The health risk:

- Health care
- Health insurance
- Health markets
References

Key concepts

• Demand for health care is derived
  – from a demand for health (few people want health care for its own sake) (Grossman model, JPE 1972)

• Demand for health is derived
  – from the demand for utility (e.g. healthy days in which to participate in leisure and work)

• Individuals are not passive consumers of health
  – but active producers who spend time and money on the production of health

• Health can be seen as lasting over time periods.
  – It depreciates (perhaps at a non-constant rate) and can therefore be analysed as a capital good
The Grossman model: a the stock of health (human capital)
Factors affecting the demand for health care

- Deterministic variables
  - Genetics
  - Investment in health

- Environmental variables
  - Socio-economic variables
  - Time and location
  - State intervention
The health risk (1)

- Characteristics:
  - Static and dynamic (the probability may become close to 1)
  - Particular and fundamental (epidemiology)
    …………….importance of public health

- Not an ideal risk
  - Expected loss is not known (morbidity tables)
  - Not accidental (not independent of behavior of policyholders)
  - Not calculable (not independent of treatment)
Health risk (2)

• Pricing the health risk
  – Asymmetric information
  – Moral hazard
  – No classification authorized (sex, age,…)

• A special contract
  – There is a third party (the provider of care)
  – Compulsory contract
  – Coverage determined by the State
The demand for health insurance

• Demand for health insurance is derived from demand for health care
• Health care is perceived as a public good
• Loss of health is insurable (health care expenses) not health itself.
• Insurable risks are not homogeneous
Health insurance and acute care
Health insurance and the disability risk

Stock de santé

Ho

T
Health insurance and terminal illness

[Diagram: Stock de santé vs T]
Health risk (3)

• Heterogeneity of risks
  – Hospitals, doctors, non-doctors, pharmaceuticals, dental care, transportation,…

• Increasing trend with age
Reimbursed expenses:
France, Switzerland and UNSMIS, 2005

Social and Private Insurance
Reimbursement expenses by age
CHF, 2000-02

Social and Private Insurance
The market for health care

- Services Providers
- Health-care insurance
- Policyholders

Diagram showing the interactions between providers, insurance, and policyholders.
A: Health Insurer/Policyholder

Social and Private Insurance
A: Health Insurer/Policyholder

- **Cost control by imposing constraints on the demand**
  - Contract of indemnity (reimbursement) or free access to care
  - Risk management tools (franchise, deductible)
  - List of admissible treatments
    - Treatments prescribed by doctors only
    - Treatments non authorized, pharmaceuticals not reimbursable, …
  - Cost ceiling to admissible expenses
    - Case of extra fees charged by doctors, parallel markets, …
Comparison with the RAND study: France
(Reimbursements of pharmaceutical products from 1994 to 2002 with different co-insurance rates)
B- Policyholders/Services providers

Social and Private Insurance
B- Policyholders/Services providers

- No information (or minimal) on quality
- No information on treatment cost
- Market with no competition (regulated prices)
- Demand determined by doctors (induced demand)
- Ex-post moral hazard (shopping for health care)
C- Health insurer/Services providers

Social and Private Insurance
C-Health insurer/Services providers

- Cost control on supply (most OECD countries)
  - State control the remuneration of services providers
    - But no control on quality and quantity of services
  - State control the quantity of services
    - Doctors are gate-keepers of access to services

- The health insurer is authorized to purchase services
  - UK, Netherlands, Germany

- Health insurers in competition
  - Switzerland, Netherlands
D: Managed care

Social and Private Insurance
Key concepts

- Provider Payment Arrangements
  - Fees for service
  - Capitation
  - Salaries

- Managed care
  - Health Maintenance Organization (HMO)
    - closed panel HMOs
  - Point Of Service (POS)
    - opened HMOs
  - Preferred Provider Organization (PPO)
  - Exclusive Provider Organization (EPO)
Examples of health networks

- United States
- Netherlands
- Switzerland
- Germany
- UK

*Vertical Integration* vs. *State regulation*
Organization of primary care

- Doctors are gate-keepers of access to care
- Costs of care controlled by doctors
- Practice (individual or group practice)

<table>
<thead>
<tr>
<th>Country</th>
<th>% Group practice</th>
<th>Remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden /Finland</td>
<td>More than 95%</td>
<td>Wage or salary</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>92%</td>
<td>Capitation payment</td>
</tr>
<tr>
<td>Netherland</td>
<td>57%</td>
<td>Capitation payment</td>
</tr>
<tr>
<td>Belgium</td>
<td>30%</td>
<td>Fee for service</td>
</tr>
<tr>
<td>Italy</td>
<td>20%</td>
<td>Fee for service</td>
</tr>
</tbody>
</table>
How to introduce some competition in health care?

• **Competition in managed care**
  – Competition among insurers to purchase health care services
  – Competition among providers of services

• **Competition in health care markets**
  – The increasing role of private insurance due to segmented markets
  – The competition among markets and trade in services
Health-care and health insurance markets

• Regulated and segmented markets
  - Non optimality of price controls
  - Non-optimality of cartel-like markets

• Insignificant trade and competition
  - Barriers to trade
  - Non-portability of insurance
Trade in services: definitions

Mode 1: cross-border delivery
Mode 2: consumption abroad
Mode 3: commercial presence
Mode 4: movement of personnel
Trade and Foreign Direct Investment (FDI) in health services

Commercial presence (Mode 3)

- Hospitals and clinics
- Health care management