

**Abderrahmane MIRA University, Bejaia**  
**Faculty of Medicine**  
***Department of Medical Sciences***

Module

***"Health, Society and Humanity (SSH)"***

**COURSE**

**"HEALTH ECONOMICS**


**1<sup>ère</sup> year Medicine (2024-25)**

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**COURSE 1:**

**Introduction to health economics  
(purpose, methods and issues)**

# OBJECTIVES

- understand the **issues, areas of application** and **basic concepts** of health economics ;
  - identify the **specific features of the "economic view" of health** compared with the medical or epidemiological perspective;
  - present the central concept of '**opportunity cost**' and its importance in determining the **collective choices** made in terms of healthcare.
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# PLAN/CONTENT

**INTRODUCTION:** *Economics as the science of scarcity*

**1) Economic science...**

**2) ... to health economics**

**CONCLUSION:** *Opportunity costs and collective choices*

# **INTRODUCTION**

**Economics as the science  
of scarcity**

# Economics is the science of scarcity

- **Most of the needs that human beings have** for food, clothing, shelter, entertainment and culture **cannot be met spontaneously** by nature alone.
- People must therefore **devote time and effort** to exploiting nature and **producing goods to meet their needs**.
- A need is only economic if it **requires material, human or financial resources** to satisfy it.
- It is this **relative scarcity of resources** capable of directly satisfying their needs **that forces people to engage in economic activity** (work, production, etc.), and it is this economic activity that economic science is interested in.

# Economics is the science of scarcity

- The fundamental economic problem is therefore that of **RARITY** :
  - ✓ Because the resources available to satisfy our needs and desires are insufficient, we cannot obtain everything we want and **we must necessarily make choices**, which forces us to **optimise our decisions**, i.e. to systematically seek out and choose the **best possible use of available resources**.
  - ✓ Economics is therefore the science **that explains the choices (trade-offs) made by social actors (individuals, organisations or institutions) to deal with the problem of resource scarcity**.

# **1. ECONOMIC SCIENCE...**

# 1. ECONOMIC SCIENCE...

## Definitions 1: *By its object of study*

- It is the science that studies how people **organise their activities**, with a view to **producing the goods and services** that will enable them to **satisfy their needs**.
- Economics studies the way in which people manage **scarce resources** in order to satisfy **needs that tend towards the infinite**.
- More specifically, it analyses the *production, distribution* and *consumption of goods and services (outputs)* that **have a useful purpose** and are produced through the use of **production factors (inputs)**: capital, labour and technical progress.



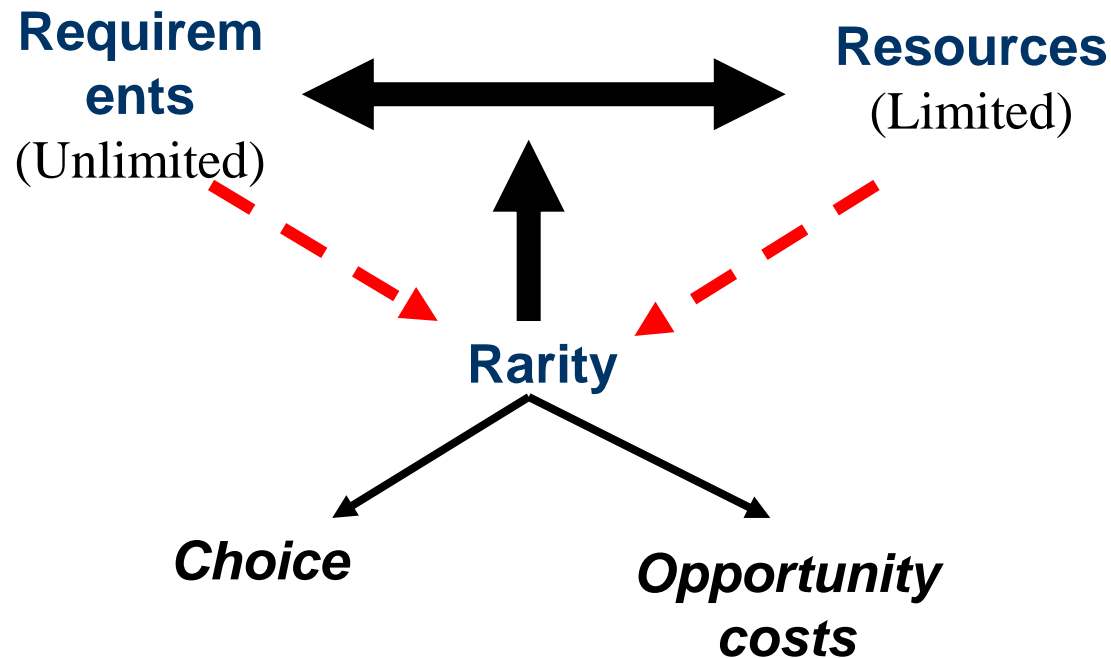
# 1. ECONOMIC SCIENCE...

