

HEALTH ECONOMICS

Meaning

- Health economics is the **discipline of economics applied to the topic of health care.**
- Broadly defined, economics concerns how society allocates its resources among alternative uses

- Scarcity of these resources provides the foundation of economic theory and from this starting point, three basic questions arise:

- **What goods and services shall we produce?**
- **How shall we produce them?**
- **Who shall receive them?**

Introduction

- Health economics generally deals with the **purpose** and **planning** of budgeting which is required to be done in the health care delivery system **for providing care.**



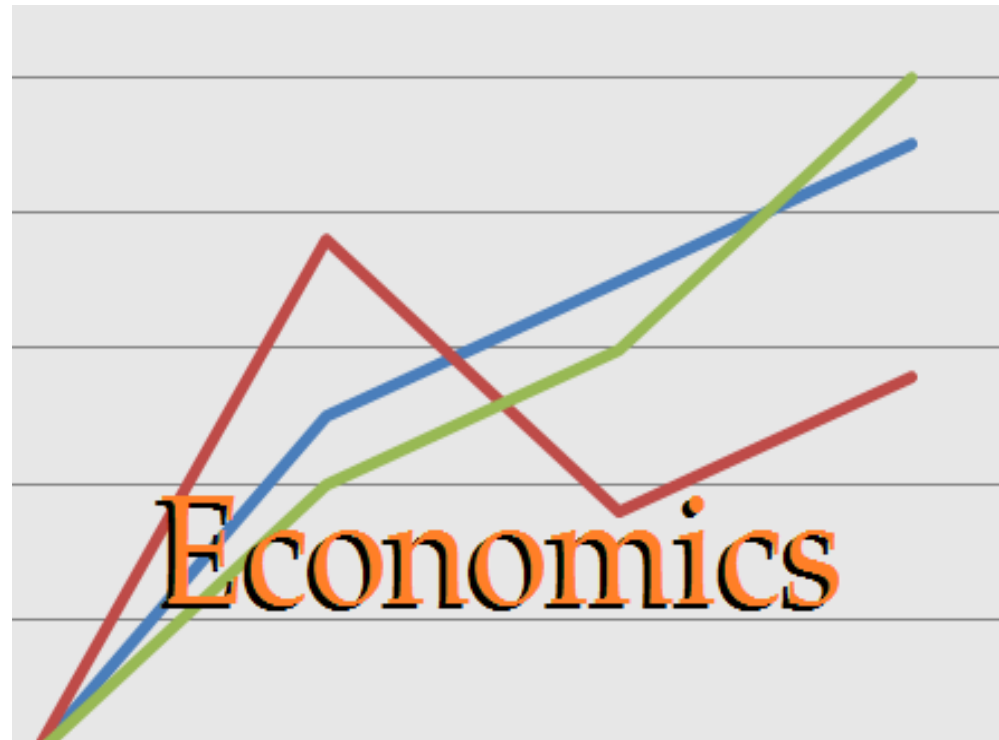
Health: -

Health is a state of complete **physical, mental and social well-being** and not merely the absence of disease or infirmity.



