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The role of doctors is unarguably changing and requires a broad skill-set that is increasingly diverse, requiring skills that have traditionally not been integrated with the conventional medical curriculum. A sound clinical education is no longer sufficient to prepare doctors for the working environment they will face within the NHS or elsewhere. In particular, doctors now require a basic understanding of health economics, a need that dates back at least as far as the GP fund-holding days of the 1990s, through to the Clinical Commissioning Groups developed out of the reorganisation of the NHS in 2012 and increasingly to the decisions made by the National Institute for Health and Care excellence (NICE). While some might argue that, with the move towards developing skills for lifelong learning within the medical curriculum (a development directly linked to the push towards evidence based medicine popularised by David Sackett et al in the early 1990s[1],) such 'extra curricular' learning can be undertaken voluntarily after the formal clinical education. However, with a demanding clinical workload and an increasing expectation of long working hours for junior doctors, it seems unrealistic to expect clinicians to develop such a wide skill set 'on the job'.

And without such knowledge, how can we expect doctors to manage conversations with patients about the availability (or often non-availability) of certain drugs or treatments within the NHS? In most consultations, the patient's questions around their illness and treatment can usually be answered by drawing on a combination of medical training, formal guidelines and clinical experience- but few doctors will have received any training in health economics, and many junior doctors may be facing these questions for the first time, with no previous experience to reflect on.

This is not to say that health economics doesn't feature within medical education at all,of course. At the University of Sheffield I provided some teaching as part of a programme of short modules designed to address topics outside of the conventional medical curriculum. The course aimed to cover the basics of how health economics is used to make decisions about which drugs and treatments will be available for patients on the NHS. I was surprised to find that the 12 spaces on the course filled up almost instantly, with a waiting list. I hadn't expected there to necessarily be huge interest in this topic and I was surprised that it was so popular.

The idea was that the sessions were based around group discussions rather than 'chalk and talk' lectures and what came across strongly was that the students clearly wanted to get a decent understanding of the topic and they could see how it would benefit them in the future as working doctors. However, as many medical schools do not routinely cover this subject in the curriculum, many medical students will graduate with little understanding of how NICE makes decisions about which drugs will be available for them to prescribe and without having had the chance to develop their own views about this process. Most importantly, they may lack the ability to talk confidently about it with patients.

As doctors, they will be at the frontline when patients arrive in the consulting room having read or heard stories about the latest cancer drug which has been refused funding by "penny pinching NHS bosses[2]". To bring the reality of this home to students I used a video of a real

patient from a BBC news story about NICE's decision to not fund the use of the monoclonal antibody Avastin (bevacizumab) in advanced colorectal cancer[3]. When presented with a patient whose opinion on the matter had been informed by a potentially very limited view of the complex process which underpins such decisions, and who asked many quite reasonable questions about the decision to not fund the treatment, most of the students on my course quickly realised that they had little idea of how the system worked, how to convey it in lay terms, or what their own feelings were on how such decisions are made.

We spent time looking back at the history of decision making in the NHS, the shifts in drug therapy that have necessitated the creation of decision-making bodies such as NICE, the drug development process and the role of the pharmaceutical industry in both developing and supporting access to new treatments.

Given this opportunity to learn, the students quickly developed strong feelings on the topic, and also a desire to be able to talk to patients about the subject in a way that was ethical and honest. Through a task which required them to 'script' responses to some of the questions posed by the patient in the BBC video, the students were able to use their learning to practice providing answers to patients' questions in lay terminology.

Our medical school has now incorporated more teaching on this subject into the curriculum, ensuring its graduates have had the chance to spend at least a little time considering these issues. These sessions are delivered by both a clinical academic and a professor of health economics, who together can provide both a sound understanding of the economic methods that underpin decisions about which treatments to provide to patients, and also the clinical context around the implementation of these decisions. The message for the students is clear: "Doctors need to understand health economics to be effective practitioners".

Our academics also run a free open online learning course on health technology assessment (https://futurelearn.com/courses/hta) which gives health professionals a brief introduction to the methods and processes that provide a major part of the evidence base on which NICE bases its decision, and the opportunity to discuss and debate the issues with others.

Our students, then, are fortunate to be part of a faculty that includes researchers working at the forefront of health economics and decision science- many other medical schools do not have such expertise to call on, right on their doorstep.

Given the highly emotive nature of many of the media reports on drugs that aren't offered on the NHS and the limited coverage about how such decisions are actually made, it is doctors who are best placed to provide patients with accurate information in the context of their own situation, and without the use of misleading statistics or complex terminology.

The NHS Budget is fixed. There is not now, and may never be, enough money to provide every therapy, to every patient, regardless of its costs or often limited benefits. When even the Cancer Drugs Fund is having to incorporate information about cost-effectiveness into its decisions about which drugs can be funded by this relatively modest resource, and when

GPs are increasingly expected to make decisions about the allocation of the NHS financial resources, it seems logical that basic health economics should form part of the core medical curriculum- it is no-longer a 'niche' topic for those with interest in this aspect of healthcare. By incorporating not just teaching on this topic, but the vital opportunities to debate these issues, UK medical schools can help to give the next generation of doctors the ability to support patients with clear information about the reasons why a certain treatment may or may not be available to them, and to discuss these issues with them confidently and honestly.

You can learn more about the subjects discussed in this blog post on the upcoming Health Technology Assessment MOOC- a free online course on the Futurelearn platform. The next course starts in late 2016 and you can register at futurelearn.com/courses/hta

The author is the course director of an online MSc in Health Technology Assessment at the University of Sheffield.

1. Sackett, D. L., & Rosenberg, W. M. (1995). The need for evidence-based medicine. *Journal of the Royal Society of Medicine*, *88*(11), 620–624.
2. Mail Online,. (2012). *Former soldier who took on NHS bosses in fight to get life-saving drug dies of terminal cancer aged 37*. Retrieved 28 January 2016, from http://www.dailymail.co.uk/health/article-2155882/Former-soldier-took-penny-pinching-NHS-bosses-fight-life-saving-drug-dies-terminal-cancer-aged-37.html
3. BBC News. (2016). *Critics condemn bowel cancer drug rejection* . BBC News. Retrieved 3 May 2016, from http://www.bbc.co.uk/news/health-11060968

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