Editorial

Prescription drug subsidies in Australia and New Zealand

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Australians and New Zealanders may see their systems for drug subsidy as different but, when viewed from the other side of the Pacific, important similarities emerge.[1] Both systems provide universal public subsidy to make commonly used medicines more accessible and affordable. This is still not achieved in some other OECD (Organisation for Economic Co-operation and Development) countries such as Canada and the USA.[2] Australia and New Zealand have, of course, different strategies for expenditure management, resulting in significant differences in expenditure. However the health outcomes obtained are likely to be similar. As contracting with drug manufacturers is becoming more common, the two countries appear to be converging in their use of certain policy tools.

Both Australia and New Zealand review the comparative cost-effectiveness of all new drugs before determining whether or not they will be subsidised. Few other countries in the world are as systematic in their application of evidence-based processes in providing access to medicines.

In this issue...

Information about adverse reactions to drugs will be returning to *Australian Prescriber* this year. The reporting of adverse events helps to improve practice. Kenneth Thomson and Dinesh Varma tell us that improvements to contrast media have enhanced patient safety. Knowing that some drugs' effects on the immune system can reactivate tuberculosis has led to recommendations for testing before prescribing. Anastasios Konstantinos discusses the tests which can be used when tuberculosis is suspected.

An increasing number of tests can now be done outside of a laboratory. Mark Shephard reviews some of the applications of point-of-care testing.

This review process is conducted by arm's-length committees in both countries – the Pharmaceutical Benefits Advisory Committee (PBAC) in Australia, and the Pharmacology and Therapeutics Advisory Committee in New Zealand (PTAC). A negative recommendation by these committees almost always means that the drug will not be listed (no means no), whereas a positive recommendation generally means that eventual listing will be subject to agreeable pricing terms (yes means maybe).

Despite comparable policy features, the approach to managing expenditure in Australia and New Zealand differs in some potentially important ways. One example is the co-payments for subsidised medicines. Both countries have lower fees for vulnerable patient populations. However, general patients in Australia face higher co-payments for each item (A$32.90) than their counterparts in New Zealand (up to NZ$15, depending on source of primary care). This difference may raise concerns about accessibility of medicines to the average Australian – drugs are subsidised but can patients afford them? It also may reflect differences in pharmaceutical benefits management – a subsidy system laid atop an otherwise free market in Australia versus a contracting system for managing purchases in the New Zealand market.

The Pharmaceutical Management Agency of New Zealand (PHARMAC), which was established in 1993, uses a capped national medicines budget, along with a variety of supplier contracts, to purchase medicines. The contracts include rebates on list prices, tendering for off-patent drugs, and bundle agreements where PHARMAC may list expensive new drugs in return for the manufacturer discounting the price of other products it supplies.

The effect of PHARMAC's approach on medicine expenditure in New Zealand compared to Australia, Canada and the USA is striking (see Table 1). Government spending on prescription drugs in Australia and New Zealand during 1993 was comparable (A$107 vs A$114 per capita). This is probably because before this point, Australia had used a relatively aggressive price negotiation program[3–5] and a

Table 1

Spending on medicines in Australia, New Zealand, Canada and the United States

Per capita expenditure on prescription drugs, A$ (PPP)

	Total			Government			Private		
	1993	2006	Change	1993	2006	Change	1993	2006	Change
Australia	$129	$462	260%	$107	$334	212%	$21	$128	498%
New Zealand	-	-	-	*$114	*$126	11%	-	-	-
Canada	$252	$750	198%	$117	$354	204%	$135	$396	193%
USA	$263	$1021	289%	$54	$348	550%	$209	$673	222%

Per capita expenditure on pharmaceuticals and other medical non-durables, A$ (PPP)

	Total			Government			Private		
	1993	2006	Change	1993	2006	Change	1993	2006	Change
Australia	$214	$609	184%	$107	$334	212%	$107	$275	156%
New Zealand	$221	$427	93%	$151	$285	88%	$70	$142	104%
Canada	$351	$901	157%	$117	$354	204%	$235	$547	133%
USA	$386	$1189	208%	$59	$360	510%	$327	$829	154%

PPP purchasing power parity

Figures are expressed in Australian dollars using the general purchasing power parity indices to convert currencies

* New Zealand data for public spending on prescription drugs. See: PHARMAC Annual Review 2006. Wellington: PHARMAC; 2006. www.pharmac.govt.nz/suppliers/reports/AnnualReview

Source: Calculations based on data from OECD (Organisation for Economic Co-operation and Development) Health Data 2008. www.oecd.org/health/healthdata

more systematically applied evidence-based coverage policy, whereas in 1993 New Zealand had only just established PHARMAC. From 1993 to 2006, growth in these costs was considerably slower in New Zealand compared to Australia (11% vs 212%). If over that period spending on prescription drugs in Australia had grown at comparable rates to New Zealand, expenditure in Australia during 2006 would have been about A$4 billion lower than it actually was.

