

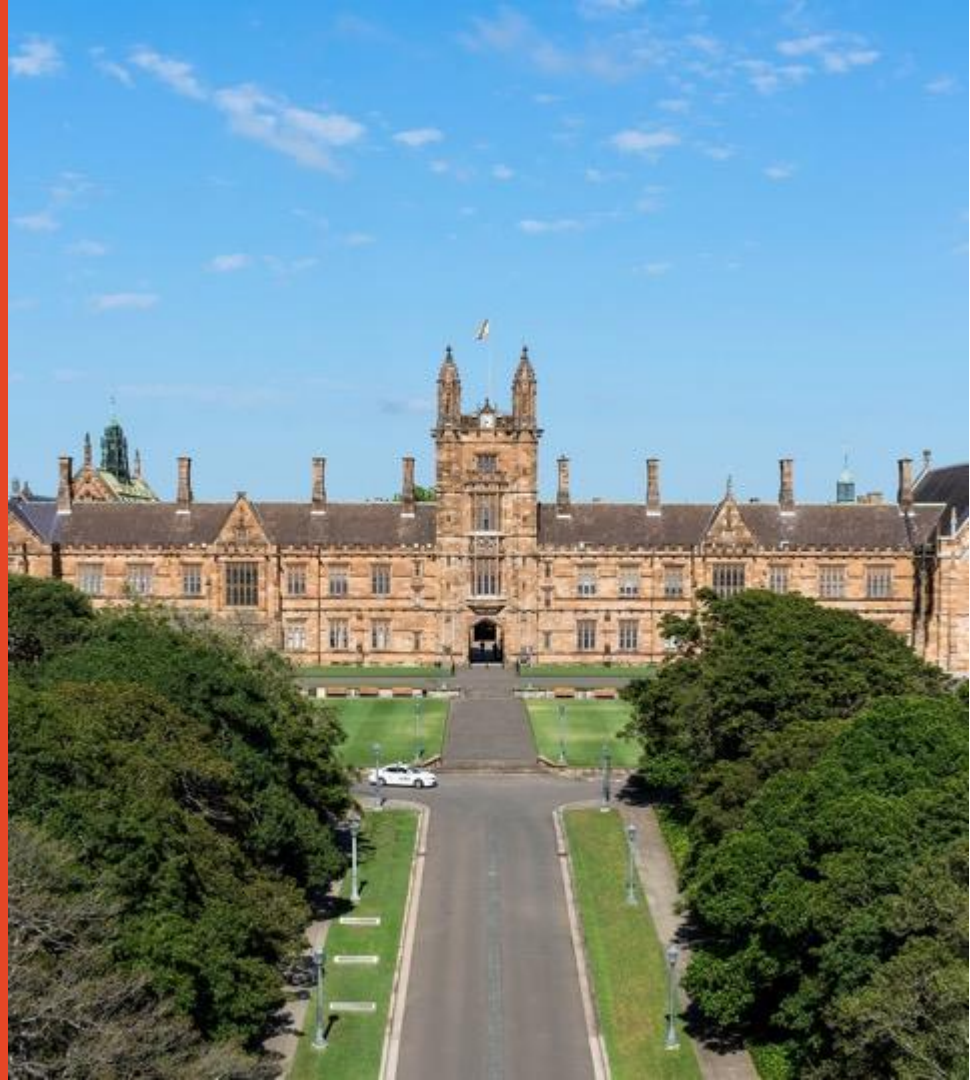
# What is health economics? (and how to work successfully with a health economist)

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We acknowledge the tradition of custodianship and law  
of the Country on which the University of Sydney  
campuses stand. We pay our respects to those who have  
cared and continue to care for Country.



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# Outline

- What is health economics?
- How do health economists think?
- What can health economists do?
- How can health economics apply to falls prevention research?
- How to successfully work with a health economist
- Resources to learn more...
- Q&A

# What is health economics?

- It is how we allocate our scarce health resources to maximise our health outcomes. It is NOT about cutting costs.
- We all use the principals of economics every day.
  - E.g. Buying a laptop maximising outcomes from finite resources



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## Coronavirus and bushfires to reduce Australia's GDP growth to zero

The governor of the Reserve Bank of Australia has warned that the virus is having an immediate economic impact but there was a bigger long-term issue.

