Costing in Primary Care—is the truth out there?

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In this edition of Family Practice, Beale et al.,1 estimate the annual medical, nursing and administration costs in two general practices as a function of patient age, sex and Council Tax valuation band used as a surrogate marker of socio-economic status. They report that these costs increase with age and reducing tax valuation band and conclude that costing exercises are difficult but important for NHS planning and resource allocation. How relevant are these claims?

Deriving and presenting cost data

In market systems what something costs is determined by its market price, a result of the interplay of supply and demand. In non-market systems such as health care, costs are derived from the sum of production expenditures. Until quite recently, there was a paucity of accurate cost information across the NHS, but against a background of increasing demands on limited healthcare resources an interest in cost measurement has been driven by the need for more efficient service delivery and performance measurement.

How costs are calculated will depend on their definition and the assumptions that have been made in their derivation. Although a number of costing principles have been developed,2 this exercise is rarely straightforward. For example, the hourly cost of a GP can vary three-fold depending on the financial inputs that are counted.3 The perspective or viewpoint of any study must also be considered very carefully and will determine which costs are relevant.

There are also problems with reporting costs. Although the principles of statistical inference are advanced in the analysis of clinical data, many issues relating to the statistical analysis of cost data remain unresolved.4 For example, a relatively small number of high cost events can disproportionately affect the ability to detect significant cost differences between items under study.

What do costs tell us?

The simplest way to view costs is from an accounting perspective where costs are seen as financial expenditures within a pre-determined budget. For example, due to their high overall cost and ease by which they can be measured, the costs of pharmaceuticals have been integrated into indicative practice budgets.

Health economists stress that because resources are limited and not everyone can receive the health care from which they will benefit, costs should not simply be seen as expenditures but have a value attached to them. Resources invested are seen as lost opportunities or ‘opportunity costs’—one person’s gain is another’s loss and the cost of an item should be valued in terms of what has to be foregone.

From the economic perspective, costs should not stand alone but be related to the benefits they accrue. This approach is set within a rational framework known as economic evaluation that assumes that the costs and consequences of various service options can be clearly identified, allowing decisions to be made which are consistent with pre-established values. In the NHS, predominant values are efficiency (maximising the output from a fixed resource or minimising the cost of achieving a defined output) and equity (distributing resources on the basis of need). Invariably these values conflict—what is efficient is usually not equitable which puts strain on the ration model.

What does this study tell us?

We can be confident that as we get older we consume more primary care manpower resources and that these are unevenly distributed across different socio-economic groupings. However, claims in this paper for a comparative cost analysis across these groupings must be treated with caution. This may simply reflect the mix of patients in the practices under study and be influenced by factors such as accessibility. Although the study gives us a limited insight into ‘the what is’ it certainly cannot make any claim for the ‘what should be’ and whether their costings are the correct way to distribute general practice manpower resources.

The importance of this study is to illuminate the difficulties inherent in a costing exercise and in particular:

• Accurate costing exercises need considerable investments of specialist time. For example, despite significant inputs of research time and analytical rigour, this study felt unable to claim accurate estimates.
• We should be cautious about using cost data unless we are very clear about the principles that are being used in their derivation and the context of the study in which they are framed. This is particularly important when costs derived in one setting are transferred to another.

• From an economic perspective, we cannot make any claims for allocating resources that are based on costs alone.

Where do we go from here?

The rational framework where costs are set within the context of economic analysis is not the only approach to resource decision-making. Many would argue that rationality is at best bounded due to the inevitability of limited information and processing power.5

Incremental models stress the importance of change in small steps, underpinned by mutual adjustment and learning.6 This has been translated by health economists into a technique known as Programme Budgeting and Marginal Analysis.7 This pragmatic approach recognizes that decision makers are not starting with a blank sheet of paper and involves examining the existing allocation of resources in a particular programme area with an emphasis on marginal change based on local costs and activity data, available evidence of effectiveness and the value judgements of relevant stakeholders.

At the opposite end of the spectrum from the rational model lies Garbage Can decision making.8 This emphasizes the chaotic and arbitrary nature of resource decision making where problems drift around at random looking for solutions to which they become attached. From this perspective, costs can at least offer a degree of stability to the system, perhaps allowing patterns to emerge and giving decision makers a little respite in the midst of disorder.

So is the truth out there for costing in primary care? Probably not. Health economists and their colleagues in the evidence-based health care movement argue that if things are not quite what they seem all we need is a greater level of analytical detail and methodological refinement to facilitate better decisions. My suspicion is that this exercise is futile and will only further illuminate the complexity of healthcare organization. This is not to reject costing exercises but to suggest that it may be better to stand back and take a broader view, accepting that all we can ever hope for is an economic flavour.9 As the economist John Maynard Keynes claimed: “it is better to be vaguely right rather than precisely wrong”.

References