Health and Healthcare Systems

Lectures 9 and 10

Le Grand, Propper and Smith (2008): Chp 2
Bochel, Bochel, Page and Sykes (2009): Chp 15
Stiglitz (2000): Chp 12
Outline

• Healthcare, efficiency and equity
• Healthcare and the market system
• Forms of Govt intervention
• Govt failures
• Healthcare reforms
Healthcare and Resource Allocation

• Individual’s health
  – diet, working conditions, housing, public health measures, health care

• Healthcare and Efficiency
  – MSB = MSC

Healthcare and Equity
  – Fair and Equitable
    – Fairness and Equity defined:
      1. Minimum Standard
      2. Full equality
      3. Equality of access

Figure 1 The Efficient Number of Hospital Beds

• Measuring the benefits is problematic
The Market System for Healthcare

• Features of a perfectly competitive private market
  – Efficient
  – Choice

• Is the market allocation of healthcare efficient?
  – Uncertainty of demand
  – Imperfect information
  – Externalities

• Small private healthcare sector in UK

• The NHS is mainly publicly funded
The Market System for Healthcare I: Uncertainty of Demand

- Demand for healthcare is unpredictable
  - planning expenditure and savings; healthcare payments tend to be large

- Private insurance market and inefficiency

1. Moral hazard (hidden actions)
   - Individual incentives to economise on treatment
   - Doctor incentives to economise on expenditures
     ⇒ usage and costs > efficient level
   - Note: publicly funded healthcare also subject to moral hazard

2. Adverse selection (hidden information)
   - Premiums reflect average risk
   - \( P > \) willingness to pay by good risk individuals (healthy)
     ⇒ under-supply of insurance
   - Bad risk individuals and equity
The Market System for Healthcare II: Imperfect Information

• 1. Quality of a good v quality of individual’s health
  – Doctor is supplier of information

• 2. Few opportunities for ‘learning by doing’
  – lack of information before and after treatment limits informed choice

• Payment method to supplier
  – Reimburse the supplier for treatment? (moral hazard)
  – Payment per person?
    ⇒ need for regulation

• A relationship of trust (monopoly power) v shop around
  – Costly information
  – Complex information
  – Inaccurate information
The Market System for Healthcare III: External Benefits

• Total social benefit = private benefits + external benefits
  ⇒ Market provision is inefficient

• 1. Communicable diseases
  – Eradication v side effects eg MMR vaccination
  – Developed v developing countries

• 2. Caring externalities
  – Concern for treatment of the sick

• Ethics and Equity
  – The act of giving and receiving v commercial purposes
  – Altruism v self-interest
  – Intrinsic rewards v extrinsic (pecuniary) rewards
    eg pay individuals to give blood? to supply organs?
Govt Policy I: Direct Provision

• **NHS**: Public provision of healthcare to mitigate
  – Asymmetric information → ↑ P for medical care
  – Over-provision
  – Over-emphasis on ‘high-tech’ or ‘interesting’ cases

• **NHS-type systems in many OECD countries**

• **Hospitals**
  – Govt ownership through NHS
  – Public sector workers are employed by NHS

• **Primary care**
  – Services of (self-employed) general practitioners

• **Health promotion activities**
  – Responsibility of govt
Direct Provision and Govt Failure

• Direct provision and the market allocation of resources
  – Power of providers

• Govt failures: inefficiency and inequity

• 1. The size of the public sector limits competition
  – State as a monopolist: production inefficiencies

• 2. Direct provision limits innovation
  – Political interest (cost of medical technology) v cost-benefit analysis

• Targets to increase service provision?
  – Reduce waiting times?
  ...but distorts output activities; fiddling of the figures
Govt Policy II: Regulation

• **1. Acceptable Standards**
  - Personnel: education, training and qualifications
  - Drugs: safety standards

• **Self-regulation**
  - Professional bodies within health service
  - eg British Medical Association, the Royal College of Surgeons

• **Public Information**

• **2. Price Control**
  - Applicable to healthcare systems with fee-paying patients
Regulation and Govt Failure

• Regulation and the market allocation of resources
  – Monopoly power; excess demand due to moral hazard

• Govt failure: inefficiency and inequity

• 1. Self-regulation
  – Self-interest v interests of consumers
    eg length of doctor training to restrict supply of doctors?

• 2. Price regulation
  – Price to limit monopoly power v market signals
  – Incentives for inefficient behaviour
    eg ↓ doctor fees → ↑ nr of patient visits ⇒ longer waiting times
  – Under-treatment of patients
    ⇒ ‘cream-skimming’ and ‘patient dumping’ and equity
Govt Policy III: Taxes and Subsidies

1. Public funding of healthcare raised from taxation

NHS: a system of public taxation and public provision

- Public funding through general taxes
- Public provision through general practitioners
  \[\Rightarrow\text{no user charges: subsidised at the point of use}\]
- Non-core healthcare carry lower levels of subsidies

2. Subsidies targeted at specific groups

- Medicaid: healthcare cheaper for low-income groups

3. Subsidies via tax treatment

- Switzerland: private health insurance is tax deductible
Subsidies and Govt Failure: Inefficiency

• Effect of subsidy: ↓P of medical care
  - efficient way of dealing with externalities

• ↓P and Over-consumption
  - Individual: MPC = MPB: Q₁
  - Society: MSC = MSB: Q*  
    - Good provided free
    - MPC = MPB = 0
    ⇒ P no longer a rationing device
    1. Queues
    2. Waiting lists

Figure 2  The Effect of a Subsidy on the Quantity of Care Demanded
Subsidies and Govt Failure: Inequity

• Effect of subsidy
  – ↑ rewards from provision to achieve equity goals
  – ↓P of medical care → ↑ access to poor
  – Promote geographical equity

• Effectiveness of subsidy

• 1. Type of subsidy
  – Universal eg NHS
  – Means-test eg Medicaid

• 2. Definition of equity
  – Both promote equity in terms of minimum standards
  – Means-test and equality of access and equality of treatment
The Main Determinants of Health

Source: Dahlgren and Whitehead, 1991
Healthcare Reforms

• Markets and Govt subject to inefficiencies and inequities

• Incentive structures

1. Quasi-market reforms: ↑ market incentives
   - Separate roles for hospital provider and purchaser functions
   - Market created on the supply side
   - Also: regulated prices; encourage entry of non-public providers

2. Cost sharing at the point of demand
   - ↑ patient awareness of costs
   - ↓ govt exp

3. Other measures
   - Low price managed care plans eg HMO
   - Insurance market competition
Summary

• Healthcare and Efficiency: MSC = MSB

• Healthcare and Equity
  – Minimum standard
  – Equal treatment for equal need
  – Equality of access

• Healthcare and Market inefficiency
  – Uncertain demand
  – Asymmetric information
  – Externalities

• Govt health intervention is substantial in OECD countries

• Reforms: ↑ role of market, maintain equity goals
  ⇒ cut costs but equity concerns