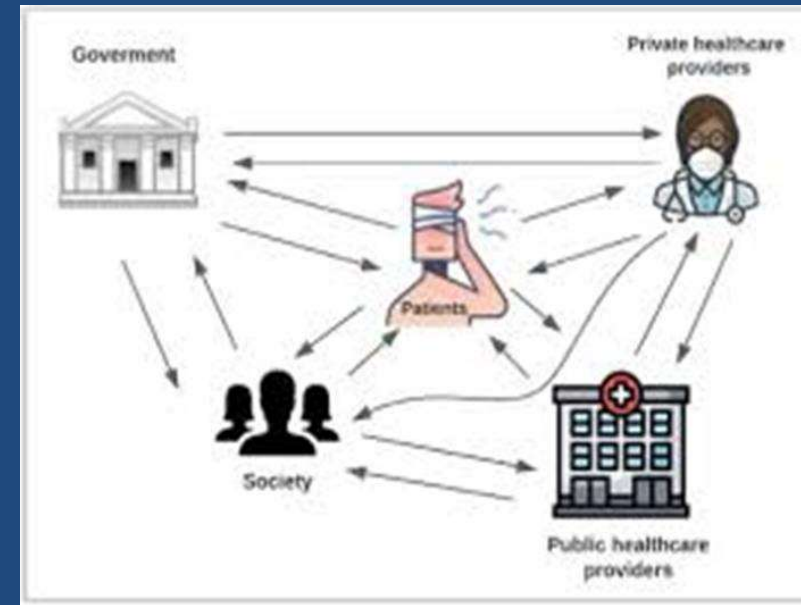


Introduction to Health Economics



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Outline

- What is economics?
- What is health economics?
- Why is Health Economics important?
- How is health economics relevant to health policy?
- Why do you need to know about health economics?
- What makes the health care market different from the market of other goods?
- What is demand and supply of health care?
- What type of questions do health economists ask?



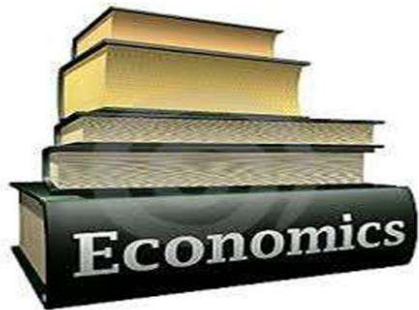
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WHAT IS ECONOMICS?



- ♦ Economics is the study of distribution of scarce resources commonly known as goods and services across a population
- ♦ Economics is the science of scarcity. It analyses how choices are structured and prioritized to maximize welfare within constrained resources.

What is Economics?



The discipline of economics deals with use of scarce resources to satisfy human wants and how best to use the resources available. (the study of the use of limited resources by a society for meeting its unlimited wants)

Economics is a social science that studies how individuals and organizations in society engage in production, distribution and consumption of goods and services.

Some economic terms

Scarcity: is a relative (comparative) term which means **less than requirements**.

A commodity is considered **scarce when it is limited in supply**, for example; the production of food may be in thousands of tonnes, but it is scarce because it is less than the requirements.

Some economic terms

Needs: Refers to basic human beings requirements for survival; food, clothing, housing and water.

Wants: any human desire is known as want or *end*. All wants of human beings cannot be satisfied because human beings' resources are scarce (finite) and wants are virtually unlimited (infinite).

All people work in order to Satisfy their wants (i.e. their desire).

What is a commodity?

Commodities are either goods (i.e. products that you can touch or hold e.g. medicines) or services (e.g. consultation).

There are three (3) things you can do with a commodity:

- *you can consume to gain utility*
- *invest for it*
- *trade it (i.e. exchange it) for some other resources*

Some economic terms

Choice: is the *selection of the wants* which have greater importance than others.

Utility: is the **quality of the commodity to satisfy** any human wants (desire).

In economics, the word or term **utility** is used for individuals to mean **satisfaction** and the word **welfare** is used for populations to mean **happiness**, both provided by commodities.

