

EDITORIAL

The “cost disease” in medical education

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William G Bowen first coined the phrase “cost disease in education” in the 1960’s [1]. He demonstrated that the rise in the institutional cost per student in higher education throughout the twentieth century was at a rate that was higher than that of general costs [1]. Numerous other researchers have replicated his findings and indeed shown that the above-inflation rate of rise has continued [2]. What is most striking about the statistics is that the rise is related to the *institutional cost per student*. If university costs were increasing but the universities were producing more graduates, then the paying public might well still feel satisfied. However the fact that it is a cost per student suggests that something has been going wrong. Some have surmised as a result that education and more specifically medical education may be cost inefficient [3]. If this is the case, then it is also worth surmising what if anything can we do about it.

Medical education is a wide discipline and so it is perhaps best to look at a sub-discipline within it. Technology enhanced learning in medicine has rapidly expanded its provision over the past ten years. In the earlier years of its expansion, enthusiasts promised big savings from its adoption. Classrooms, equipment and off-the-job time would become unnecessary in the brave new world of e-learning and, in the case of continuing professional development, learners and trainers would no longer have to travel to face to face events thus saving the costs of accommodation, travel and subsistence. However thus far the promises have not all transformed into reality and it is worth considering why. Could it be that it is a problem with innovation in medical education and not with e-learning itself?

Let’s explore innovation from another perspective. In 1900, there were 8300 motorcars in the USA [4]. By 1930, there were 26 million motorcars [4]. In that time period other forms of transport changed also. Use of the horse drawn cart declined dramatically – and some words such as chaise, charabanc and clarence simply fell into disuse. Provision of technology enhanced learning has risen rapidly over the past ten years yet there has been no corollary fall in the provision of traditional forms of medical education. In some ways it is as if it is 1930 and there are millions of more cars on the road and the same number of horse drawn carts as ever. Instead of progress we have congestion.

As an example how many times have we seen face to face lectures being filmed and then delivered over the internet? Has this been the best use of this new form of technology or would we have been better considering a

more fundamental rethink of how teachers teach and learners learn? As a general rule, existing practices must make way for innovations. If innovations are simply added on incrementally to existing practices, then the provision of content will snowball and the situation will become untenable for teachers and learners alike.

So it is worth reflecting on what you might have stopped doing in the past year – not because you forgot or got tired of doing it, but rather because you came to a considered decision that it was not an efficient use of time or resources. Was it that lecture on professionalism for students that you retired now that you have inculcated within faculty the necessity that they be professional role-players? Was it the student selected components of the undergraduate curriculum that had low take-up and low satisfaction scores? Was it the e-learning programme that was producing content that was freely available on the web and largely of similar quality? This last phenomenon might be termed the “not created here syndrome”. This syndrome can result in a medical education provider investing in the production of an e-learning resource perhaps on the prevention of deep venous thrombosis – when another resource is available for free or at a fraction of the development cost at a neighbouring institution [5].

This desire to create or buy the best also contributes

to inflation in medical education costs [6]. The desire to buy the best can sometimes result in some centres investing in technology that they do not need. For example, in the case of simulation, clinical centres should invest in simulation suites that simulate clinical activities that actually take place in the clinical workplace. It is simply illogical for institutions to buy neurosurgical simulation equipment if neurosurgery isn't actually performed at the hospital – and yet this sometimes happens. Simulation services can be expensive – so cost inefficiencies can result in significant and unnecessary overspend [7].

Medical education may be suffering from “cost disease”, and this may be making medical education expensive. If this is the case, then the answer is that sometimes we are going to have to deliberately stop doing certain things and as importantly change the culture of medical education so that stopping ineffective or inefficient or non-evidence based practice is as celebrated as innovating. Think about what you have stopped doing in the past year. Think about what you should stop in the next year. Think about things you should have stopped in the past but didn't – for whatever reason – maybe because you thought – well we have always done things this way. Then tell a colleague. You can whisper it first.

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