High Cost Medicines for Rare Disorders

Discussion document and a request for your input

We've been doing some thinking about access to high cost medicines for rare disorders, and we want your input to help us develop an alternative commercial approach.

EXECUTIVE SUMMARY

There is on-going public interest on the topic of access to high cost medicines for rare disorders. Feedback we've received as part of our ongoing consultations has led us to again consider this issue.

The issue of access to high cost medicines for rare disorders is likely to be an on-going one. It's likely that medicines in the future will be increasingly expensive and targeted at relatively few patients. Although PHARMAC does fund some expensive medicines, a high price reduces the likelihood that a medicine will be funded, all else being equal, because of the impact that price has on two decision criteria – cost effectiveness and budgetary impact. Suppliers understand the consequences of this, and know that medicines that cost many tens of thousands of dollars per year are less likely to be funded unless clear delivery of substantial health benefits can be proven. Given that they charge these prices overseas, suppliers have little incentive to cut their prices here in New Zealand, in part because doing so would raise questions about their high prices elsewhere.

We've been doing some thinking about whether a contestable fund and bidding process specifically for high cost medicines for rare disorders could demonstrate to suppliers that we want to improve access to these treatments, and could encourage them to propose more competitive pricing offers than they have done to date. If successful this could lead to better pricing for these medicines, resulting in improved access and, ultimately, better outcomes for patients with rare disorders. We're proposing to use an existing funding pool to avoid having to make direct trade-offs within each annual budget cycle against other medicines that with the current approach offer better value for money.

Establishing a contestable high cost medicine fund would create risks, and regardless of what approach we take, there will always be some treatments that we can't fund within our fixed overall budget. We're proposing to establish a contestable fund to help establish whether a different approach might be able to improve competitive tension and reduce prices. We still need to work out the scope, process and entry criteria for the fund, but we intend to run it as a Request for Proposals (RFP), whereby suppliers of medicines that meet the pre-requisites would be invited to bid for a capped fund. The approach adopted will need to be consistent with PHARMAC's statutory objective.

The commercial approach could be evaluated in terms of whether we receive good commercial offers, whether access to effective pharmaceutical treatments and health outcomes for patients are improved, and whether the risks to the overall PHARMAC model are managed.

We're aiming to have something ready by the end of this year, and we want input from the public and suppliers to help us design the RFP. We encourage you to give us your feedback on our approach and to meet with us to discuss how it might work.

DISCUSSION

We've heard the public's concern about access to high cost medicines for rare disorders…

There is on-going public interest on the topic of access to high cost medicines for rare disorders. Feedback we've received as part of our consideration of eculizumab for paroxysmal nocturnal haemoglobinuria (PNH) and alglucosidase alfa for adult late-onset Pompe disease, along with our Decision Criteria consultation, has led us to again consider this issue. Patient groups and their representatives also raised the issue during the 12 community forums we held from July to September 2013, with one group proposing that PHARMAC establish a separate, competitive, high cost medicines pool.

…which is likely to increase in the future.

The issue of access to high cost medicines for rare disorders is likely to be an ongoing one. Some commenters (such as the McCormack Panel in 2009[1]) have noted that in the future medicines will be increasingly targeted at relatively few patients; more expensive than the ones currently available; and there will not be many new 'blockbuster' medicines that have a high uptake and are sold at a relatively low cost over time. The Nature Reviews journal noted in 2012 that the pharmaceutical industry has been moving from a blockbuster model towards 'niche-buster' opportunities[2]. In the past few years, medicines for rare conditions accounted for over 35% of the new drugs approved by the US Food and Drug Administration (FDA), 22% of the new chemical entities, and 31% of the biologics[3]. The global orphan drugs[4] market reached $84.9 billion in 2009, growing from $58.7 billion in 2006. The market is expected to grow at a compound annual growth rate of nearly 6% to reach $112.1 billion by 2014[5].

The Treasury has noted in its Long Term Fiscal Statement (2009) that "the main drivers of health spending have been and will continue to be income growth and technological change – both of which affect the demand for, and the cost of supplying, health care". Public expectations of the health system increase as technology progressively extends the range of possible treatment options. This suggests that not only is it likely that medicines will become increasingly expensive, public expectations about access to pharmaceuticals are also likely to increase.

