

Value-based drug system proposed in UK

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It may seem like common sense that a product's price would be based on its value, but that is rarely the case when it comes to pharmaceutical therapies. A United Kingdom politician wants to change that, and is suggesting a pricing scheme under which pharmaceutical companies would only get paid for the patients who actually benefit from their drugs. Though this scheme sounds ideal in theory, health care economists warn that implementing it in the real world is another matter.

In many countries, including Canada, drug therapy pricing schemes are fairly straightforward. Drug companies set prices on their products and governments decide whether or not to cover them under public funds based on cost-effectiveness. A country that operates this way is known as a "price taker." According to Stirling Bryan, director of the Centre for Clinical Epidemiology & Evaluation in Vancouver, British Columbia, the scheme can be summed up this way: "The company indicates price, and we indicate if we are willing to pay for it or not."

The UK, like Canada, uses a price-taker system. Andrew Lansley, the shadow secretary of state for health, is calling for the country to instead adopt a value-based drug pricing scheme. He argues that UK patients are often denied new, innovative therapies because the government has deemed the medicines to be too expensive. In a few cases, however, drug companies have provided such therapies to a small number of patients anyway, on the condition that they be paid only if a patient receives a therapeutic benefit.

Lansley is petitioning that this scheme — payment by results — become the norm instead of the exception. Patients would benefit by gaining access to innovative therapies, argues Lansley, and drug companies would benefit by gaining permission to introduce new products.



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The aim of a value-based drug pricing scheme is to restore balance between the price of pharmaceutical products and their therapeutic benefits.

It isn't the first time that the notion has been put forth in the UK. In 2007, the Office of Fair Trading, a consumer regulator, asserted that the pricing system would save the National Health Service up to £500 million a year (www.offt.gov.uk/shared_offt/reports/comp_policy/oft885.pdf). The regulator claimed the prices of drugs were often far out of line with their therapeutic benefits.

But critics of a pricing system based on monitoring outcomes suggest that it would only create more bureaucratic hurdles for UK-based drug companies, such as GlaxoSmithKline and

AstraZeneca, and therefore delay releases of new products and harm economic development.

One major challenge of implementing a value-based drug pricing system is measuring and quantifying therapeutic benefit. "Two main issues are 1) not knowing what the main outcome is we should be measuring and 2) not currently collecting that information," Jeffrey Hoch, director of the Pharmacoeconomics Research Unit at Cancer Care Ontario, writes in an email.

"For cancer, there is concern over whether progression free survival (PFS)

is a worthy outcome compared to overall survival. However, if PFS were agreed upon, there may not be systems set up to evaluate PFS in an objective manner. Who should collect this data? Will their incentives affect the collection or interpretation of the data?"

Another difficulty, notes Hoch, would be getting sellers and purchasers to communicate effectively and agree upon a definition of therapeutic benefit. "I believe there are major trust issues that need to be resolved around defining 'how we

know it works' and in the communication of consequences," writes Hoch. "Without solving the communication problem, there is no hope for a nuanced solution, since both sides need to play an 'all or nothing' game."

Like Hoch, Bryan suggests that the challenges of implementing a value-based drug pricing system are immense, though it might be possible in some areas of health. "One thing you have to do is establish, for every patient, if they are benefiting or not. It's an incredibly difficult thing to do," says Bryan. "It

might work in some very select areas with existing infrastructure of progressive monitoring."

If a value-based drug system was implemented well, notes Bryan, people denied access to new drugs would be the primary beneficiaries. "Patients would get access to therapies they otherwise wouldn't," says Bryan. "It is a step in the direction of personalized medicine, which is the Holy Grail." — Roger Collier, *CMAJ*

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