ECONOMICS, HEALTH ECONOMICS AND IMPLEMENTATION RESEARCH

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Session 1 Outline

- What is economics?
  - Core principles
- What is health economics?
  - How is health different?
- Using health economics in research
  - Economic evaluation
  - Preferences
  - Evaluation of policy
  - Workforce
In this presentation.....

- Behind every health economist there are:
  - Ideas
  - Theories
  - Concepts

- These originate in ECONOMICS
  - (Yes, the dismal science)

- Applied to the topic of health care
Applied Economics

- HE is one of a number of branches of Applied Economics
  - Public economics
  - Labour economics
  - Environmental economics
  - Agricultural economics

- Applied MICROeconomics
  - Not Macroeconomics
  - The ECONOMY (growth, inflation, unemployment, imports, exports)

- Don’t worry about the labels: Economics is a useful way of thinking about the world
What are we thinking?

1. The behaviour of individuals \((\text{consumers, patients, providers})\) and firms \((\text{groups, organisations, hospitals, government})\) in making **DECISIONS** about resource allocation \((\text{buying and providing/selling goods & services})\).

2. How these decisions affect the **SUPPLY** of and **DEMAND** for goods and services - which in turn affects prices.

3. How **PRICES** affect the quantities of goods and services demanded and supplied.
How are we thinking?

- **Assumptions**

- Individuals are **rational** and make decisions which maximise their **utility** - their preferences are stable.

- Their decisions are subject to a **budget constraint**.

- A **competitive market** exists in which there are many buyers and sellers and a **balance is reached between supply** (availability of a product at a price) and **demand** (desires of those with purchasing power).
Does this apply to Health Care?

- An economics way of thinking can apply to any market: insurance market, energy supply market, labour market, real estate market, flea market, fitness services market, taxi market, health care services market.

- Three important concepts:
  - Limited resources (constrained budget)
  - Opportunity cost (doing one thing means you cannot do another)
  - The margin (assessing the next (or additional) action in terms of costs and benefits)
Does this apply to Health Care?

- These are easy to think about in an individual sense
  - Not so easy when who faces them is not (only) an individual

- Three other important concepts:
  - Market Failure
    - All markets fail
  - Incentives
    - Not only financial
  - Moral Hazard
    - A bit of a furphy
1: Market Failure

Many reasons why (health) markets fail

- Competition failure
- Public good
- Merit good
- Externalities
- Information asymmetry

Rationale for regulation/government intervention

Other ways needed to make collective choices

- Collective funding via public and private insurance
2: Incentives

- Motivation for an individual to perform an action
  - People expect to benefit from own decisions and actions
    - Financial: most common
    - Moral: right and wrong
    - Natural: consequences
    - Coercive: negative

- Study of incentive structures is central to the study of both individual decision-making and co-operation and competition within a larger institutional structure.
3: Moral Hazard

- Where an individual takes more risks because s/he doesn’t bear the cost of those risks
  - Conventionally, seen as a bad thing; people will seek and consume more health care than they need if they don’t bear the costs
  - Other side of the coin is that not bearing costs may encourage people who otherwise would not seek care to do so.

Think about it:
- If surgeons refused to accept payment for appendectomies anymore, would anyone go and get one just for the fun of it?
- If colonoscopies or chemotherapy were free, how many patients would demand more?

What happens when providers know patients won’t face costs?
How do we manage these issues?

- **Response is to develop an insurance market.**
  - Insurance: a *means of protection* from (financial)* loss
    - a form of *risk management* used to hedge against the risk of a contingent, *uncertain loss*.
  - The insured pays a guaranteed and known relatively small amount - the *premium***
  - The insurer promises to compensate the insured in the event of a *covered loss*
  - The loss must involve something in which the insured has an *insurable interest***
Health insurance

Most OECD countries have a form of **universal health insurance**
- funded by citizens via tax or social insurance schemes

Medicare is a **taxpayer-funded universal insurance scheme**
- all permanent residents entitled to most necessary health care services

**Private health insurance** provides cover for:
- Services not covered by Medicare
- Some medicines not listed on the PBS, or prescribed for a condition other than the PBS indication
When markets don’t work: regulate

- All insurance needs some rules regarding
  - How the premiums will be collected, how funds pooled, how risks rated
    - Medicare levy, taxes, PHI premiums
  - What will and won’t be covered by public/private insurance:
    - MBS, PBS, in-hospital care, community services, private products/services
    - Co-payments
  - Who will “fix” the problem (what is the problem??)
    - Registered health care professionals
    - Accredited facilities
Health economics as implementation

- Health economics provides evidence about how each part of the system should work:
  - Is it value for money to fund a new drug or health care service?
  - What might happen when the system is changed?
  - How can we affect desired behavioural change in individuals and/or providers through incentives: carrots or sticks?
HE research (1)

- Evaluation of policy
  - How well does Australia’s unique combination of public and private sources of finance for health care, and public and private sector providers work?
  - Administrative, panel, linked, survey data
    - How do individuals respond to changes in personal circumstances?
    - How do past experiences within the health system impact on present choices?
    - How do changes in policy settings shape decisions and impact on outcomes?
HE research (2)

- Economic evaluation & health outcomes measurement
  - what are the costs and benefits of alternative interventions?
  - Trial-based, model-based, combination
  - Challenge to assess health outcomes which are:
    - Relevant to end-users
    - Sensitive to differences in alternative interventions
    - Valid for cross-service comparisons
Preferences and Values

- Individuals make choices
  - Lifestyles, whether & what health care services to use
- These choices determine
  - Utilisation, costs, outcomes
- Utilisation, costs, outcomes determine
  - How health system works
  - Whether we can predict impact of changes in policy

Available data usually not adequate

- Stated preference data (from discrete choice experiments)
HE research (4)

- **Workforce**
  - health workforce crucial to productivity, effectiveness, accessibility of health care.
  - Lots of data collected
  - Some predictions made

- **But**
  - Little Australian research in this field
The right tool for the right research question

- Health economics as a way of thinking is very flexible;
  - Recall – scarcity, opportunity cost, margin
    - Given resources are limited, how might I best use what I have given the benefits forgone of using them in an alternative way? AND
    - If we change service parameters or payments, how will it change behaviour and outcomes?
The right tool for the right research question

- Product or service exists, to be introduced/evaluated:
  - Are there comparative data eg a clinical trial — consider an economic evaluation (more on this in a moment)!
  - Are there existing data sets that address the question of interest eg. 45&UP (combining health outcomes and health service use) — for policy evaluation.
The right tool for the right research question

- A new product/service:
  - What do we know about existing behaviour?
  - How might behaviour change in the face of the new product/service?
  - Can we design an experiment to understand expected changes in behaviour?

- (Can also be applied to understand behaviour and preferences for existing products/services).
Do I always need health economics?

- Short answer, no! BUT
  - If there is question about comparative resource use or outcomes, or
  - You want to affect change to existing service delivery, or
  - Introduce a new service...
- Then it think about including an economic perspective to your analysis.
Who can assist?

- Centre for Health Economics Research and Evaluation (CHERE)
  - TCRN Research Partners
  - Cancer Research Economics Support Team through Cancer Australia
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