

# HS 156 - Economics of Health and Education

## Module 1: Microeconomic Foundations of Health and Education

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Lesson 1

# Why health economics?

What does health care represent?

A collection of

- Services
- Products
- Institutions
- Regulations
- And PEOPLE

## Unique aspects of health care economics

1. The extent of government involvement.
2. The dominant presence of uncertainty at all levels of health care, ranging from the randomness of individuals' illnesses to the understanding of how well medical treatments work, and for whom.
3. The large difference in knowledge between doctors (and other providers) and their patients, the consumers of health care.
4. Externalities – behaviour by individuals that imposes costs or creates benefits for others.

# 1. Government intervention

- Government intervenes in many markets but not as much as in the markets for health care. How?
  1. By rigorous examination of competence of health care professionals.
  2. The government directly controls the economic behaviour of health care providers such as hospitals, nursing homes, and doctors etc.
  3. By making it compulsory for individuals/institutions to subscribe to health insurance.
  4. Providing insurance or financial aid against health expenses for extremely diverse set of people, v.i.z. elderly persons, poor, military veterans, children with birth defects, permanently disabled people, migrant workers, school children etc.
  5. Prices in health care industry are also rigorously controlled by the government.
  6. Central and state governments also provide special assistance for providing education to people entering the health care field.
  7. Government conducts intensive research in the health care sector through various sponsored institutions v.i.z. Indian Council of Medical Research.

# 1. Government intervention

- Why does the government involve itself so much in the financing of health care?
- Why do we spend so much effort controlling prices in health care in contrast to those in other industries?
- What leads the government to intensively monitor and control the simple process of firms entering and exiting an industry?
- Why do governments offer support for medical education process?
- Why does the government concern itself so much with what drugs we take?
- Why does the health care sector receive favourable tax treatments and how much is its size and shape influenced due to such taxes?

*Some governments intervene more and some less.*

## 2. Uncertainty

- Decisions to use health care begin with random events – a broken arm, accident, heart attacks etc.
- Some medical events are initiated because an individual is concerned about the possibility of some illnesses.
- Uncertainty may begin with the consumer-patient in health care, but does not end there.
- Providers also confront uncertainty
- There are also contrasts in our approach to uncertainty in different areas of medical care. For e.g. when it comes to new drugs in the market, the government monitors intensively. However, with regard to efficacy of a new surgical technique, we license the providers broadly, and then entrust them to make appropriate decisions.

### 3. Asymmetric knowledge

- When two people bargain in an economic exchange, and one holds far more relevant information than the other, the issues of asymmetric information arise.
- In health care, one party (the doctor) generally has greater level of knowledge than the other (the patient) about issues at hand – namely, the diagnosis and treatment of disease.
- Since the life of the patient (consumer) is in the doctor's (provider) hands, a simple profit motive can lead the doctor into different choices.

*We have evolved various mechanisms to protect untutored consumer-patients in settings such as the above.*

### 3. Asymmetric knowledge

- One of the important reasons for “professions” to evolve, with a code of ethics and, commonly, professional licensure, is to provide an institutional mechanism to help balance transactions such as a more-knowing doctor and a less-knowing patient (Kenneth Arrow, 1963).
- Health care industry is an area (service industry) in which “professionals” dominate the supply of the activity. The disparity of knowledge between the doctor and the patient is larger than say, a customer and an auto mechanic. A reasonably intelligent person can learn quite a bit about auto repair in a relative short period of time.
- The ability of individual customers to learn about the activity they purchase from others places a constraint on the amount of fraud one might expect.
- This process of acquiring information about the quality of mechanics (or doctors and dentists) proves important in the functioning of health markets.



## 4. Externalities

- An important area separating health care from many other (but not all) economic activities is the common presence of “externalities,” both positive and negative.
- External benefits and costs arise when one person’s actions create benefits for or impose costs on others, and when those benefits and costs are not privately accounted for in individuals’ decisions.
- *Communicable diseases such as COVID-19, common flu are the purest form of an event with externalities.*
- *When people get sick with a communicable disease, they not only bear their own illness, they also increase the risk that their relatives, friends, and neighbours will contract the same illness. When they take steps to avoid such diseases, they confer a benefit not only on themselves, but on those around them.*

*For e.g. the social benefit of getting a COVID-19 vaccine exceeds the private benefit.*

- *If people balance the costs of COVID-19 vaccine shots (including monetary costs, time, inconvenience, pain, and the risk of an adverse reaction) with just their private benefits (the reduced risk of contracting the virus during an ongoing wave), they will underinvest in vaccine shots from a societal perspective.*

## 4. Externalities

- Most major health care activities with significant externalities have become such a part of the background of our society, we seldom recognize their presence or consequences.
- Sewage control, mosquito abatement, quarantine rules for viral diseases, and massive inoculation programmes for infectious diseases often pass unnoticed by the average person.
- Private activities also create external costs. For e.g. every time a patient receives an antibiotic injection, the odds go up slightly that a drug-resistant strain of bacterium will emerge, immune to the current antibiotic. In relative closed communities such as nursing homes, this can become a serious problem.
- Note that although externalities are an important part of some medical activities, they are not unique to health care markets.