What is Health Economics?

> *'In a system with limited resources, health professionals have a duty to establish not only that they are doing good, but that they are doing more good than anything else that could be done with the same resources'*
>
> ***Alan Williams (Professor of Health Economics, University of York)***

Health Economics is a subfield of economics that applies the principles and methods of economics to the field of health. It is concerned with an efficient and fair allocation of health care resources in an environment of scarcity and uncertainty.

The Problem of Scarcity

The fundamental economic problem is **scarcity**—allocation of limited resources across unlimited wants and needs. We face this problem every day in our lives. For instance, we might face a choice between purchasing a new car or spending the same money on a vacation trip. In an ideal world, we would buy both the car and the vacation package to satisfy our wants. However, with a finite budget, we would be forced to choose between the two options. By comparing the costs and benefits associated with the two competing alternatives, we can make an optimal decision for ourselves. Since we make use of such economic methods in our daily lives, it does not require a big change in mindset to apply the same techniques as health care professionals. This is the core idea of health economics.

The health sector is routinely faced by dilemmas where it becomes evident that given the constraints of time, infrastructure and affordability, health care systems cannot cater, in an absolute manner, to all needs of the population of patients. After acknowledging that choices must be made, health professionals can then analyze alternatives presented to them in various situations by examining the relevant costs and benefits. However, since healthcare provision is different from other services, economic analysis in such settings will be affected by the distinct features of this sector. The aim of health economics is to provide health professionals with a conceptual framework and evaluation tools to achieve cost-effectiveness alongside clinical effectiveness.

Achieving Cost-effectiveness and Efficiency

The idea of cost-effectiveness is central to health economics. **Cost-effectiveness** implies maximizing the welfare of health care consumers from a given set of health care resources. **Efficiency** is a related concept which calculates how well these resources are used to achieve a given objective. However, the concept of cost in economics is different than accounting cost because it includes opportunity cost. **Opportunity cost** is defined as the benefit or value of an alternative that is given up in order to choose another alternative. For example, in the context of healthcare, using available resources for a certain treatment would imply foregoing the benefits associated with the use of other treatments. Thus the cost of a particular treatment is not just the price that is paid for that treatment but also the lost opportunity of availing other treatments.

Health economics provides a set of economic tools to find the best healthcare alternatives based on concepts such as cost-effectiveness and efficiency. **Evaluation tools** include, amongst others, methods such as cost-benefit analysis, cost-minimization analysis and cost-effective analysis. The underlying edifice of all such methods consists of explicit measurement of costs incurred in application of inputs and the benefits derived from the outcomes. However, in many cases, the cost and benefit estimates may be uncertain—they may vary or it might be impossible to pin down their precise values. In such circumstances **evidence-based** practices to assess clinical and economic evidence are employed.

Health economics offers a systematic methodology—an objective mode of thinking (in terms of identifying alternatives) and a set of formal economic evaluation tools—which allow for more informed and improved decision-making in the provision of healthcare.

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