ECOS3017 Health Economics

SUPPLY AND DEMAND FOR HEALTH CARE

IS HEALTH CARE DIFFERENT TO OTHER MARKETS?

What is Health Economics

Health is part of our utility. **Health care** is an input into the production of health.

Health care decisions are made by:

- Individuals
- Health care providers
- Government
- Insurance Companies

Economics is the study of the allocation of scarce resources

Health care uses resources & is not available in endless supply

In Australia, Health care expenditure was 9.3% of GDP in 2016, 17.1% for the USA.

Opportunity cost: A dollar spent on health care, is a dollar less to spend on something else

- Within health care: IVF for one person = 300 MMR vaccinations
- Other public sectors: IVF for one person = 5000 school dinners

Due to insurance, expenditure decisions are typically centrally planned either by insurers or the government (who acts as an insurer).

How do we evaluate an allocation of a scarce resource? Efficiency (MB = MC) or Equity ("fairness")

- Efficiency
  - Maximize social welfare function (aggregate individual utilities)
  - Can be more than one efficient allocation
  - Not necessarily equitable. Those with highest WTP get the resources.
- Equity
  - Allocate to those who have a need for healthcare services
  - Equitable distribution requires social planning
- Economists usually consider equity conditional on efficiency

How do Health Care Markets Work

Simple model of health care

People have health

- If a person gets sick they need to purchase health care
- Uncertain when or if they will get sick

People can pool risk of requiring health care

- Insurance: before it is revealed who will get sick, everyone puts in some money
- The amount is based on the expected payout

People get sick and go to a medical provider

Provider must be paid

- With insurance – insurance pays for the treatment
- Without insurance – patient pays with own money

Australia's Health Care System

Insurance

<table>
<tr><th>Medicare (public)</th><th>Pharmaceutical Benefits Scheme (Public)</th><th rowspan="2">Private Health Insurance

Pay premiums to a private insurer

Means-tested government subsidy

Pays for private hospitals, pharmaceuticals, ancillarys

Eligibility: optional, you have to pay for it and can still use Medicare as much as you want. Some tax savings.</th></tr>
<tr><td>Pays for public hospital stays, primary care, pathology, diagnostics</td><td>Pays for prescription pharmaceutical</td></tr>
<tr><td colspan="2">Paid for through taxation

Some out of pocket costs but they are capped by the Medicare safety net

Eligibility: everyone</td></tr>
</table>

Providers

- Hospitals: public or private
- Other physicians: private

US Health Care System

Insurance

- Medicare: Public insurance for the elderly (65+)
- Medicaid: Public insurance for the poor

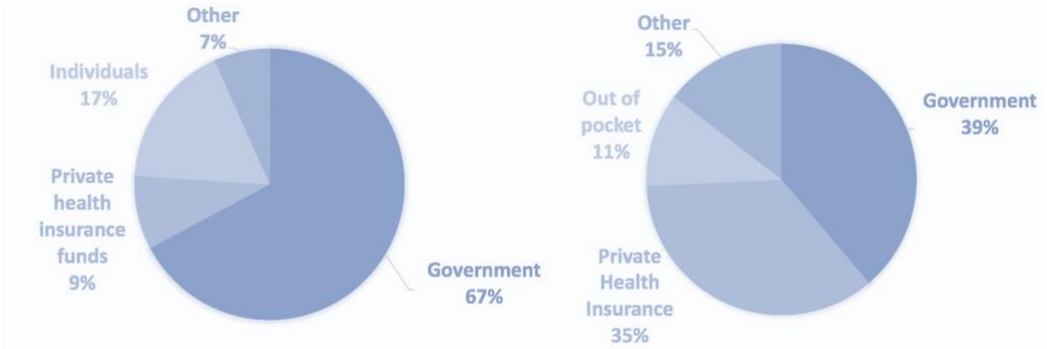
} Paid for through taxation

  - Administered through the states, among which criteria may differ
- Employer sponsored health insurance (ESHI)
  - Part of employee compensation/salary package
  - Health insurance tied to workplace
- Health exchanges
  - State based private insurance plans ("Obamacare policies")
- Other government programs e.g. the VA for veterans

Providers

Hospital and other providers are most private.

Who pays?



AUSTRALIA USA

Public vs Private

Health care may be paid for in different ways, but consuming it is never free:

- Patient pays out of pocket
- The patient pays premiums to a health insurance plan
    - At the time the patient uses health care the insurer pays but premiums = expected payouts
- Government pays for health care
    - Government raises this money through taxation

Public vs Private: the alignment between how much you pay and how much you use

- **Private & no insurance**: pay for exactly what you use
    - Health inequality would arise as
        - Those with higher income would receive more or higher quality health care
        - While those with lower incomes receive less or lower quality health care
    - A large number of people are uninsured in the US, large health inequalities are observed

- **Private & insurance**: pay for what you *expect* to use
    - Risk of illness and needing health care
    - Pay a premium equal to the expected cost of your health care
    - Depending on your health shocks, premium may be > or < health care received
    - The quantity and quality of health care depends on the policy you purchase
        - You are sharing the risk with a group of people
        - Other people must also be willing to pay for that service to be included

- **Public insurance/care**: Pay based on taxation
    - You use the health care you need
    - You pay based on the taxation system – higher income pay more
    - Quality and quantity is decided by the government
        - Everyone gets the same health care options
        - Higher income people pay more for the same health care then lower income people

Comparing Health Care to Other Markets

The health care market has many distinctive features. However, none of which are individually unique.

Patients do not behave like consumers

- Demand in unpredictable
- Uncertain if medical care will work for any particular consumer – purchase an expected benefit
- Medical knowledge is complex (“trust” in providers) – asymmetric information
- Insurance won’t work due to pre-existing conditions
- Externalities: Patients care about other patients’ health care consumption
    - A healthier society benefits more than just the individual who received care
- Health care gives indirect utility i.e. surgery does not increase utility, but rather the health improvements that may result

Providers do not behave like firms

- Barriers to entry such as licenses – needed to protect quality but prevent competition
- Asymmetric information – care dictated by clinical need not by the financial interests
- Not for profit firms
- Providers charge patients’ different prices (price discrimination)