Human wants and choices

Human wants are **numerous or unlimited** or in the sense that once a goal is achieved **another comes up**.

However, Human beings are able to **make choices** between **competing wants**-
EG. a new shirt or a book.

What is Microeconomics?

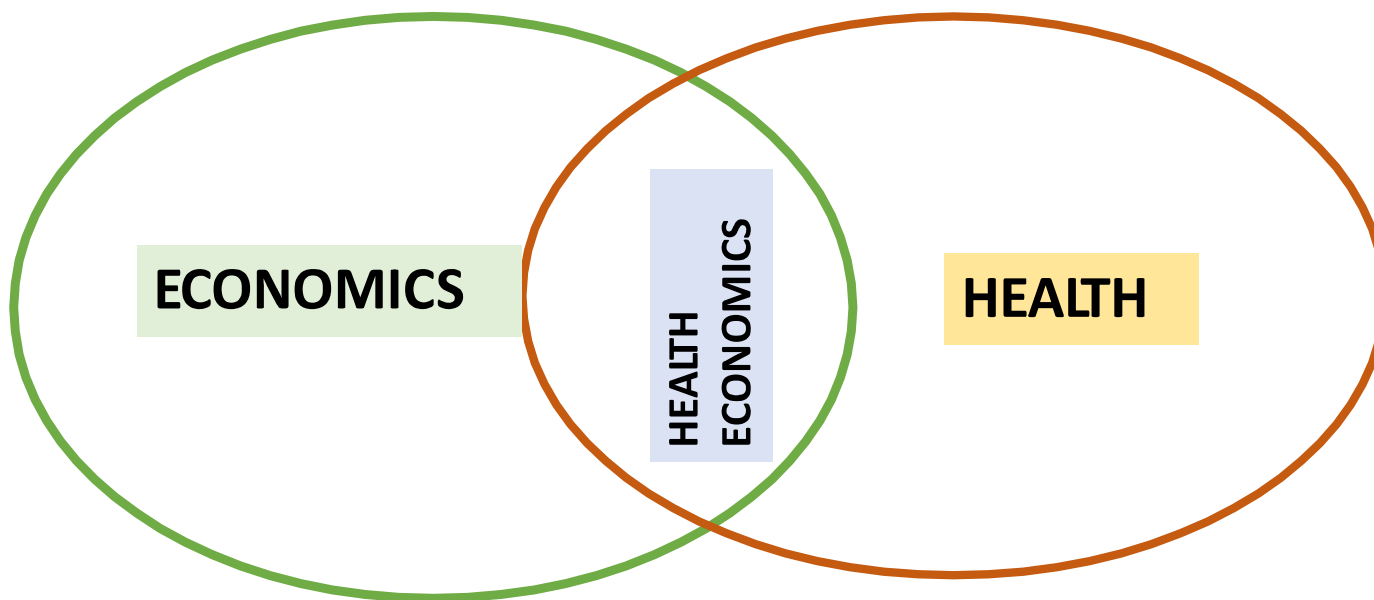
- Two broad classifications of economics

–**Microeconomics** : is a study (branch of social science) that assist us in better understanding the operation, function and relationships among markets, consumers, and producers. **Its primary objective is to assist society in determining the most efficient methods for allocating its scarce resources.**

What is Macroeconomics?

- – **Macroeconomics** : is a study (branch of social science) that assist us in better understanding the interplay of various economic sectors, and their effect on the overall performance of a nation's economy.

Economics of Health



Health Economics is the interface between Health or Medicine, and Economics

What is health economics?

Health economics is the study of how (scarce) resources are allocated to and within the health economy.

- Production of health care (doctors, specialists, or nurses).
- How do we distribute health care across the population?
 - Based on who can pay or who needs it or some combination.
- How much money should the government spend on health care? (proportion of governmental vs private)

- Health Economics applies Economic Principles to issues relating to Health.
- The concept of Opportunity cost applies here.
 - *Opportunity cost is the best alternative given up for taking one course of action rather than another.*
- So, the Economics of Health studies, among other things, how scarce resources are allocated among alternative uses in Health care, both at the micro and macro levels.

