Affordable access to innovative cancer medicines — don't forget the prices

Efforts to improve access to cancer medicines should not overlook exorbitant prices

On 17 September 2015, the much anticipated Senate report on the *Availability of new, innovative and specialist cancer drugs in Australia* was released.[1] The inquiry preceding the report, which was triggered by concerns about inadequate and inequitable access to cancer medicines, had attracted over 200 submissions from doctors, patients, patient advocacy groups and government decision makers.

The report addressed the health burden of cancer on our society; the impact on patients of delayed access to cancer medicines; and the challenges of assessing cost-effectiveness, particularly for rare cancers. It also focused on ways of improving Australia's processes of health technology assessment (HTA), by which we determine whether medicines are safe, effective and cost-effective.

Australia's health technology assessment processes

In Australia, HTAs for medicines are carried out in two phases. First, a pharmaceutical company makes a submission to the Therapeutic Goods Administration, which assesses a medicine's efficacy and safety. If the medicine is approved, an application can be made to the Pharmaceutical Benefits Advisory Committee (PBAC) to have the medicine subsidised by the Pharmaceutical Benefits Scheme (PBS). The PBAC assesses whether the medicine is cost-effective in comparison with existing therapies. For targeted therapies, approval may also be sought from the Medical Services Advisory Committee for "companion diagnostics" that determine whether patients are likely to respond to the treatment. If medicines are not subsidised by the PBS, patients and their doctors have to find other means to gain access to them, which may include enrolling in clinical trials, seeking treatment through public hospitals or appealing to pharmaceutical companies for free or subsidised access. If unsuccessful, patients are left with the pressure of raising the money themselves or having to forgo treatment.

Those advocating in the Senate report for reform argued that patients are forced into these situations far too often because Australia's HTA processes are antiquated, inflexible, unpredictable and inequitable — particularly for those with rare cancers, young people with cancer, and cancer patients located in rural and remote regions.

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Proposed solutions to these problems included:

- providing multiple HTA pathways;
- prioritising the resources of regulators and payers so that the most important and complex medicine applications are given the most attention;
- enabling better coordination between decision-making bodies to speed up decisions;
- enabling better communication with pharmaceutical companies to set expectations early and thereby reduce failures;
- leveraging off decisions made by overseas regulators with comparable evidence standards;
- taking greater account of indirect economic benefits and outcomes, such as improvements in productivity; and
- having greater focus on outcomes important to patients and doctors.

It was also suggested that because companies may not be commercially motivated to seek approval for non-commercially attractive uses of their products, it should be made easier for physicians, patient advocates and other stakeholders to make applications. To help regulators and payers make timely decisions, often in the midst of great uncertainty about real benefits, harms and costs, it was also proposed that there should be broader use of "managed entry" schemes in Australia — that is, schemes in which further evidence is generated *after* approval by the regulator or payer.

Cost of new cancer drugs

While it is important for Australia to refine its HTA principles and processes, what was notably absent from the Senate report was an in-depth consideration of why new cancer medicines cost so much, and what can be done about it. Many new cancer drugs cost more than $100 000 per treatment,[2,3] and it has been shown that in the United States the launch price of cancer medicines has increased by 10% per annum over almost 20 years.[4] These prices mean that unsubsidised medicines are well out of the reach of all but the wealthiest individuals, and they place intense political pressure on governments to subsidise medicines that would otherwise have been considered too expensive or supported by insufficient evidence.

The report's overlooking of drug prices is significant because adjusting HTA processes to provide earlier access to more drugs without reforming the way we price cancer drugs will mean an increasingly large proportion

of our health budget will be directed to medicines in general, and cancer medicines in particular. This has the potential to create enormous opportunity costs and inequities elsewhere in the system.

In this regard, there are lessons to be learned from other jurisdictions. In its submission, the Society of Hospital Pharmacists of Australia poignantly notes that the United Kingdom's Cancer Drugs Fund, which was set up to provide access to cancer drugs not approved by the National Institute for Health and Care Excellence, has inadvertently resulted in the UK paying more for cancer drugs than most other European countries, and ultimately resulted in 25 of the 84 previously listed cancer medicines not being funded in 2015–16.