PHARMAC does fund some high cost medicines…

PHARMAC does fund some expensive medicines. In the 2012/13 financial year, 86% of PHARMAC's expenditure was spent on 20% of patients[6]. The highest amount spent in

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[1] McCormack, P; Quigley, J; Hanson, P; *Review of Access to High-Cost, Highly-Specialised Medicines in New Zealand. 2009*

[2] Melnikova, I: *Rare Diseases and Orphan Drugs*. Nature Reviews – Drug Discovery, Volume 11, (April 2012)

[3] Melnikova, I: *Rare Diseases and Orphan Drugs*. Nature Reviews – Drug Discovery, Volume 11, (April 2012)

[4] Orphan drugs are pharmaceuticals that have been developed specifically to treat a rare medical condition.

[5] Sharma, A et al. *Orphan Drug: Development Trends and Strategies.* Journal of Pharmacy and BioAllied Sciences (2010).

[6] To respect the commercial arrangements PHARMAC has with some suppliers, these figures do not reflect any rebates.

2012/13 on one patient (for one treatment) was approximately $450,000[7]. Out of the six medicines that New Zealand has received applications for[8] that are funded by the Australian government as part of their Life Saving Drugs Programme, three have been funded, either on the Schedule or for particular named patients.

In New Zealand, the definition of what medicines are considered to be 'high-cost' will continue to change over time. Funding a medicine 10 years ago at $20,000 for each person per year was considered to be very high-cost, while now it is more in the order of $20,000 to $100,000. In 2013, PHARMAC received applications for pharmaceuticals costing over $500,000 per patient per year.

…but because treatments for rare disorders are often priced very highly…

Treatments for rare disorders are often priced very highly, and suppliers claim this is due to the need to recoup the fixed costs of research and development (R&D) across lower volume or patient numbers.

However, the BMJ journal noted in 2012 that more than four fifths of all funds for basic research to discover new drugs and vaccines come from public sources[9]. Many countries have supported the development of drugs for rare conditions through public funding of research, lowered registration costs, and extensions to market exclusivity. These incentives, combined with developments in genetic targeting and in human monoclonal antibodies, have led to a rapid rise in the number of products available for relatively limited populations. However, despite the incentives and subsidies, many of these new products are priced at a level that makes them very poor value for money compared to other treatments used in wider populations, or even to other therapies used to treat the same condition.

Suppliers also claim that it is often difficult to build sufficient clinical evidence due to natural limitations on the size of randomised controlled trials (RCTs), because of the rarity of the conditions. However, this also means that orphan drugs potentially offer some financial advantages to pharmaceutical companies over conventional medicines, including faster development timelines, lower research and development expenses, a higher likelihood of clinical and regulatory success, premium pricing, lower marketing costs and a lower risk of generic competition[10].

According to the Tufts Centre for the Study of Drug Development, companies reported that 22% of their programmes designated as orphan drugs led to FDA approvals between 2000 and 2009, whereas the clinical approval success rate for mainstream drugs was 16%[11]. Arguments about high prices being necessary to recoup research have also been discredited by several commentators,[12] concerned that the true cost of research is masked by access to Government research subsidies, calculations of profits

[7] To respect the commercial arrangements PHARMAC has with some suppliers, these figures do not reflect any rebates.
[8] Nine medicines are listed as part of the LSDP programme, but PHARMAC has not received applications for three.
[9] *BMJ*2012;345doi: http://dx.doi.org/10.1136/bmj.e4348 (Published 7 August 2012)
[10] Melnikova, I: *Rare Diseases and Orphan Drugs*. Nature Reviews – Drug Discovery, Volume 11, (April 2012)
[11] Melnikova, I: *Rare Diseases and Orphan Drugs*. Nature Reviews – Drug Discovery, Volume 11, (April 2012)
[12] Roger Collier, "Drug development cost estimates hard to swallow", CMAJ, 3 February 2009, 180(3): 279-280

foregone rather than out-of-pocket expenses, and payments to doctors. PHARMAC is also aware that not all medicines for rare diseases are priced highly.