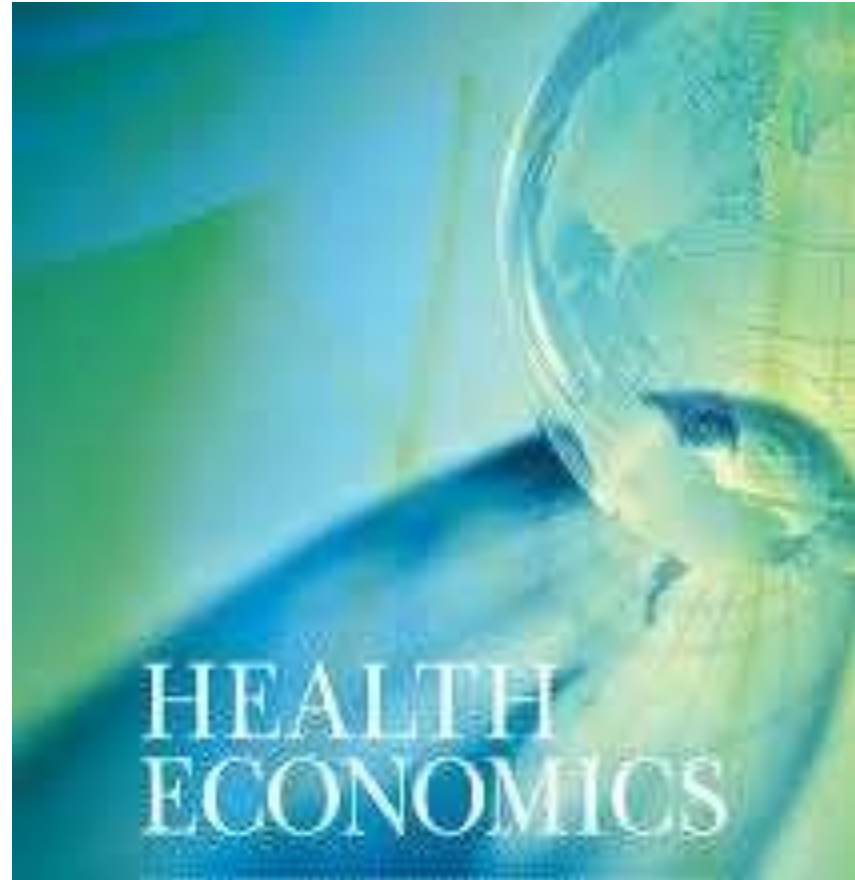
Economics: -

It has been variously described as the **study of wealth, study of welfare and study of scarcity.**



Health economics: -

- It is the discipline that determines the **price and the quantity** of limited **financial and non-financial** resources devoted to the care of the sick and promotion of health.

