A C E R H

AUSTRALIAN CENTRE FOR ECONOMIC RESEARCH ON HEALTH

Clinical Effectiveness and Responsive Governance

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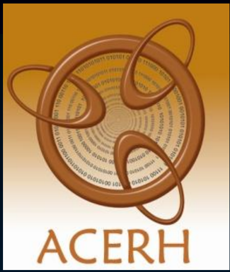
Hospital Performance Measurement Forum, Sydney

10 - 11 December 2009

THE UNIVERSITY OF WESTERN AUSTRALIA



Aims

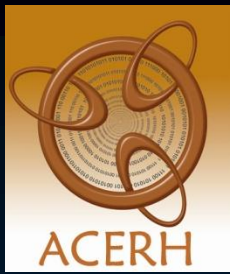
To cover the clinical effectiveness and responsive governance topic:

1. **Putting hospitals in a nationwide population health context**

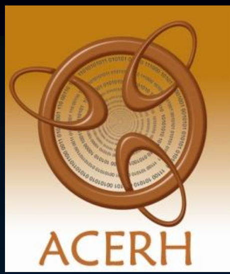
2. **Addressing the issue of optimal – or best practice - use of resources to achieve maximum output (ie how to obtain 'value for money')**

3. **Considering health inequalities (eg between rural and urban areas; or economically advantaged versus disadvantaged population groups)**

   – because narrowing inequalities is one way of improving overall health



1 Hospitals in a nationwide population health context

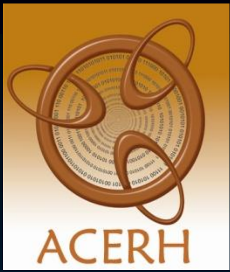


1 How to measure Australians' health

In its *Hospitals Performance* issues paper the PC notes that :

- **ideally hospital performance should be measured in terms of patient outcomes** - eg life expectancy (LE), healthy life expectancy (HALE), quality of life (QoL)
- **but that measuring this is not possible for hospitals**
- **so need to use of proxy 'output' measures** (eg number of patients treated in hospitals)

However, the 'ideal' outcomes measures are possible at the national and health sector levels

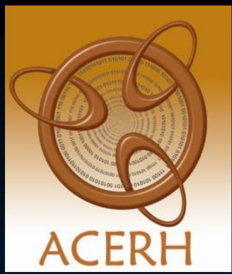


1 Australia’s recent health performance is among the best internationally

- In 2006 our healthy life expectancy at birth was close to that of No 1 country, Japan [1]

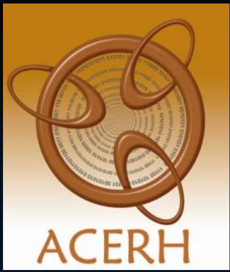
- this was achieved with similar total health expenditure as % of GDP to the OECD median (9%) [2]

- and with a lower government share of total health expenditure (68%) than OECD median (75%) [2]



Life Expectancy (LE) and Healthy Life Expectancy (HALE) at birth (2006, years)

	LE	HALE
Japan	83	75
Australia	82	73
Switzerland	82	73
Singapore	80	70
Denmark	79	70
UK	79	71
USA	78	69
China	73	64

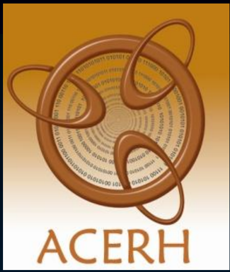


1 In future our international ranking by health may worsen

- obesity prevalence in Australia is about the worse in the OECD
  - with more and more overweight persons believing they are in the 'normal' BMI range (NHS 2007-08)

- thus chronic disease prevalences may continue to rise and HALE and QoL to worsen

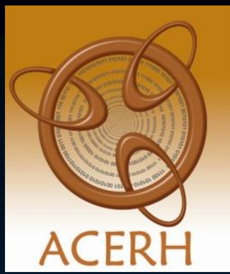
- above GDP growth in health expenditures may continue to put pressure on Budgets and lead to further increases in copayments



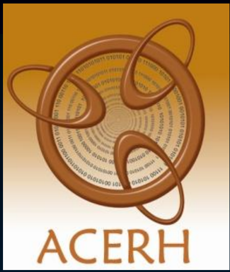
1 Budgetary pressures may lead to rapid copayment increases

- analyses using World Health Organisation (WHO) data suggest that the % of health expenditures paid by individuals as copayments is a key factor explaining HALE

- in Australia, further increases to already high copayments are likely to widen health inequalities, as even the socially less disadvantaged will choose to go without health care in non-emergency situations



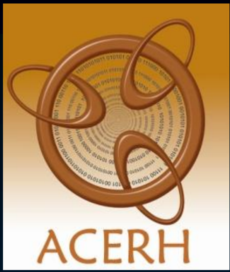
2 Optimal use of resources to achieve maximum output



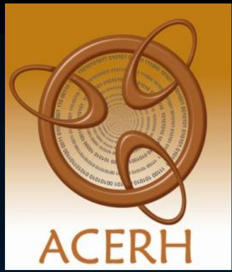
2 How to obtain 'value for money'

If Australia is to maintain its excellent health performance, then greater use will need to be made of economic analyses that compare the health benefits of policy options per dollar spent

While cost effectiveness studies have traditionally underpinned certain policy decisions (eg the listing of new drugs on the PBS), in future the coverage of such studies will need to be broadened considerably



