Editorial Note on Alternative & Integrative Medicine – Economic Evaluation

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Introduction

Economic evaluation is the process of systematic identification, measurement and valuation of the inputs and outcomes of two alternative activities, and the subsequent comparative analysis of these. The purpose of economic evaluation is to identify the best course of action, based on the evidence available. It is most commonly employed in the context of health economics and health technology assessment; in the UK, the National Institute for Health and Care Excellence publishes guidelines for the conduct of economic evaluations.

Public health professionals can use economic evaluation to identify, measure, value, and compare the costs and consequences of different public health interventions. Allocating resources and implementing these interventions—whether policies or programs—require an understanding of the relationships between resources used and health outcomes achieved by the program or intervention.

Economic evaluation can consider both resources used and health outcomes achieved simultaneously. It can also be useful in supporting decision-making when resources are limited.

Clinicians working in accident and emergency (A&E) medicine will have little difficulty accepting the idea that health service resources are scarce. Increasing demands for health care and limited resources with which to meet them is a familiar part of the emergency environment. All clinicians will be aware of the need to make difficult choices in deciding which health care interventions to fund.

Health economics tackles this problem of scarcity of resources and the implicit requirement to make choices that will maximise the benefit accrued from their consumption.1 It therefore entails far more than simply accounting or attempting to cut costs. Yet many of the concepts behind economic evaluation will be unfamiliar to practising clinicians. The aim of this article is to explain some of the basic ideas behind economic evaluation.

Clinical trials measure health care outcomes to determine the efficacy or effectiveness of health care interventions. If resources are unlimited, this is the only information we require to decide which interventions to use. We simply choose the most effective option. However, because resources are limited we also need to know whether the intervention represents good value for money. In other words, is it cost effective?

The concept of opportunity cost is fundamental to health economics. It is based upon the idea that scarcity of resources means that expending resources on one health care activity inevitably means sacrificing activity somewhere else. The opportunity cost of undertaking an activity is defined as the benefits that must be foregone by not allocating resources to the next best activity.

For example, you decide to employ a chest pain nurse in your department to achieve National Service Framework targets for thrombolysis. To do this you must make tough choices elsewhere. Perhaps you must do without some clinical assistant sessions? But this will cause overall waiting times to increase. The opportunity cost of employing a chest pain nurse is the benefit you must forego by being unable to fund the next highest option on your list of priorities. If your next highest priority is more clinical assistant sessions, then the cost of foregoing these (an increase in waiting times) will be the opportunity cost of employing a chest pain nurse.

Several types of economic evaluation are recognised. It is the measurement of outcome that determines what type of economic evaluation has been performed.

• Cost Minimisation Analysis
• Cost Effectiveness Analysis
• Cost Utility Analysis
• Cost-Benefit Analysis
• Cost Consequences Analysis

The methodology of economic evaluation is developing; many issues need to be resolved and many controversies still exist. What is now beyond doubt is that, outside of the utopia of unlimited health care resources, economic evaluation will play a vital part in determining optimal management for our patients. Only by understanding the principles of economic evaluation can we achieve this in the A&E department.