… they often don't compare favourably to other medicines…

A high price can reduce the likelihood that a medicine will be funded because of its impact on two different decision criteria: cost effectiveness (PHARMAC decision criterion five[13]) and affordability / budgetary impact (decision criterion six). Because price is a large component of cost, an expensive medicine is less likely to be cost-effective, all else being equal. Price also affects affordability, along with the size of the population group, the likely uptake rate, and the average dosage. It is possible for a medicine to be cost-effective but not affordable, or to be affordable but not cost-effective.

This means that very high cost treatments often do not compare favourably to other medicines that benefit larger populations and achieve greater overall health gains for less money. In the case of eculizumab for PNH for example, we estimate that at the current price, funding eculizumab instead of other treatments would mean tens of thousands of New Zealanders would miss out on new medicines that offer more health gain overall.

…and suppliers are dis-incentivised to make competitive offers.

New Zealand is only 0.1% of the global pharmaceutical market, and many other countries fund high-cost treatments for rare disorders. In our experience New Zealand is generally a price taker for these treatments and has been unable, with our current commercial approach, to influence pricing to an extent that would see such treatments compare favourably to other medicines we consider.

Suppliers are aware that PHARMAC's current funding approach means that very highly priced medicines are less likely to be funded, and so they may be dis-incentivised to propose competitive offers that could undermine their global pricing strategy, especially where there may also be a limited likelihood of such activity being successful in securing funding.

A fixed contestable pool could improve competition….

PHARMAC is intending to develop an alternative commercial approach. The idea is that a separate funding pool and bidding process specifically for treatments for rare disorders could demonstrate to suppliers that funding is available to improve access to these medicines, and incentivise them to propose more competitive offers than they have done to date. If successful this could lead to better pricing offers for these medicines, which may result in better outcomes for patients.

We're still working out the details of the scope, process and entry and exit criteria for the proposal, although we intend to run it as a Request for Proposal (RFP), whereby suppliers of treatments that meet the pre-requisites would be invited to bid for a capped fund.

[13] Our current nine decision criteria are currently under review. Refer to our website for more information http://www.pharmac.health.nz/about/operating-policies-and-procedures/decision-criteria-consultation

The proposal could be evaluated in terms of whether it incentivises suppliers to provide better commercial offers, whether access to effective pharmaceutical treatments and health outcomes is improved, and to ensure the approach supports PHARMAC's ability to secure the best health outcomes that are reasonably achievable from the funding provided in accordance with our statutory objective.

... but bring new risks.

Establishing a high cost treatment pool would create risks. Key among them is the risk that funding some high-priced treatments establishes a new, higher benchmark for pricing of new products, and reduces incentives on suppliers to develop and sell products that offer good value for money and continue to improve the cost-effectiveness of public health spending in New Zealand.

Regardless of what approach PHARMAC takes, there will always be some treatments that we are not able to fund as there will always be more investment options available than funds. Consequently the discussion about access to funded pharmaceuticals is likely to always exist in some form.

CONTESTABLE FUND PROPOSAL

We still need to work out the detail of how a contestable fund would work, but some of our current ideas are outlined below. These ideas are only provided to give a sense of how the proposal could work - we're seeking your input to help us decide on the best process, prerequisites and evaluation criteria.

Process

Suppliers could be invited to submit funding proposals for medicines[14] that meet the prerequisites (listed below) by a set deadline.

Suppliers could be required to submit proposals that can be managed from within a fixed funding provision i.e. they would need to involve some form of risk-sharing that manages the risk to PHARMAC of a significant growth in patient numbers. Suppliers could bid, for example, for a fixed amount of funding for which they would supply all patients regardless of the size of the patient population, so that the risk of the patient group being lower than forecast would be borne by PHARMAC, and the risk of the patient group being higher than forecast would be borne by the supplier.

Suppliers would also be able to propose patient entry and exit criteria, but these would need to ensure that patients with the same clinical circumstances receive the same level of access, to ensure equity of access for patients. Further consideration would need to be given to the ways in which suppliers' commercial sensitivities about pricing could be managed, given the small patient numbers and the fixed nature of the fund.

All eligible proposals could then be considered and clinical advice obtained, before they are prioritised against each other and the size of the fund. The current Decision Criteria[15] could be used for this purpose, or we could consider alternative prioritisation methods.