Eliot Hastie

## THE AUSTRALIAN

Tuesday, February 18, 2020 Today's Paper Mind Games

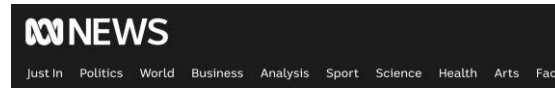
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## Mental illness costs \$180bn, study reveals

By STEPHEN LUNN  
SOCIAL AFFAIRS EDITOR  
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12:58AM OCTOBER 31, 2019



## Private health insurance at a 'tipping point', with Australians dropping cover in droves

By business reporter Sue Lannin

1 Aug 2019, 4:54am

Industry experts are warning Australia's health insurance industry could be in a sharp decline as consumers abandon their private health cover in droves.

The federal Government subsidised industry is in a crisis as thousands of people, especially 19-year-olds, dump their private health cover policies as annual premiums increase over the cost of living and wages.



MARCH 5 2020 - 4:32PM

## Sans Souci mother joins fight to have eczema treatment added to Pharmaceutical Benefits Scheme

Merryn Porter

Community

f t v A A A



Accept for help: Maria Kaloudis, of Sans Souci, was part of a group that went to Canberra last month.

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# How do health economists think?

1/4

## – Resource are scarce

- Resources are finite
- Giving money to one area (e.g. health) takes away from other areas (e.g. transport, education, defence, etc).
  - The same applies within health (e.g. aged care vs paediatrics)
  - Actually, the same applies at many levels



# How do health economists think?

2/4

- We want to maximise the benefits:
  - In health, the benefit we are trying to maximise is health.
    - Health can be measured in different ways, from specific (e.g. number of hip fractures prevented) to general (e.g. survival in years) to theoretical (e.g. utility)
  - Economists refer to ‘utility’ as a way of measuring overall wellbeing / happiness / satisfaction
    - I get utility from a weekend getaway and can also gain utility from improving my health
    - Health economists often combine utility with length of life, to get a measure of quality adjusted life years (QALYs) – these enable comparison across treatments with different outcomes



# How do health economists think?

3/4

- Maximising benefits to the population is the goal
  - This is in contrast to clinicians, who are trained to think about what is best for the unique, individual, specific patient in front of them.
  - Health economics is a way to bring these two perspectives together and find a balance. We want interventions that maximise the health of the population, while still allowing individuals to access the best possible treatment (best not necessarily meaning all available!)