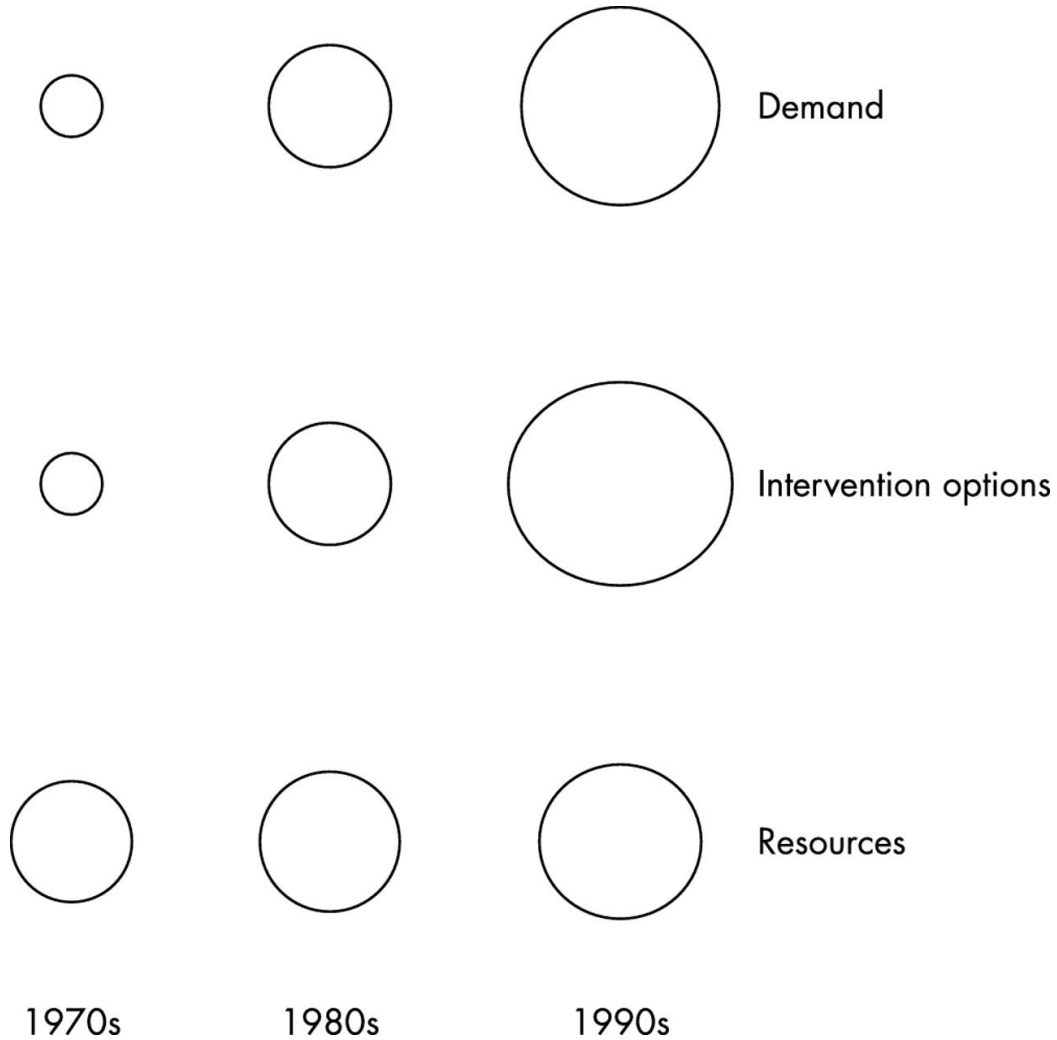




Importance of health economics

- There is limited health care resources, an empowered consumer and an increasing array of intervention options there is a need for decisions to be taken more openly and fairly.

**Diagrammatic background to health economics—increasing demands on limited resources
(area of each circle reflects size of each variable).**



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- The importance of the **economic model is that it provides useful insights into how health care can be organised** and financed and provides a framework to address a broad range of issues in an explicit and consistent manner.

Aim of health economics:

- To quantify the resources used in health service delivery.
- To **organize, allocate and manage** the resources.



Principles of Health Economics

MICROECONOMICS	MACROECONOMICS
Studies individual income	Studies national income
Analyzes demand and supply of labor	Analyzes total employment in the economy
Deals with households and firms decisions	Deals with aggregate decisions
Studies individual prices	Studies overall price level
Analyzes demand and supply of goods	Analyzes aggregate demand and aggregate supply

Economics Principles:

Health economics works on **two** principles:

- **Microeconomics:** -

It deals with the behaviors of the **individuals** and organizations and the effects of those behaviors on prices, costs, and the allocating and distributing resources.

Microeconomics

Por: Patricia Gutiérrez García



Microeconomics continue...

It has following factors:-

- **Supply and demand:**
 - These both factors are interrelated to each other because if there is **no demand** then there is **no supply**, but if there is **good demand** then there is a **good supply** and the cost of demanding objects will be higher.



Microeconomics continue...

- **Efficiency:** - It refers to producing **maximal output**, such as good or services, using a given set of resources, such as labor, time, and money.
- **Effectiveness:** - It refers to the extent which a health care services meets a stated goal or objective, or how well a program or service achieves what is



Macroeconomics: -

It deals with the **large- scale** or general economic factors, such as interest rates and national productivity.

It has two factors:-

- **GNP & GDP**: - **The National Product** and **Gross Domestic Product** are the conventional terms used to understand the performance of the economy.

These indicate the sum total of three components in a country:-

- Personal consumption;
- Expenditure of goods and services;
- Investment expenditure.

GNP & GDP serves as measures of total production of goods and services in a country during year.

Economic analysis: -

There are **four** main types of economic analysis in health:

- ***Cost-minimization: -***

In this the inputs are compared and outputs are considered to be equal, which rarely so.

- ***Cost benefit: -***

In this type of analysis all outputs are measured in monetary terms.



Economic analysis continue...

- **Cost effectiveness:** -

Here a **clinical output** such as morbidity, mortality, reduction in blood pressure, or quality of life, etc. is measured as a measure of the effectiveness.