On-going eligibility for patients could be considered at appropriate intervals, based on whether there has been a clinical improvement in the patient or a stabilisation of the

[14] The scope of the proposal would include medicines, but not medical devices, as the issue is one of improving access to high cost medicines.
[15] We note that the current decision criteria are being reviewed.

patient's condition. Any entry and exit criteria would need to be agreed before the treatment is started.

Prerequisites

Entry prerequisites would need to be considered in more detail, but prerequisites along the following lines could be considered:

Disease related:

1. There is a rare[16] but clinically defined disease for which the drug is regarded as a proven therapeutic modality (i.e. has been approved by Medsafe for that indication).
2. The disease is identifiable with reasonable diagnostic precision.
3. Epidemiological and other studies provide evidence that the disease causes a significant reduction in either absolute or relative age-specific life expectancy or quality of life, for those suffering from the disease.

Treatment related:

4. Clinical advice suggests the treatment is likely to be clinically effective.
5. The patient's lifespan or quality of life could be substantially improved as a direct consequence of the treatment[17].

Alternatives related:

6. The treatment or chemical is not indicated for the treatment of another, non-rare, disease (or if it is, the combination of prevalence still falls within the definition of rare)[18].
7. There is no alternative treatment on the Pharmaceutical Schedule.
8. There is no suitable[19] alternative non-drug therapy for the rare disorder.

Cost / market related:

9. Total market value, based on the price and the supplier's proposed expenditure cap, is less than a set figure.

Funding

PHARMAC has been successful in transferring 26 medicines that we received Named Patient Pharmaceutical Assessment (NPPA) applications for in 2012/13 (and 16 so far in 2013/14) onto the Pharmaceutical Schedule. This has the effect of providing greater access to patients, reducing administrative workload for clinicians, and providing greater certainty for patients and clinicians alike. The agreed funding provision for NPPA is $8 million per annum, although, as stated in our original policy objective, we anticipated this expenditure level would reduce as we listed more medicines on the Schedule. We

[16] 'Rare' would need to be defined. In the UK an orphan disease is defined as a disease with a prevalence of less than five cases per 10,000 and an ultra-orphan disease as 1:50,000. In the USA, it is defined as 1:1,500, in Japan as 1:2,500 and in the EU as 1:2,000. The UK's definition of ultra-orphan (1:50,000) is probably the most useful definition for the purposes of the proposal, which would imply fewer than 90 people per condition across the whole of New Zealand.

[17] This could be measured by absolute or proportional QALY gain.

[18] Bidders could be required to reveal their overseas approved indications, their phase 3 development program and any relevant patents.

[19] Further consideration could be given as to how 'suitable' could be defined. It could be defined as a treatment that provides a comparable health outcome.

anticipate a projected surplus of up to $5 million in this NPPA funding provision next year, which means this funding could be made available for use in a contestable fund for high cost medicines.

Evaluation Criteria

The success of the proposal could be evaluated against the following criteria:

- Access to effective pharmaceutical treatments is improved.
- Health outcomes for those patients who receive funded treatments via the proposal
- Financial risk is managed, and expenditure does not exceed the value of the funding provision.
- PHARMAC receives better commercial proposals for eligible treatments than those that have been received in the past.
- PHARMAC's ability to negotiate good prices for the rest of the Pharmaceutical Schedule is maintained, for the purposes of securing the best health outcomes for New Zealanders.

WE WANT TO HEAR FROM YOU

The purpose of this discussion document is to share our thinking, and to seek your feedback on how a contestable fund could work. We still need to work out the detail, and we would appreciate your input to help us do that. We're working towards requesting commercial proposals by the end of this year. We're interested in meeting with suppliers, patient groups and anyone else that has an interest in this work.

If you would like to meet with us, please contact us via email, fax, or letter to:

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Please note that any feedback we receive from you is subject to the Official Information Act 1982 (OIA). This means it, and your identity, may need to be disclosed in response to a request under the OIA. If you would like us to withhold any commercially sensitive, confidential proprietary, or personal information, please advise us of this and clearly identify the relevant sections of your feedback that you would like withheld. PHARMAC will give due consideration to any such request.