# How do economists think?

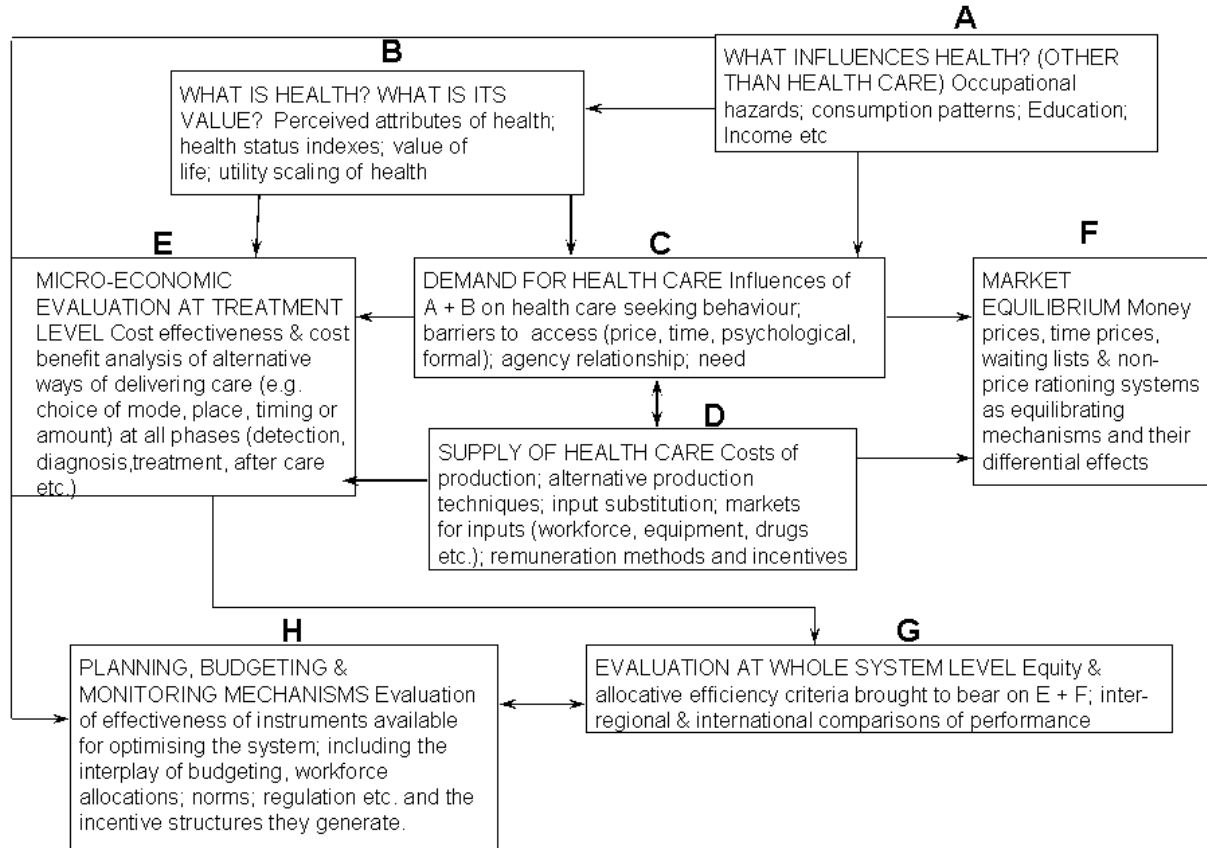
4/4

- Opportunity cost is important, not price
  - Economics is not about prices, cost saving or cost cutting. The opportunity cost of A is the benefits we forgo (from B or C or D) by spending our resources on A.
    - E.g. opportunity cost of upgrading hotel room to a suite is not \$50/night, but the enjoyment I would get from spending that \$50 on a nicer meal / wine
    - E.g. opportunity cost of employing a physio to do weekend rehab for hip fracture patients is not the salary cost of the physio, but the health benefits that could be gained from using that physio (or their equivalent salary) elsewhere in the health system
  - Therefore, the benefits that can be achieved are just as important to a health economist as the costs of achieving them.
    - This is value.





# What can health economists do?



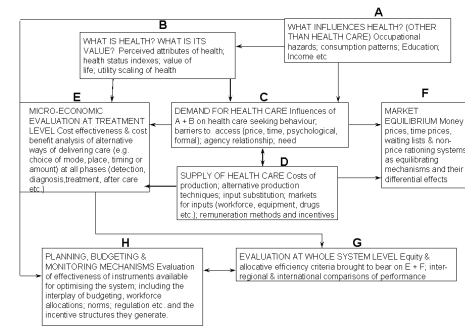
# What can health economists do?

## – Health economists are interested in questions like:

- What influences likelihood of falls?
- How do falls impact on health, and how do we measure that?
- How can we arrange the health workforce most efficiently to provide falls prevention programs?
- Can we pay or incentivise primary health care to provide falls prevention advice?
- Can we reduce inequities in the availability and accessibility of falls prevention activities?
- How do patients make choices about their health in relation to falls?
- and many more...

## – Health economists you encounter will often do work in:

- Economic evaluations
- Increasingly (hopefully!) patient decision making



## Economic evaluation

- Comparing the costs and benefits of two (or more) alternatives
- Can be done within a trial, or use a model
- Depending on the outcomes, can be cost-minimization, cost-effectiveness, cost-utility or cost-benefit analysis
- Outcome is (usually) the Incremental Cost Effectiveness Ratio.
  - Lower ICER = better value

$$\text{ICER} = \frac{\text{Total Cost}_{\text{new}} - \text{Total Cost}_{\text{current}}}{\text{Total Health Outcomes}_{\text{new}} - \text{Total Health Outcomes}_{\text{current}}}$$

## Patient decision making

- Increasing focus on shared care & patient engaged decisions in health
- Requires knowledge of patient preferences
- Economic methods (e.g. Discrete Choice Experiment surveys) can quantitatively measure patient preferences
  - Relative importance of different aspects of an intervention
  - How people trade off between the different aspects
  - How much people are willing to pay to get (or avoid) a certain outcome
  - Uptake rates of new intervention