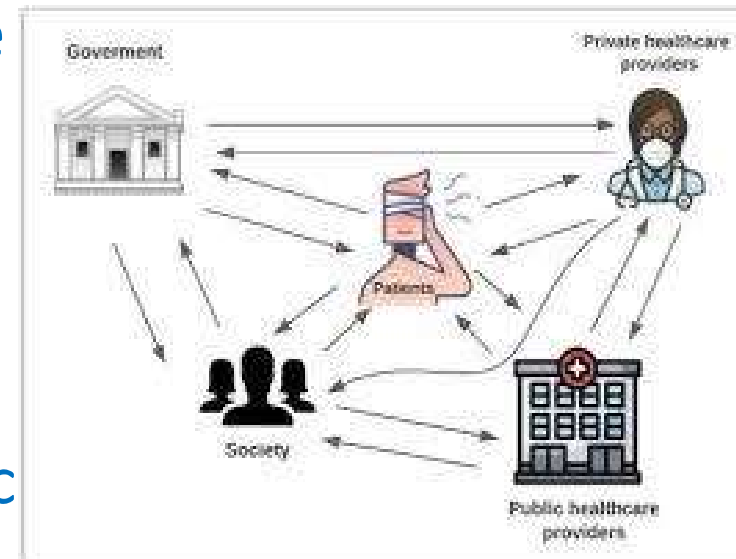
- Resources to be allocated to Health sector are limited,
- So choices have to be made, and priority areas where they need to be used, should be selected.
- In other words, the costs and benefits of different courses of action should be weighed with one another, and the best action should be selected (higher benefit/ cost ratio)
 - For instance in a hospital: should more money be allotted to building a new ward, or to buy more surgical instruments, or to appoint new staff?
 - This applies to both the micro or individual level, as well as the macro or Government policy level.

What is Health Economics (HE)?

- Efficient allocation of limited resources among competing alternative medications and health services.
- Compares the costs and consequences (outcomes) of medical interventions or health programs.
- linking investments in health to economic development. **Healthy People: healthy economy**

Importance of Health Economics

- To establish the true costs of delivering health care or to estimate all real costs like the use of patients' time, loss of output elsewhere in the system etc.
- To evaluate the relative costs and benefits of particular policy options.
- To estimate the effects of certain economic variables like user charges, time and distance costs of accessibility, etc on the utilization of health services.



DEFINITIONS OF HEALTH ECONOMICS

Health economics is the study of distribution of health care. It is a branch of economics concerned with issues related to efficiency, effectiveness, value and behavior in the production and consumption of health and health care.



DEFINITIONS OF HEALTH ECONOMICS

Health economics is the study of how scarce resources are allocated among alternative uses for the care of sickness and the promotion, maintenance and improvement of health.

It includes the study of how health care and health-related services, with their costs and benefits, are distributed among individuals and groups in society.