- **Cost utility:** - This measure allocates a



WHAT DO HEALTH ECONOMISTS DO?

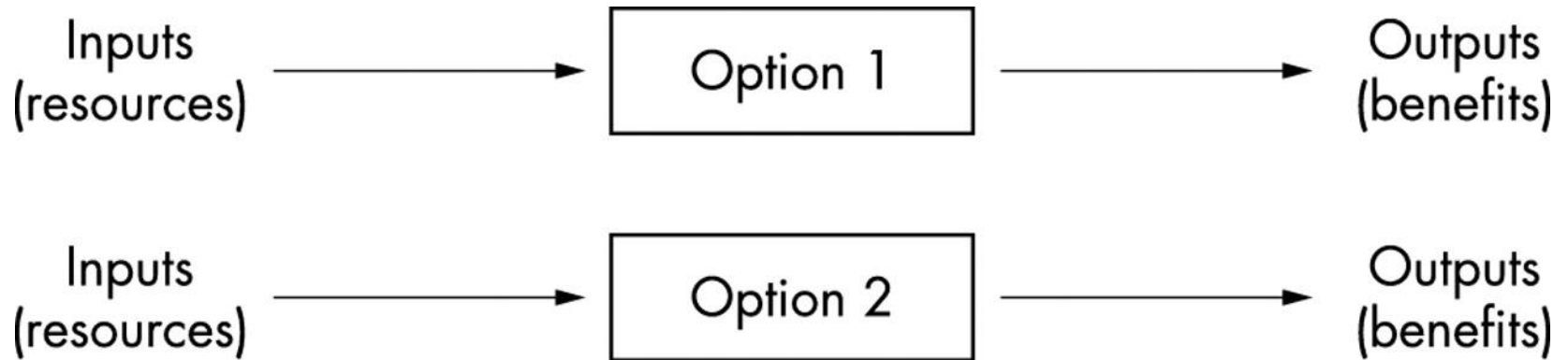
- Health economists are interested in the production of health at a number of levels. **For example:**
- **What is health and how do we put a value on it?**
- **What influences health other than health care?**
- **What influences the demand for health care and health care seeking behaviour?**

- What influences the supply of health care? (The behaviour of doctors and health care providers.)
- Alternative ways of production and delivery of health care.
- Planning, budgeting, and monitoring of health care.
- Economic evaluation—relating the costs and benefits of alternative ways of delivering health care.

CONCEPT OF ECONOMIC EVALUATION

- The concept of economic evaluation underpins efficiency choices in health care.
- It relates the benefits of **alternative interventions** to the resources incurred in their production

Economic analysis relates inputs (resources) to outputs (benefits and the values attached to them) of alternative interventions to facilitate decision making when resources are scarce.



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Scarcity: -

- Scarcity exists to all walks of life.
- The health needs are infinite whereas the resources are definitely limited, in India as elsewhere.



Demand: -

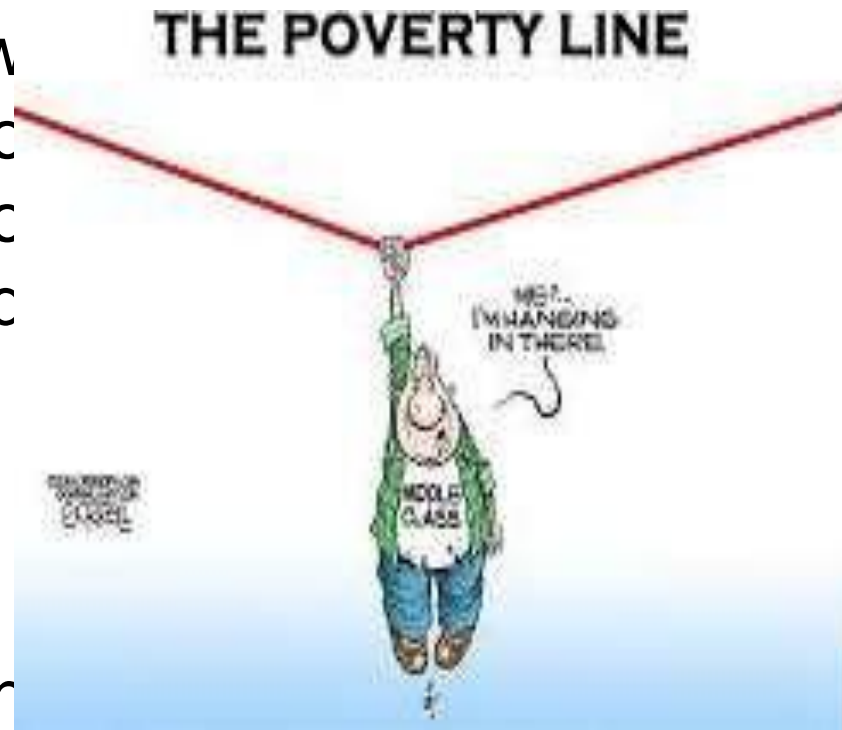
It is, the type, quantity and quality of **services** or commodities wanted or **requested**.

