The study of the allocation of resources to and within the health economy.

Folland, Goodman, Stano (2007, p. 8)

- How do people evaluate their own health?
- Health as an input in the process of producing goods and services.
Typical questions . . .

- Patients
  - Do prices matter in how much medical care is utilized?
  - Lifestyle – how many hours to invest into health?

- Doctors
  - Urge the patient to undergo a grueling chemotherapy?
  - How many hours to work in the practice?
  - Charge different fees to different patients?

- Hospitals
  - Do the expected benefits justify the cost of a new medical center?
  - What treatments for what patients?

- Regulators
  - What are the expected cost and benefits of screening campaigns?
  - Coverage levels for prescription drugs
Size and scope: health expenditures in Austria

Source: OECD health data 2008
Number of practitioners in European countries

Source: OECD health data 2007; general practitioners and specialists
Practitioners per 1000 inhabitants

Source: OECD health data 2007; general practitioners and specialists
General practitioners in European countries

Source: OECD health data 2007
General practitioners per 1000 inhabitants

Source: OECD health data 2007
Hospital beds in Austria per 1000 inhabitants

Source: OECD health data 2008
Hospital beds in European countries; per 1000 inhabitants

Source: OECD health data 2007
MRIs per million inhabitants

Source: OECD health data 2007
Features of economics . . . applied to the health sector

- Scarcity of societal resources
- Assumption of rational decision making
- Concept of marginal analysis
- Use of economic models

The analysis requires

- Interdisciplinarity (medical science, psychology, sociology, . . .)
- Knowledge of institutions (hospitals, insurers, regulators, politicians, . . .)
How relevant is economics to health and health care?

It is often complained that economics is irrelevant to the analysis of health:

Health is considered to be primarily a technical issue of medical science, better left to experts. Patients get sick – they see a doctor who provides the appropriate treatment.

- Emergency cases
  - limited time and reasoning power left
  - prices are almost never questioned
- A significant proportion of health care is elective
  - room for rational choice
  - routine cases, prior experience, agents take decisions even in a real emergency
Economic incentives matter

Source: Keeler, Manning, and Wells (1988); Keeler and Rolph (1988)
Distinctive features of health care

- Uncertainty
- Information problems
- Insurance
- Restrictions on competition
- The role of equity and need
- Government subsidies and public provision
Uncertainty and information problems

- Health status and need for coming health care uncertainties
- Product uncertainties (expected outcomes of treatments)
- Even physicians cannot predict outcomes with certainty
- Lack of information as a reason for uncertainty
  - Sometimes information is unavailable to all parties concerned (early stages of diseases)
  - Asymmetric information (some do have information, others do not)
- As a consequence, economic analysts must modify their methods (e.g. principal agent models – conflicting interests as the agent (the doctor) offers both the information and the service)
The importance of insurance

- Large portions of cost are indirectly paid through coinsurance and through insurance premiums
- Insurance premiums are mostly purchased through labor force participation
- Separation from direct payment weakens price effects
- Insurance changes the demand for care and also the incentives of providers (Do you hold a private health insurance?)
- Example: Insurance payment procedures change provider behavior – the Austrian change of the hospital payment system to a DRG (diagnosis related groups) based system (Leistungsorientierte Krankenanstaltenfinanzierung)
Nonprofit firms and lack of competition

- Many providers have nonprofit status, including
  - hospitals
  - nursing homes
  - insurers
- Economists must understand the differences in their behavior to for-profit firms
- Competition is effectively restricted
  - licensure restrictions
  - restrictions on advertising
  - standards of ethical behavior
  - regulation
  - patent protection in the pharmaceutical industry
- A thorough economic analysis of welfare effects seems indispensable
Current challenges to health economists

- Historical development: growth of the health care system
- The fee-for-service system did not offer incentives for less expensive care
- The emergence of managed care plans as an alternative form of less expensive health care (gate-keeping and service utilization control, ...)
- Expected cost drivers in the future
  - demographic change
  - costly medical technology
Life expectancy in Austria

Source: OECD health data 2008