In short, Health Economics is

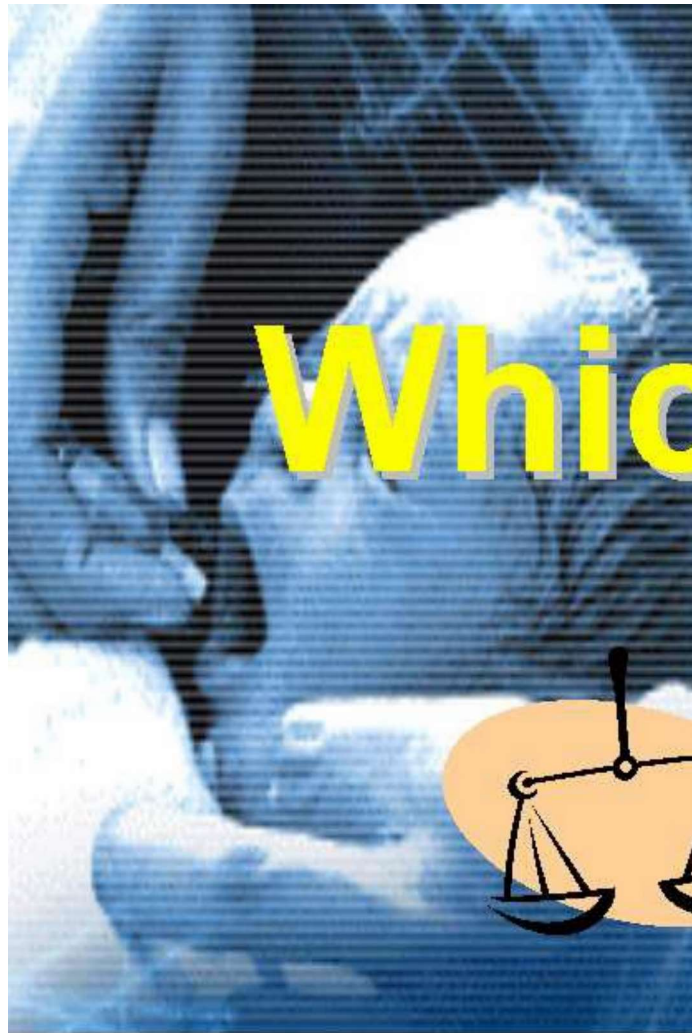
- a broad-based sub-discipline of Economics.
- is concerned with maximizing benefits within available resources
- overlaps with a number of topics, both within and apart from, health and medicine
- interacts with many other disciplines
- encompasses more than economic evaluation alone
- has a significant role in health care decision-making at policy and clinical levels.



Discussion Questions

- Health is a fundamental human right. Can we meet all health needs irrespective of cost?
- A healthcare organisation has enough resources to give a 5 year-old child a potentially life-saving operation or to provide a 75 year-old woman with a much-needed hip replacement.

How would you decide which to treat? What further information might you need?



Which ?



What is the “right” answer?

- Health economics can guide choices among alternative medications, treatment regimens and services based on a combination of costs and outcomes.
- Results and interpretation of Health economics studies are influenced by the **perspective** of the decision maker—there is no one “right” answer.

Differences between Pure Economic theory and Health Economics

Prabha Pawar 04-08-2018

- Kenneth Arrow: initiated the study of Health Economics in an article. (Uncertainty and the Welfare Economics of Medical Care, The American Economic Review Vol. 53, No. 5 Dec '63)
- Pointed out the following distinctions between Health economics and Perfect Competition Markets:
 - Uncertainty** in the demand, and in the supply of health. Unlike in Perfectly competitive markets (PC) in Economic theory, health problems may surface anytime, no certainty.