The pressure on governments is likely to get worse. According to the Pharmaceutical Research and Manufacturers of America, there are almost 800 drugs in development for cancer, of which 98 are for lung cancer, 87 for leukaemia, 78 for lymphoma, 73 for breast cancer, 56 for skin cancer and 48 for ovarian cancer.[5] A recent report by the IMS Institute predicts that 225 new medicines will enter the market over the next 5 years, and that cancer treatments represent the highest proportion of these drugs.[6] Of the cancer medicines being developed, 91% will be targeted therapies, which is likely to make these medicines more expensive. Pressure on budgets will therefore only increase if something is not done now about cancer drug prices.

Perhaps one reason the Senate report focused so much on HTA, and not on drug prices, is that price and profit expectations for pharmaceutical markets are set internationally, and Australia is a small player in this market. Part of the pharmaceutical industry's global strategy includes setting high pricing precedents, typically in the US market. Although companies do negotiate different prices elsewhere in the world, there is a limit to their willingness to do so.

It is interesting, however, to observe that the US — traditionally the bastion of medicine price deregulation — now recognises that high drug prices are the biggest barrier to patient access, and questions are beginning to emerge about the legitimacy of the prices being charged. A new Bill has recently been submitted to the US Congress seeking to empower the nation's Medicare system (which provides public health care primarily to people aged 65 years and older) to drive down prices, and to demand reports about expenditure and profits for each drug listed with the US Food and Drug Administration, including overseas sales.[7] No doubt, recent scandals relating to unjustifiable price hikes — most notably the more than 5000% increase for 60-year-old drug pyrimethamine (Daraprim), used to treat infections such as malaria[8] — has contributed to the recent spike in unease about medicine pricing.

A few submissions to the Senate report did make mention of the need for new approaches to purchasing medicines. Rare Cancers Australia, for example, recommended treating medicines as a service, wherein licences to use medicines, rather than the medicines themselves, are bought and sold. The advantage of this approach is that regardless of how much of a medicine is used, the licensing fee remains fixed, removing any incentive to overprescribe or aggressively promote use of a medicine. If such licences are not linked to specific indications, this model may also provide subsidised access to off-label drugs to treat patients with rare cancers.

Social impact bonds are another possible approach that was recommended by the Cancer Drugs Alliance. A social impact bond is a means to attract non-government investment into projects that resolve social problems that have traditionally relied on relatively small-scale support from trusts and foundations. The premise is that dealing with acute social problems early (eg, severe suffering from cancer) will lead to less expensive interventions and therefore savings for governments, of which a proportion is provided to investors as reward.[9]

Where to from here?

Such dramatic changes to how we procure medicines will need to be considered carefully and adopted gradually, and perhaps all Australia can do for now is wait for global drug pricing trends to adjust. Meanwhile, we need to be cautious about demands to radically overhaul HTA processes that might actually be working quite well. For example, when it comes to managed entry programs, it has to be recognised that current evidence standards have evolved for a reason, and it is extremely difficult to disinvest if a medicine subsequently proves to be ineffective, unsafe, poor value for money or simply unaffordable. It is therefore crucial for decision makers to separate the real value of cancer medicines from the hype that often surrounds them — using, for example, a tool developed by the European Society for Medical Oncology that ranks the "clinically meaningful benefit" that can be expected from new cancer treatments.[10]

One change that we *can* safely make now is to advocate for greater transparency surrounding both HTA and price negotiations. At present, decisions about access to cancer medicines are made behind closed doors, largely because of the perceived need to maintain commercial confidentiality. It is understandable that companies would not want to completely reveal their commercial interests, but without greater openness about how funding decisions are made, and how medicine prices are linked to underlying research and development, manufacturing and operational costs, we will remain unable to optimise the utilisation of our health resources in a way that works for both society and the pharmaceutical industry.

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