## Definitions 2: *By its method*

- It is the science of **optimising the use of the scarce resources** available to the community.
- **OPTIMIZING** means **managing the scarce resources available to the community in the best possible way**; it means **obtaining the best result (effectiveness) with the least possible resources (efficiency)**.
- **Optimising decisions means making choices based on the criterion of EFFICIENCY.**
- **EFFICIENCY = Results (efficiency) / Resource (costs)**
- More concretely, economics seeks to **define the conditions for achieving EFFICIENCY**:
  - **maximum efficiency (results)** from a given volume of resources;
  - or the **minimum cost in resources** for a given level of efficiency (results).

# A generic definition

**Economics** helps to formalise the trade-offs required to resolve the constant tension between the (potentially) unlimited needs of human beings and the **limited** resources available.



## **2. ... TO HEALTH ECONOMICS**

## 2. ... TO HEALTH ECONOMICS

### Definitions 1: *By its object of study*

- Health economics is concerned with **the acquisition, dissemination and use of 'health capital' in a population**, through *prevention, care and changes in attitudes*.
- This definition leads us to distinguish :
  - ✓ on the one hand, the **production of utility** (*output*): the state of health of the population,
  - ✓ and secondly, the **resources deployed, the production factors** (*inputs/inputs*): hospitals, outpatient medicine, drugs, prevention and attitudes influencing states of health.

## 2. ... TO HEALTH ECONOMICS

### Definitions 2: *By its method*

- Health economics aims to optimise the use of resources allocated to health.
- More specifically, it is looking for :
  - how to achieve the **best individual or collective state of health** using the **financial, technical and human resources** available;
  - or how to **minimise the cost of achieving a defined state of health.**

## 2. ... TO HEALTH ECONOMICS

- Whatever the definition adopted, **health** and the **resources mobilised** for the sector are clearly part of the **economic approach**.
- Even if the "café du commerce" still asserts that "*health is priceless*", everyone must recognise that **the resources deployed** (which are by definition rare and limited) **have a cost to the community**.
- **Every healthcare system therefore has an economic dimension** that must be taken into account both in *collective choices and in the day-to-day practice of healthcare professionals*.

## 2. ... TO HEALTH ECONOMICS

- The economic approach applies equally to :
  - ✓ **compare medical techniques** (e.g. dialysis/transplant arbitration in the treatment of renal failure),
  - ✓ **selecting the best prevention programmes,**
  - ✓ **hospital organisation** (health management),
  - ✓ **Rationalisation of care networks**
  - ✓ **or the appropriateness of granting marketing authorisation for a new drug** (pharmacoeconomics).

