

Editorial

Value-based pricing for medical education?

Kieran Walsh

¹BMJ Learning, BMJ Publishing Group, BMA House, Tavistock Square, London WC1H 9JR

[&]Corresponding author: Kieran Walsh, BMJ Learning, BMJ Publishing Group, BMA House, Tavistock Square, London WC1H 9JR

Key words: Value-based pricing , medical education

Received: 13/09/2013 - Accepted: 13/10/2013 - Published: 29/10/2013

Pan African Medical Journal. 2013 16:71. doi:10.11604/pamj.2013.16.71.3372

This article is available online at: <http://www.panafrican-med-journal.com/content/article/16/71/full>

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Editorial

"Professions exist to serve the public interest and if universities use public funds to train members of professions they must expect to be held accountable." Ian McWhinney [1]

Concerns about funding for medical education have been around a long time. Thirty years ago McWhinney made explicit the need for providers of medical education to be held to account by their payers. At a time when universities guarded their independence jealously, such thinking may have seemed radical. Today the concept seems self-evident, however inevitably the debate has moved on. The question now is not whether to hold providers of medical education to account, but rather how to hold them to account.

The traditional way of ensuring value for money from medical education has been equivalent to the way we might ensure value for money from any expenditure. The traditional business model of the pharmaceutical industry is a good case study. A pharmaceutical company would typically produce a drug and spend say one million pounds bringing it to market. The pharmaceutical company might expect to sell 1000 drugs while the product was still in patent and might therefore charge £1000 per drug to break even, and more to make a profit. This pricing model is based on the production costs of the drug ? if the drug was cheaper to produce, the company would charge less for it. It is interesting to consider to what degree costing of medical education has followed this model. Let's look at a parallel example of an educator setting up a new simulation unit. The educator and their team would typically work out the costs of setting up the unit (these would typically include although would by no means be limited to the costs of faculty, learner, equipment, consumables and facilities) [2] This might come to one million pounds and the payer ? perhaps the local training authority - would pay this amount for it. This approach whereby you pay a cost that is closely related to the cost of creation of a product or service is a logical and reasonable one. However in a number of different fields of activity it is being replaced by new models of costing products and services. To look in detail at one such field, we can return once again to the pharmaceutical industry.

The current strategy of this industry is to introduce a system of value-based pricing [3]. Value-based pricing means that the payer (e.g. the government) will pay a price for a drug that is related to that drug's value or worth. So if a drug makes only a small difference to patient outcomes compared to alternatives, then the price for that drug should be low. In this system the amount of money spent in developing the drug is irrelevant. If value-based pricing were introduced in medical education, then the model for applying for funding for a simulation centre would be different to that described above. The educator would have to show what educational and clinical outcomes would be achieved by the simulation centre and would have to describe how these outcomes might be achieved at lower cost in the simulation centre compared to alternative environments or perhaps how they might save costs elsewhere (for example by the avoidance of medical error). The educator would thus be able to assign a value to the new centre and this value would be related to the price that the commissioner of the education would pay.

Inevitably there are a range of dependencies, contingencies and uncertainties in value-based pricing. Value can only be estimated ? we cannot know value for sure. Even if we are sure of the value of an educational service, there may be wide disagreement as to the monetary sum that should be assigned to that value. Value is also not an absolute ? it varies between payers and between contexts.

For example a medical education institution might need to pass an external evaluation in two month's time. However it realises that it must fill a gap in the provision of its educational services to pass the evaluation. The institution will likely assign a high value and probably a high price to something that will help it fill the needed gap. By contrast an institution that had noticed the problem two years before its next evaluation might place a lower value on this service. Another example is that a learner might place high value on a component of the medical education that they receive (perhaps mentoring); however the medical education institution might place lower value on this component: which stakeholder should then be listened to? Value-based pricing models will also influence the activities of providers of education further up the chain of production. If a form of medical education is deemed to be of low value yet the cost of its provision is high, then providers of that form of education will phase it out and/or look for alternatives.

Value-based pricing is in any case not an exact science: it has as much to do with purchasers' feelings and instinct as it does with quantitative measures.

For example the price sensitivity meter is a method of surveying potential purchasers to find out when they would think a product is so expensive that it is completely outside of their budget, when they think that it is so cheap that quality would be poor, when they think it would be just outside of budget, and when they think it would be low cost but a bargain considering its value. It is interesting to consider how you would reflect on these points when considering a new piece of assessment software for example.

Conjoint analysis is another window through which you can consider the value of a purchase. It is a method whereby potential purchasers make a number of trade-offs when deciding on the value of a purchase. It might be used in medical education in the following example whereby an educator looking to purchase an assessment programme considers the validity, reliability, educational impact and cost of the programme, and balances the different components against each other to find out which ones are top priorities [4].

Another model of value-based pricing is economic value estimation. This framework takes into account the value of competitor products and services when deciding on value. It also examines how a certain product can be differentiated from alternatives.

There is no single correct model of value-based pricing that works in all circumstances - it is very much context and consumer dependent. However the concepts outlined in this article should help you to make rational judgements about the value of medical education interventions and also to understand why sometimes we can be irrational in our judgements.

Competing interests

The author declared no competing interest.

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