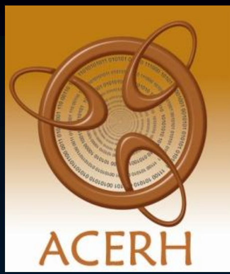
- In particular, prevention options – eg early years interventions, town planning,workplace designs - will need to be integrated into resource allocation studies - aiming for more disease onsets to be prevented or delayed ... thus lessening the demand for health/hospital services
- Because life style related risk factors for chronic diseases are in great part under the control of individuals, the incentive structures embedded in health policies need to be reviewed
  - aiming to foster greater person-level responsibility for own health



2 Examples of resource allocation studies

1. What if Australia (or Britain) became more equal [3] ([4]) ?

2. What is the best option for Type 2 diabetes interventions among a selection of interventions [7]?

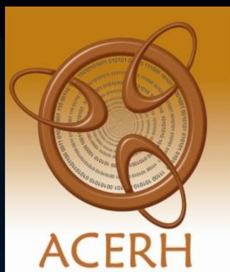


Example 1: narrowing health inequalities

Illustrative Scenario:

Lifting in 1998 the health status of all Australians to that of the most affluent 20% in the population would result, by 2018, in:

- close to half million fewer Australians being disabled
- over 180,000 life years being saved
- health care costs being around A$1 billion lower; and
- government could save close to A$700 million on the disability support pension [3] [8]



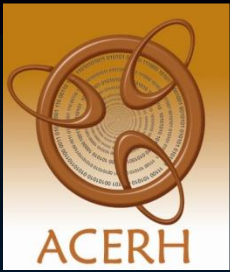
Example 2: Type 2 diabetes intervention options

Intervention:

- diabetes screening and prevention intervention in 2000 for 45-74 year old Australians;
- offer of lifestyle interventions for those found to be at high risk of developing diabetes

Results :

- by 2010 115,000 people became "newly diagnosed“
- of those at high risk 53,000 avoided developing diabetes
- average yearly intervention and incremental treatment cost was AU$179 million
- cost per disability-adjusted life-year was a minimum of AU$40,000 [7]

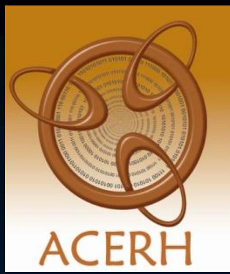


2 Hospitals in the 'big picture'

Hospitals are Australia's largest health sector, accounting for around 40% of its total health expenditure ($100 billion)

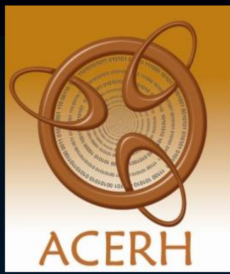
However, the demand for hospital services is mainly driven by external factors, such as
- population ageing, life style choices, the efficacy of preventive measures and of the country's primary health services

So health policy planning needs to account for hospitals as one element of the health 'big picture'



3 Health inequalities

(eg rural versus urban areas; economically advantaged versus disadvantaged population groups)

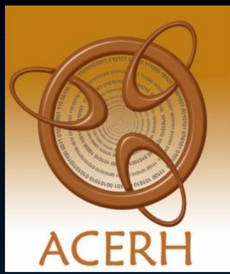


3 Do poorer and richer Australians use/receive similar health services?

Worldwide, poorer persons have worse health and die younger than richer persons (same for rural versus urban)

Average cost of treatment in NSW hospitals was, within most age groups, around 3% less for low SES patients (Q1) than for high SES patients (Q5) [5]

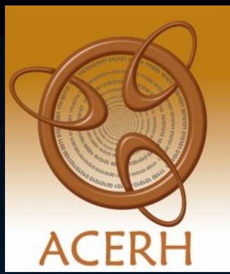
High SES (Q5) people used, by age group, more NSW hospital services than Q1 people for:
- renal dialysis, chemotherapy, rehabilitation and diagnostic scopes (eg colonoscopies) [6]



Because such inequalities are common to many countries with widely different health systems and GDP/capita expenditures

- investing more in health overall may not be the best 'value for money' option

Implementing better incentive structures may yield significantly better 'value for money' outcomes (eg greater person-level responsibility for own health; Commonwealth only responsibility for overall health finances and outcomes)

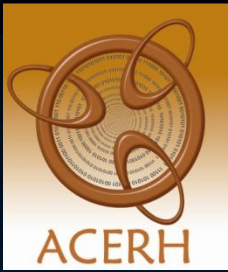


4 CONCLUSIONS

Health is essential for individuals' well being, as well as for national productivity.

In most countries health is tightly regulated yet it depends on many factors external to the health system itself.

The many external influences mean that in future health policy strategies will need to be developed in a 'bigger picture' framework - with prevention and life style choices being added to key elements of current focus.



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[1] World Health Organisation, 2008 WHOSIS database

[2] Australian Institute of Health and Welfare, *Health expenditure Australia 2007-08*

[3] Walker A. 2009, *Modelling the socioeconomic status to health link in Australia: a dynamic microsimulation approach*, LAP Lambert Academic Publishing, Koln, Germany

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[5] Thurecht L, Walker A et al, 'The 'Inverse Care Law', Population Ageing and the Hospital System: a Distributional Analysis', *Economic Papers*, 2005; 24 (1): 1-17.

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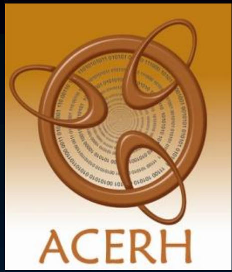
[7] Colagiuri S, Walker A. Using an Economic Model of Diabetes to Evaluate Prevention and Care Strategies in Australia, *Health Affairs* 2008; 27(1): 256-268.

[8] Victorian Government's social policy action plan, *A Fairer Victoria,* 2008 (Dept of Planning and Community Development)



Further information

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