**Medical/epidemiological rationale *versus* economic/health insurance rationale**

<i>Approach</i>	Medical	Epidemiological	Economical / Health insurance
Scale of intervention	Individual	Population	Systemic
Object	<ul style="list-style-type: none"> <li>- Medical cases</li> <li>- Individual patient</li> </ul>	<ul style="list-style-type: none"> <li>- Patient groups</li> <li>- Population at risk</li> <li>- Pathology</li> </ul>	<ul style="list-style-type: none"> <li>- Financial resources</li> <li>- Healthcare systems</li> </ul>
Methods	<ul style="list-style-type: none"> <li>- Medical history</li> <li>- Diagnosis</li> <li>- Treatment</li> </ul>	<ul style="list-style-type: none"> <li>- Carrying out epidemiological surveys</li> <li>- Collecting and analysing epidemiological data</li> </ul>	<ul style="list-style-type: none"> <li>- Estimating and analysing costs</li> <li>- Cost-effectiveness analysis</li> <li>- Economic modelling</li> <li>- Management of financial flows (allocation of resources)</li> </ul>
Products	<ul style="list-style-type: none"> <li>- Order</li> <li>- Hospitalization</li> </ul>	<ul style="list-style-type: none"> <li>- Epidemiological study report</li> <li>- Health action plans</li> <li>- Public health programmes</li> </ul>	<ul style="list-style-type: none"> <li>- Economic study</li> <li>- Budget plan</li> <li>- Health organisation plan</li> </ul>
Expected results	<ul style="list-style-type: none"> <li>- Support</li> <li>- Healing</li> <li>- Improving the patient's quality of life</li> </ul>	<ul style="list-style-type: none"> <li>- Explanation of causes</li> <li>- Reducing the incidence and prevalence of disease</li> <li>- Control of programmes within the population</li> <li>- Recommendations for implementing or revising health programmes</li> </ul>	<ul style="list-style-type: none"> <li>- Optimisation (rational allocation) of resources</li> <li>- Efficiency (result/cost)</li> <li>- Improving access to care</li> <li>- Sustainability of the healthcare system</li> </ul>



## 2. ... TO HEALTH ECONOMICS

- However, savings are often **misunderstood by healthcare professionals!**
- There are many different reasons for this:
  - **Economy = resource rationing/budget austerity**
  - **The economy is equated with trade and profit, and applying economic reasoning to health means devaluing life and neglecting suffering.**
  - **Health is a right** and, consequently, accounting and financial considerations aside...

**CONCLUSION**

**OPPORTUNITY COST AND**

**COLLECTIVE CHOICE**

# 3. Opportunity costs and collective choices

- In economics, the allocation of productive resources is based on the concept of "**opportunity cost**".
- This is **the set of goods and services that must be foregone** by any economic agent who chooses to consume a particular good/service, given that **their resources are limited**.
- **e.g. buying a car** involves an opportunity cost because other expenses are foregone: a trip, furniture or renovating a flat.
- **e.g. a patient** who is hesitating between having ***dentures*** made for himself or offering ***private lessons*** to his child.

Similarly, the **money allocated to healthcare** has an opportunity cost in terms of *spending on education, infrastructure and even ordinary consumption.*

- The same resources are coveted **by different needs or sectors of the national economy:** *how should collective resources be allocated? What should be prioritised?*
  - **agriculture** to produce more food for the population?
  - **hydraulics** to connect all residents to the public drinking water and wastewater network?
  - **industry** to guarantee a job for every citizen of working age... or a car for every household?
  - **national defence** to modernise the country's defence 'shield' by buying more guns and planes?
  - **national education system** to raise the school enrolment rate and combat illiteracy?
  - **health**, to bring health facilities closer to the population, improve the quality of care and enable Algerians to live longer?

- In today's healthcare systems, **funding is largely socialised** (*taxes and social security contributions make up the bulk of funding*).
- Based on this concept of 'opportunity cost', the aim of health economics is to **shed light on collective choices** in terms of :
  - ✓ **the allocative efficiency of public spending:** by indicating the different possibilities for achieving an optimal distribution of resources between the different public services (*How much should be allocated to the health system?*).
  - ✓ and **the productive efficiency of healthcare expenditure:** by ensuring that the resources made available to the healthcare system are well used, providing the best possible return for society (*are the resources allocated to the healthcare system being used wisely?*).