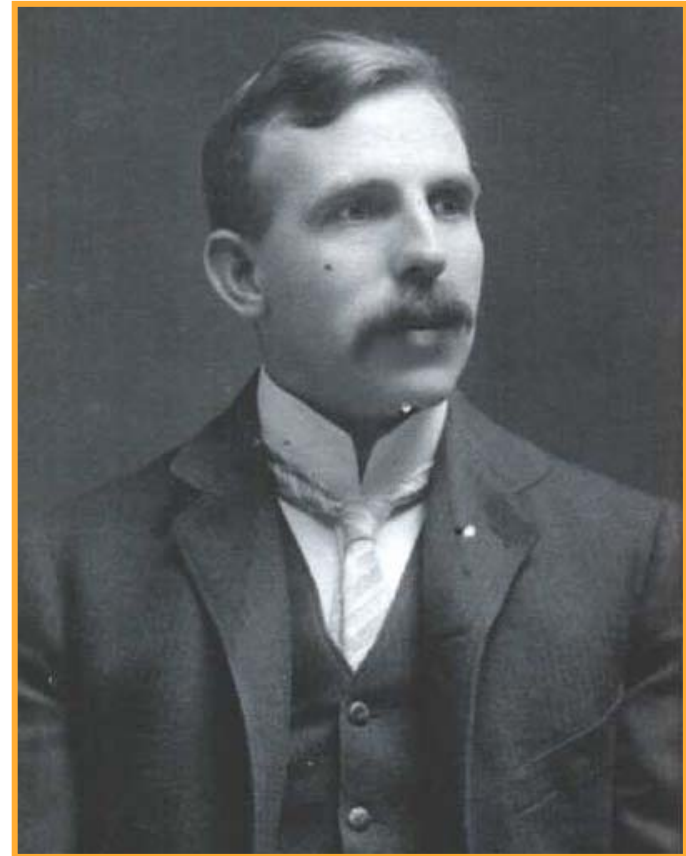


Compared with 2000-02, in 2006-08 there were:

- **1.7 million additional GP encounters** involving the management of CVD problems
  - **740,000 more CVD problems managed** for which pathology was ordered
  - **2.4 million additional tests** ordered for CVD problems.
-

# Lord Rutherford of Nelson

- One of twelve children
- Worked on x-ray transformation of elements.  
The sun will still shine!
- Described the atomic nucleus
- Nobel Prize 1908 for chemistry.



# Lord Rutherford of Nelson

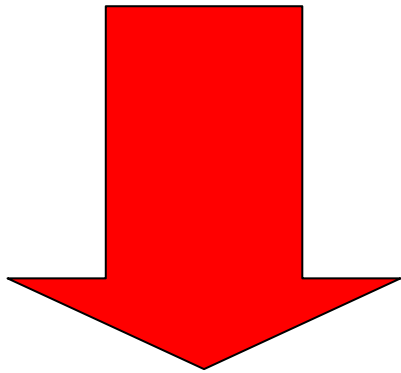
**"Gentlemen, we have run out of money.  
It is time to start thinking."**



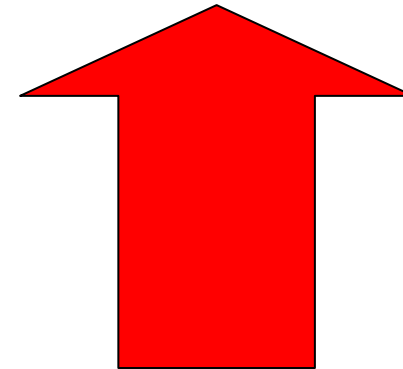
# Cardiovascular disease in Australia

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Mortality



**BUT**



Morbidity

The potential large economic consequences of chronic illness, whether measured in growth or welfare terms provide a **rationale for dedicating greater attention to PREVENTION**

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# What are we doing about it?



- **Preventive strategy** research – concentrates on primary prevention, societal and individual behaviour change. Aims to determine effective interventions
- **Aetiological** research – much already done in many (CVD, cancer, lung) diseases but more needed – mental health for example and the growing field of genetic epidemiology
- **Policy** research – needs assessment, including critiques of existing policies for prevention and care and offers suggestions for the future. Also contributes to policy evaluation. Can include assessment of policies for secondary and tertiary prevention.

# Prevention in relation to CVD and sustainability



There are three major approaches to chronic disease and sustainability:

- **Primary** – healthy cities, food, tobacco, exercise
- **Secondary** – drug therapy, surgery, rehabilitation
- **Tertiary** - building an integrated system of care across hospital and community settings



# The contribution of basic research

Continue to recognise the importance of **basic research!**

It is difficult to plan where and when new breakthroughs will occur...

- Electrical engineer **John O'Sullivan**, recipient of PM's Science Prize for the discovery of high speed WiFi, and
- **Elizabeth Blackburn**, recipient of the 2009 Nobel Prize for Medicine for the discovery of the telomerase enzyme, which 85% of all cancers depend on for their continuing growth.