- But the demand for health and medical care in strict economic sense, is a function of:
 - Consumer's income,
 - The price of medical care relative to the prices of other goods,
 - Preferences of consumers, including their perceptions about health and health care.



Poverty Line: -

- Poverty line refers to, the cutoff point of income below which people are not able to purchase food sufficient to provide **2400 kcal** per head per day.
- This income level has been fixed by the planning commission at **Rs. 119.50** in rural areas and at **Rs. 138** in urban areas at 1987-88 prices.



Cost: -

It refers to the resources which are spent in carrying out health activities so far as the health care sector is concerned.

In general, costs can be classified into **two broad** groups:-

1. Capital costs: - These costs are borne irrespective of the type of health center, hospital or health center.



COST CONTINUE...

2. Operating costs: -

These costs are related to the **level or type of activity** in a health institution. Some operating costs will change daily and some from year to year.

These operating costs include:

- Salaries, wages and allowances of health staff at different levels.
- Medical supplies, drugs etc
- Transport operating costs.
- Maintenance and repairs.
- Training.
- Power.
- Other miscellaneous items.



costs: -

1. Historical Perspectives: -

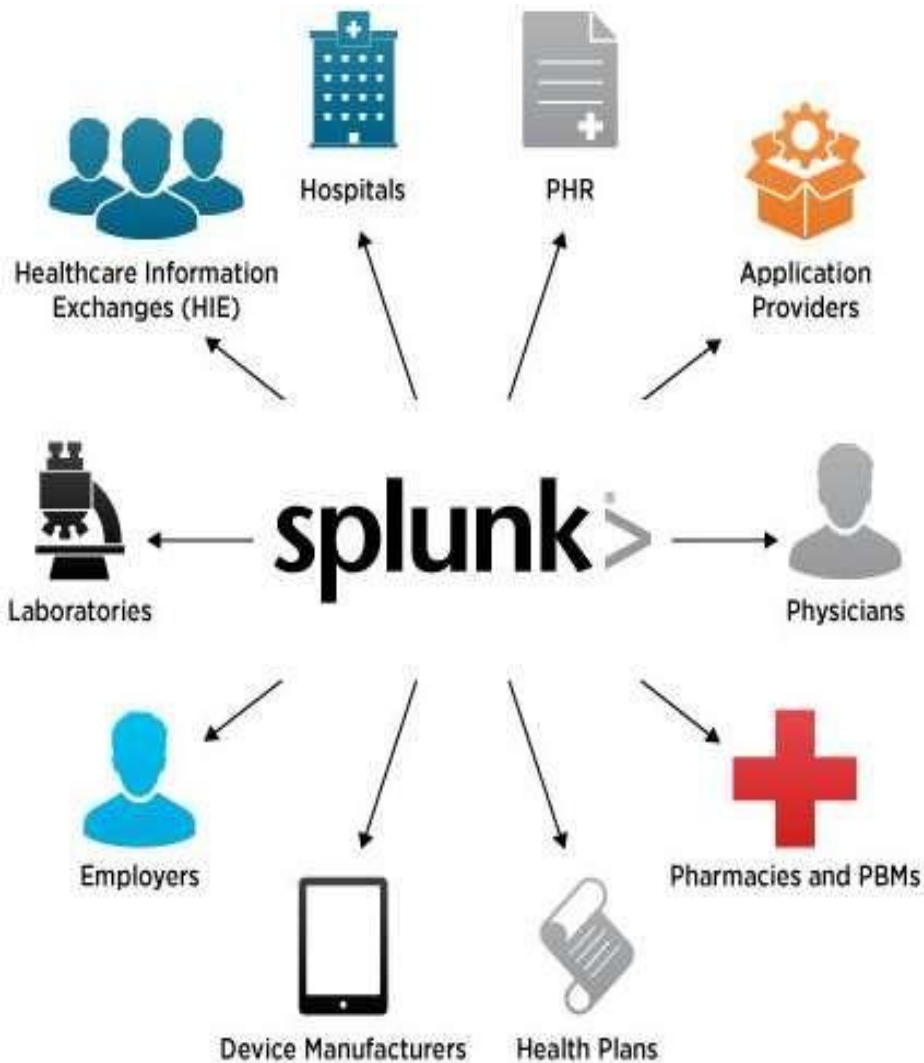
- Until 1930, the predominant method of health care functioning was private payment. Physicians charged a fee for the services they rendered and the patient paid these ***out-of-pocket expenses.***
- In the year 1929, the concept of **paying small fee** for guaranteed health care