Differences between Pure Economic theory and Health Economics

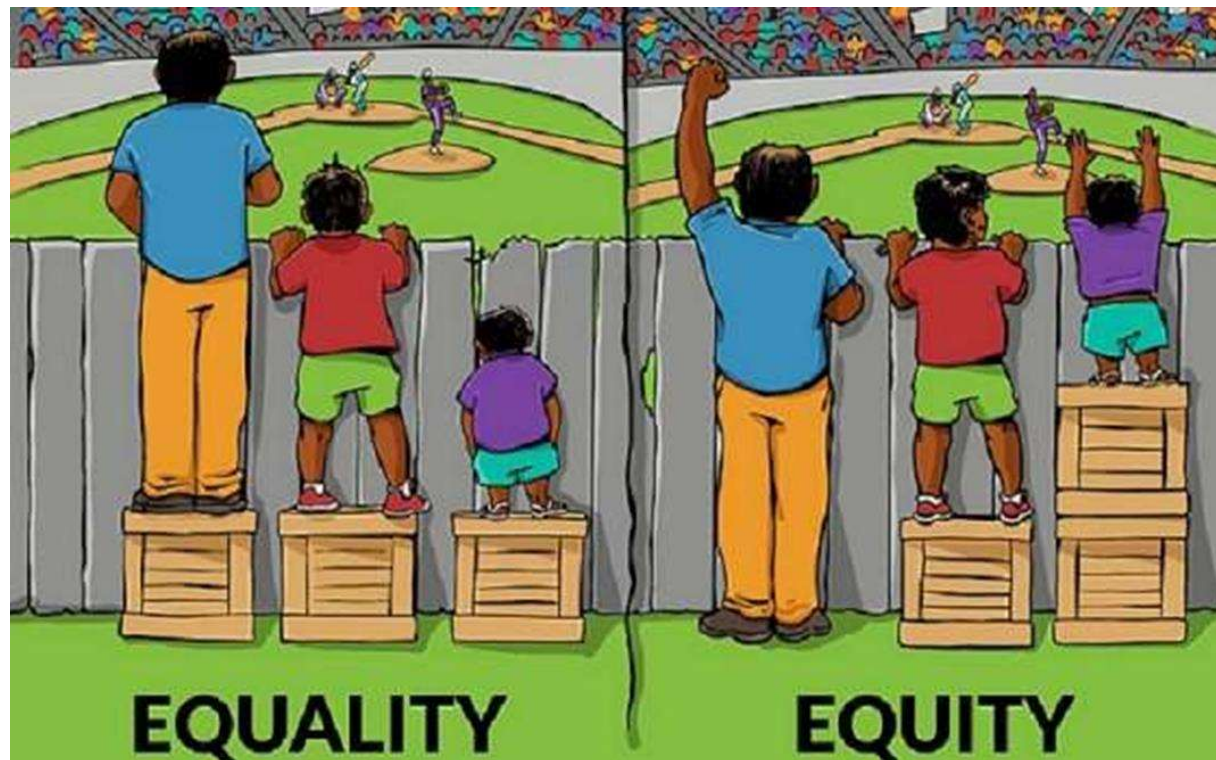
- **Asymmetry** in knowledge of the outcome of treatment. Physicians have more knowledge of the impact of treatment, than the patients. In PC, both buyers and sellers have equal knowledge of the commodity or service sold.
- **Externalities in Health Care:** e.g. if one person does not get vaccination, he spreads the disease to others. If one person takes treatment, he prevents the spread of the disease. But most economic goods do not have external impacts.

Differences between Pure Economic theory and Health Economics

- **Public Good:** a) Non Excludable: If a stagnant pool is sprayed with pesticides, all persons in that area benefit from the destruction of mosquitoes. b) Non Rival: if one person gets the benefit of the spraying, it does not decrease the amount available for others. But Economic goods are private goods.
- **Need for Government intervention:** Private sector will underprovide health care, or else develop monopolies, makes health care unavailable to poorer people. Barriers to entry. Government intervention required, health care to be subsidised by public health services. But PC based on laissez faire.

- **Lack of information:** regarding cost of treatment, outcome, and availability of health services, unlike PC market where it is assumed that there is perfect knowledge.
- **Ethics:** ethical practices to be followed by doctors and medical staff. But Market Economics does not include normative features like ethics.
- **Psychological:** Patients have close psychological connections with their physicians, which helps them in their recovery. This is not the case of other salesmen.
- **Increase in Human Capital and Labour Productivity:** At the micro level, improvement in health and absence of diseases increases labour productivity. This increases income and output both at the micro and macro levels. Stronger and healthier labour force adds to Human Capital.

Equality vs. Equity



THE DEMAND FOR HEALTH CARE

- ❖ The demand for health care services will depend on the demand for health and on the perception of the link between health care and health.
- One complication of trying to model or predict this demand is that individuals value apparently equal health states differently.
- Most health care is carried out by families within the home.
- The demand for health care will also vary according to the age structure of the population.

Differences between Health and Health Care

- ❖ Health care services can be bought and sold, while health cannot.
- ❖ Health is difficult to define and even more difficult to measure.
- ❖ According to the world health organization {WHO} good health is “a state of complete physical and mental well-being and not merely the absence of disease or infirmity”.
- ❖ Poor health in an individual will have an impact on and may pose threats to others in the society.