# The contribution of clinical research

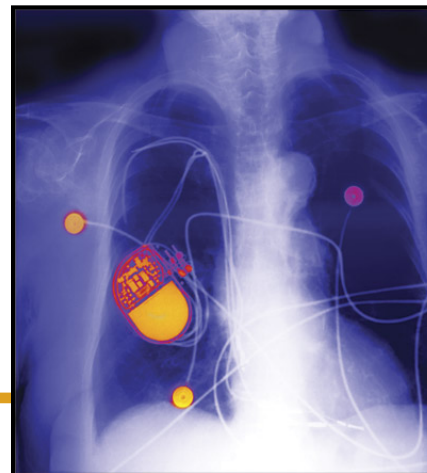
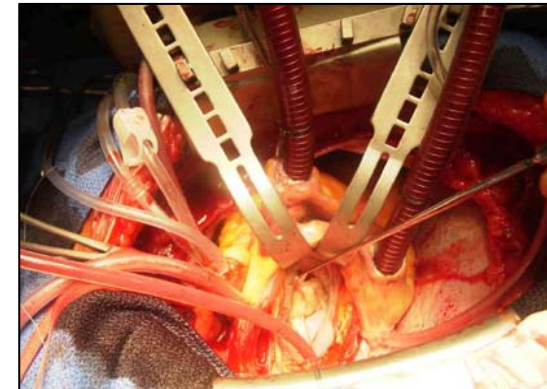


- Support **clinical research within teaching hospitals**
  - greater recognition of research and education functions of teaching hospitals should be expressed clearly in health reform plans for Australia
  - ‘Protected’ research time for health professionals
- Boost for **clinical trials** in Australia (Minister Roxon, 28 Oct 2009)
  - The government is investigating priority reforms to the clinical trials operating environment to make Australia a more attractive location for investment and activity
  - A new Action Group will work on ensuring coordinated, nationwide approaches to clinical trials; streamlined ethics approvals systems; national patient referral networks; and better ways to approve, establish and conduct clinical trials.

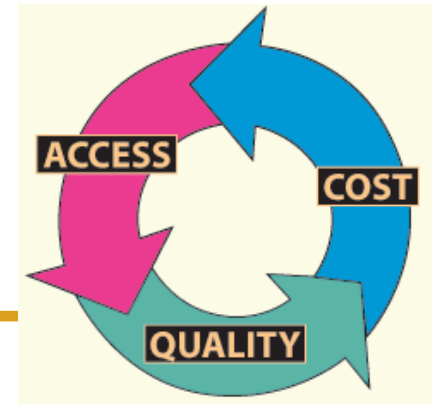
# The contribution of translational research

It is important to ensure that important discoveries are moved from *bench to bedside*, to improve all areas of chronic disease management:

- Diagnostics
- Therapeutics
- Medical devices
- Surgical techniques
- Doctor-patient communication
- Rehabilitation
- Quality of life
- Palliative care.



## The contribution of health policy research



Policy research helps to answer the increasingly important questions:

- what are the policy approaches that might deliver better health care while making the best use of available health resources?
- what are the implications of an ageing population?
- how do we prevent and manage serious and continuing illness?
- what data collections do we have, or need, to understand existing health care patterns and to detect and measure the changes for which we must plan?

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Do our current policies and initiatives  
result in people receiving the most  
appropriate care?

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# Past policies and initiatives

1996	CVD established as one of the original National Health Priority Areas
1999	Introduced (1) Health assessment items for GPs conducting annual check-ups for over 75s and Indigenous over 55s; and (2) Multidisciplinary care plans and case conference items introduced
2004	Specific item number introduced for patient care by a practice nurse
2005	Multidisciplinary care plan items replaced with GP management plans, including 'Chronic disease management' items
2006	One-off health check item introduced for 45-49s; and PBS criteria revised for lipid-modifying medications
2008	Obesity (with its strong links to CVD and other chronic diseases) nominated as a National Health Priority Area.

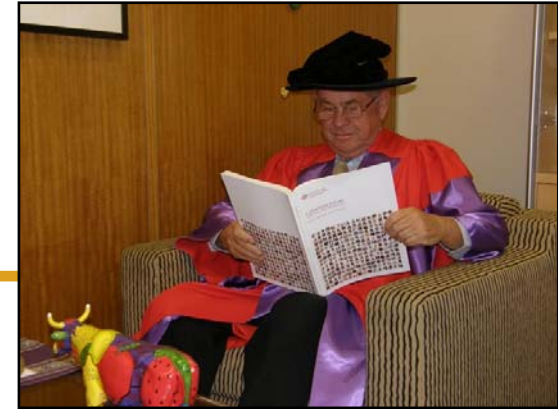
# Moving forward



- **Better focus on primary, secondary and tertiary prevention**
- There will be **more demand** for a range of health care services to manage cardiovascular disease
- There is a need to:
  - **improve coordination of care**
  - **reduce avoidable hospital admissions.**



# NHHRC recommendations...



Focus on **prevention**, strengthened **primary care** services, and better **coordination of care** by:

- helping patients to **navigate the system** (through voluntary enrolment at 'health care homes')
- use of **personal electronic health records**
- establishing **comprehensive primary health care centres**
- promoting **better use of specialists** in the community to manage chronic and complex health needs.

# Implementation of reforms



May lead to improved outcomes for patients with chronic disease as a result of:

- ✓ better coordination of care
- ✓ improved treatment of diabetes
- ✓ slower growth in obesity
- ✓ reduced smoking rates
- ✓ improved primary care and rehabilitation.

# What Menzies can do...

- Continue with basic research that refines our understanding of causes, mechanisms and treatment options for chronic disease
- Continue with epidemiological surveillance and inquiry to complete our population-based understanding of these diseases
- Consider the translation of these research findings into the policy process.