Factors continue...

2. Use of health care:

- As the financial funding process emerged the use of health care and also services increased.



Factors continue...

3. Health behaviors:-

- Due to increased awareness toward health, more peoples are demanding preventive health care from the provider and their health care contractors.
- Public financing of health care has increased funding for such preventive care as screening tests, periodic examination, and immunization.



Factors continue...

3. **Technology advances:** -

- Modern society has become to expect miraculous technological advances.
- Now 50% of the population consuming 80% of the health care resources.



Benefit: -

- The benefits of health program or project are the desired effects program.



Cost Benefit Analysis(CBA): -

It is an **economic technique** applicable to-

- **Health planning,**
- **Health management, and**
- **Evaluation,**



Which scheme or combination of schemes will contribute most to achievement at a fixed given investment or,

Cost- effective Analysis: -

- It is **formal planning and evaluation** technique having both **economic** and **technical** component.
- It involves **organizing information** so that the costs of alternatives and their effectiveness in meeting a given objective can be compared **systematically**.



Budget: -

The budget is a systematic economic plan for a specific period of time.

- It incorporates **politically** and **technically** determine in what way and for what purpose various health resources are to be used.



Health Financing: -

- It refers to the raising of resources to pay for goods and services related to health. These resources may be in the “cash” or “kind”.



MAJOR PROBLEMS IN HEALTH FINANCING

- Lack of funds.
- Unequal distribution of health finances.
- Rising health costs.



- **Cost effectiveness and strategic planning (WHO-CHOICE)**

- **WHO-CHOICE is a program** in the World Health Organization that helps countries decide health system priorities based on considerations of costs and impacts.
- A number of different methods and tools contribute to the program of work.
- The Generalized Cost-Effectiveness **component of the program is interested in identifying health care interventions** that provide the greatest value for money – the largest health gain for each dollar spent on health.

- The OneHealth Tool is used to help countries to examine the costs and feasibility of their strategic plans, as well as to evaluate the potential impact of the plan.
- WHO-CHOICE data and methodology has been used in the calculation of “Global Price Tags”, estimating resource requirements for scaling up health care interventions for specific disease areas across countries.

- WHO-CHOICE supports the use of **Geographic Information Systems (GIS)** to analyze physical accessibility to health services, linking the results to national planning and costing processes, and policy discussions on how to optimize investments in the health system.

- Recognizing that the consequences of disease and injury reach beyond health, WHO-CHOICE provides guidance and a framework for evaluating the economic consequences of disease and injury.