Best Practice & Research Clinical Gastroenterology 27 (2013) 831–844

Contents lists available at ScienceDirect

Best Practice & Research Clinical Gastroenterology

1

Introduction to health economics and decision-making: Is economics relevant for the frontline clinician?

Ron Goeree, MA, Professor [a,b,*],
Vakaramoko Diaby, PhD, Post-doc fellow [a,b]

[a] *Programs for Assessment of Technology in Health (PATH) Research Institute, St Joseph's Healthcare Hamilton, Hamilton, Ontario, Canada*
[b] *Department of Clinical Epidemiology & Biostatistics, McMaster University, Hamilton, Ontario, Canada*

Keywords:
Health economics
Economic evaluation
Clinical decision-making
Decision-making criteria

A B S T R A C T

In a climate of escalating demands for new health care services and significant constraints on new resources, the disciplines of health economics and health technology assessment (HTA) have increasingly been turned to as explicit evidence-based frameworks to help make tough health care access and reimbursement decisions. Health economics is the discipline of economics concerned with the efficient allocation of health care resources, essentially trying to maximize health benefits to society contingent upon available resources. HTA is a broader field drawing upon several disciplines, but which relies heavily upon the tools of health economics and economic evaluation. Traditionally, health economics and economic evaluation have been widely used at the political (macro) and local (meso) decision-making levels, and have progressively had an important role even at informing individual clinical decisions (micro level).

The aim of this paper is to introduce readers to health economics and discuss its relevance to frontline clinicians. Particularly, the content of the paper will facilitate clinicians' understanding of the link between economics and their medical practice, and how clinical decision-making reflects on health care resource allocation.

* Corresponding author. PATH Research Institute, 25 Main St. W., Suite 2000, Hamilton, Ontario L8P 1H1, Canada. Tel.: +1 (905) 523 7284x5268; fax: +1 (905) 522 0568.
E-mail address: goereer@mcmaster.ca (R. Goeree).

1521-6918/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.bpg.2013.08.016

Background

A combination of the rise of health care expenditures in many jurisdictions (see Fig. 1), ever-increasing technological innovation in health care (especially in drugs and devices), patients' insatiable needs and demands, the emergence of new diseases and demographic changes [1] have all come together to force decision- and policy-makers, at all levels of the health care system, to rethink reimbursement and provision decisions. With limited capacity of the health care system to handle the accumulation of these factors, health care decision-makers have recognized the need for prioritizing between competing health care uses and the important role a transparent, structured and evidence-based process can play in making decisions.

General economic principles offer a theoretical foundation for dealing with resource allocation in an environment of scarcity of resources [2]. The underlying rationale is that, in a free market, resource allocation is regulated by price, ability to pay [3] and perfect information, such that market forces will provide the optimal allocation of health care resources. However, in health care significant market failures exist that prevent a freely functioning market. For example, health care professionals have significantly more knowledge about the potential benefits and risks of health care treatment (i.e. asymmetry of information) and as a result patients place trust in the advice and recommendations provided to them and this can influence patient preferences and decisions [3,4]. This is different than in many other markets like buying a new car where consumers can better judge the benefits to them of car attributes or enhancements and know how much they are willing to pay for these features. Similarly, obstacles to a freely functioning health care insurance market exist such that a number of individuals may not be able to afford adequate health insurance. These, and other market failures in health care, hinder a free market optimal allocation of resources in the health care sector. Therefore, general economic theory is not a viable option for supporting decision-making in health care as it fails to address market failures and society's ethical attitudes toward health and the provision of health care.

The field of health economics (HE) proposes to maximize benefits stemming from the use of health technologies against available resources [3]. As HE recognizes, and attempts to deal with, the various forms of market failure in health care, the use of HE has been legitimated as a framework to guide decisions around health care resource allocation. HE can broadly be defined as a field of economics concerned with the way health care resources are allocated among competing alternatives, at the societal level [5]. HE encompasses many techniques and tools among which economic evaluation (EE) is the most relevant to health care decision-makers. For this reason, the main focus of this paper will be on EE and its role in health care decision-making.

According to Drummond et al, EE is 'the comparative analysis of alternative courses of action both in terms of their costs and consequences' [6]. It is a widely adopted tool for the assessment of the value of health technologies. This is evidenced by its formal application as part of reimbursement decision-making, at the macro and meso levels (political and administrative levels), as well as the abundant production of health EEs in the medical literature. However, concerns have been raised regarding the

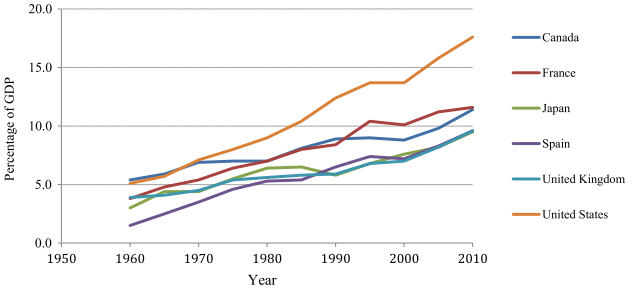

Fig. 1. Total expenditure on health care in six countries, members of the Organisation for Economic Co-operation and Development (OECD), as a proportion of gross domestic product. Source: Adapted from OECD Health Data 2012 (http://stats.oecd.org/Index.aspx?DataSetCode=SHA).