Differences between Health and Health Care

- ❖ Improved health care services thus provide benefits to society as a whole if they result in improved health as well as providing benefits to the individual.
- ❖ The role of medicine in improving the health status of the population has been exaggerated, and factors such as housing, education, diet, hygiene and standard of living have had more significant impact on levels of health.

Requirements of health services

1. Economy

- ❖ We would like the services to be inexpensive.
- ❖ Somebody always pays either directly or indirectly.

2. Effectiveness

- ❖ We expect the service to be effective we want each procedure to produce perceptible health gains {or reductions in suffering}.
- ❖ The evidence based medicine beginning to influence health care providers.

3. Efficiency

- ❖ We expect our services to be efficient. If we can deliver an equally effective service in different ways then we would want to choose the least expensive.

Requirements of health services

4. Equity

- ❖ Three broad ways of defining equity in health care;
 - A. Equality of health status attained.
 - B. Equality of use of health care {for equal need}.
 - C. Equality of access to health care {for equal need}.
- ❖ Horizontal equity- the principal of equal treatment for equal need.
- ❖ Vertical equity- provision of unequal treatment for unequal need.

4. Ethical issues

- ❖ The behavior of doctors and other health care professional may put them into conflict with those who manage resources.
- ❖ The doctor could manipulate the situation for financial gain.
- ❖ The patient is protected from these abuses by the doctor's ethical and professional codes of conduct.

DEMAND AND SUPPLY

In a market economy , output is distributed through a system of prices.

- ❖ Each good and service produced is sold to those who are willing and able to pay the market price.
- ❖ The market demand for a good or service is presented as a schedule which relates the number of units (quantities) that will be purchased at alternative prices, holding constant other variables that influence the purchase decision.

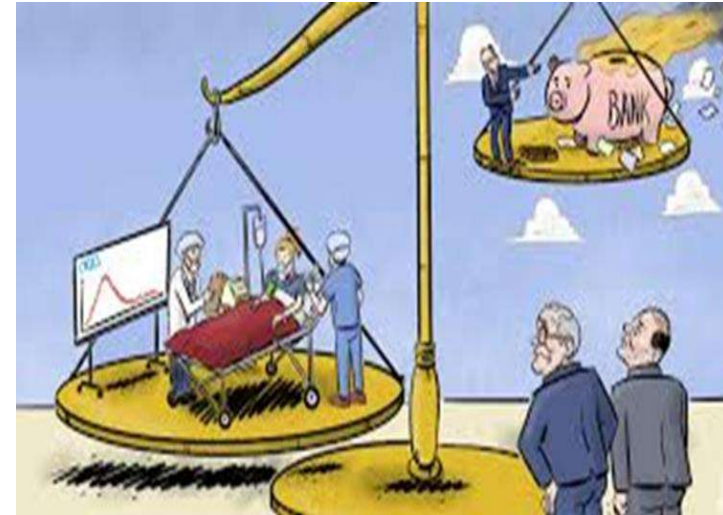
DEMAND AND SUPPLY

Change in market demand is a shift in the market demand curve that results from:

- ❖ a change in the number of consumers in the market
- ❖ consumer preferences
- ❖ consumer money income
- ❖ the price of a substitute commodity
- ❖ the price of a complementary commodity.
- ❖ a change in the number and or size of producers.
- ❖ a change in the technology
- ❖ a change in the price of a factor of production
- ❖ a change in the price of other commodities used in production.

Basic Economic Questions

1. Which goods and services to produce?
2. How to produce the goods and services?
3. Who receives the goods and services?
4. What role should the government play in health?
5. What health care investments should a developing country make?
6. What advertising should be banned?



What other questions do health economics ask?

- What is the optimal design for health insurance?
- Why has health care become so expensive?
- Does health care early in childhood lead to improved cognition and higher incomes in the future?
- Have Medicare and Medicaid increased utilization and improved health outcomes?
- Do different methods of doctor payment change quality of care, outcomes or costs?