# Examples of health economics in falls prevention

## Economic evaluations

- Irvine et al (2010) Cost-effectiveness of a day hospital falls prevention programme for screened community-dwelling older people at high risk of falls [\[Link\]](#)
- Jenkyn et al (2012) How much are we willing to pay to prevent a fall? Cost-effectiveness of a multifactorial falls prevention program for community dwelling older adults [\[Link\]](#)
- Church et al (2015) Cost effectiveness of falls and injury prevention strategies for older adults in residential aged care facilities [\[Link\]](#)
- Albert et al (2016) Cost-effectiveness of a Statewide Falls Prevention Program in Pennsylvania: Healthy Steps for Older Adults [\[Link\]](#)
- Winser et al (2020) Dosage for cost-effective exercise-based falls prevention programs for older people: A systematic review of economic evaluations [\[Link\]](#)

## Patient preferences

- Angell et al (2018) Participant preferences for an Aboriginal-specific fall prevention program: Measuring the value of culturally-appropriate care [\[Link\]](#)
- Franco et al (2016) Smallest worthwhile effect of exercise programs to prevent falls among older people: estimates from benefit-harm trade-off and discrete choice methods [\[Link\]](#)

## How to (successfully) work with a health economist

- There are a limited number of health economists in Australia
- Most health economists have their own research programs with specific interests (clinical or methodological)
- But many will also do some ‘service’ supporting clinical research


## Typical email to a health economist

Dear Health Economist,

I'm a clinician at ABC Hospital. I am writing because I am submitting a funding proposal for a study looking at a new way of providing treatment for XYZ. We are planning a cluster RCT to compare our new treatment with no treatment.

We are also interested in showing our treatment costs less. If you are interested in being involved, could you please provide a one paragraph description of the health economics analysis and your bio? The grant is due tomorrow.

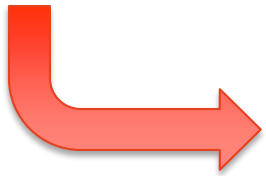
Yours sincerely,  
Clinician



Similar examples from hospital managers, health departments, policy makers and to consultants or internal staff also available!

## Common mistakes

- Last minute requests
- Misunderstanding what health economics does
- Segregating health economics from the rest of the project
- Including health economics because it is a requirement of the grant, or you've heard it improves funding success rates



Do not lead to good applications, good research or happy health economists!



## Tips to working with a health economist

- Engage early
- Seek health economists with interest in your clinical area and/or method
- Be open to including research questions in your work/study
- Be up front about what you want & need
- Be aware of the constraints on & incentives for collaborators (funding, time, authorship, etc)
- Use a checklist to be prepared...

# 11 Questions to help you work with a health economist

- To help you think about how health economics might be part of your research
- OK if you don't know all the answers...
- But, helpful if you've a least thought about them!
- Help you get the most out of your first meeting with a health economist
- Available: <http://www.alisonpearce.net/uncategorized/11-questions-to-help-you-work-with-a-health-economist/>



NAME	
PROJECT	
1. What is your research question?	
2. What is your economics research question? <i>Think about the decision you are trying to inform and who will make it. Do you think you will improve health or reduce costs or both?</i>	
3. What is your population and setting?	
4. What is your intervention?	5. What is your control or comparison group & why? <i>Think about current and best practice.</i>

# 11 questions...

1. What is your research question?
2. What is your economics question?
  - Do you think you will improve health or reduce costs or both?
  - What decision are you trying to inform? Who will make this decision?
3. What is your population and your setting?
4. What is your intervention?
5. What is your comparison?
  - Why is that the best comparison? Consider best & current practices

## 11 questions continued...

6. What are your outcomes?
  - Consider clinical outcomes, quality of life, others?
  - Consider costs, resource use, others?
  - What time frame are you interested in?
7. What data will you use?
8. What role do you want the health economist to play?
9. How will you pay for the health economics?
10. What is the timeframe for your project?
11. How are you ensuring your research is patient oriented?

## Resources to learn more...

Economics in real life:

- [Freakonomics](#) (books and podcast)

Health Economics – Introduction (articles)

- [Kernick](#) (2003) Introduction to health economics for the medical practitioner
- [Goodacre & McCabe](#) (2002) An introduction to economic evaluation
- [Sanofi](#) (2009) What is health economics?

Economic evaluation – Detail (books)

- [Gray et al](#) Applied methods of cost effectiveness in health care
- [Drummond et al](#) Methods for the economic evaluation of health care programs

# Key messages:

Economists think differently

Health economics is about maximising health outcomes from our limited resources

Health economics provides a way to think about, describe and understand the value of falls prevention research

Start looking for a health economist early, so you can get the right fit



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