PHARMAC's approach to expenditure management is considered aggressive by some and critics have questioned whether this approach requires a trade-off between expenditure management and patient access to drugs. Three levels of access need to be considered: access to a class of drugs, access to a specific drug within a class and access to various brand and generic versions of a specific drug.

There is little difference between Australia and New Zealand in the availability of subsidy for at least one drug within classes. Consider the leading five drug classes in the global marketplace – ACE inhibitors (including combinations), calcium channel blockers, proton pump inhibitors, HMG CoA reductase inhibitors (statins), and selective serotonin reuptake inhibitors. One or more treatment options from each of these drug classes are subsidised in Australia and New Zealand (see Table 2 online*).

While PHARMAC argued in 2006 that a broader range of drug types and formulations are listed in New Zealand than in Australia[6], we suggest that the system in New Zealand will result in fewer subsidised drugs listed within many drug classes than are listed in Australia. For the leading five drug classes, a total of 35 different drug types were listed on the Pharmaceutical Benefits Scheme (PBS), whereas 23 were listed by PHARMAC (Table 2 online). These differences may stem from PHARMAC's assessment of the relative value of adding newer drugs to established classes, such as esomeprazole to the list of proton pump inhibitors. Also, PHARMAC may have particular contracts that limit the number of drugs covered within a class in exchange for price concessions.

It is doubtful that the advantages (at the individual or population level) of allowing unfettered choice in established drug classes would outweigh the opportunity costs imposed on health systems. Differences in the choice of subsidised drugs within a class – whether in Australia, New Zealand, British Columbia, or a private insurer in the USA – have been the subject of considerable controversy for many years. In New Zealand, there is conspicuously little evidence that limiting choices is negatively associated with health outcomes. Limited research suggests that sweeping changes in drug availability (due to a therapeutic switching policy) may have

an impact on surrogate markers of health outcomes but little more.[7]

In contrast, there is substantial evidence to suggest that the more blunt policy instrument of patient co-payments may have detrimental effects on medicine accessibility and clinical outcomes.[8–10] 'Freedom of choice' under a drug benefit program may come at considerable cost to patients when escalating program expenditures produce a 'need' for patient cost-sharing policies.

Differences in the listings of subsidised drugs between countries may be shrinking as more drugs come off patent. Within a matter of years, virtually all of the 'blockbuster' drugs brought to market in the 1980s and 1990s will be off patent and therefore potentially available at prices that would justify unfettered subsidy – provided that the generic price is right.

Generic pricing differs quite considerably between Australia and New Zealand. Simply put, New Zealand widely uses tendering for drug products, whereas Australia does not. In New Zealand, this limits the choice between chemically interchangeable medicines, since only one version of the generic drug is subsidised. It also dramatically reduces the cost of acquiring off-patent prescription drugs.

In the five major drug classes, 81 different drug products are subsidised by PHARMAC compared to over 650 subsidised on the PBS (Table 2 online). Most off-patent drugs listed in New Zealand are from sole suppliers and deep price discounts are provided in exchange for exclusivity.

A common critique of tendering processes is that sole supply of generics may result in threats to medicine availability. While shortages are a potential risk that must be managed with tendering contracts (by including contingency and indemnity clauses), limiting national supply of an off-patent medicine to a single manufacturer is not unlike the sole supply arrangements for brand name manufacturers that are legally protected during the life of a patent.

The challenge in tipping the 'consumer choice' or 'expenditure management' scales in this debate will require a new form of social contract with retail pharmacy and, importantly, pharmacists. This will not easily be done, but it appears to be one of the (many) objectives underlying current PBS reforms.[11]

In an era of increasing generic availability, manufacturers launching new patented products into established therapeutic areas are struggling to find ways to avoid them being compared to older off-patent medicines. One way to protect a new product or class of products from this competition is to negotiate marketing contracts and pricing arrangements. Government drug plans potentially benefit from this desire to protect new products if it allows them to list more patented products while maintaining control over costs. As the trend toward contracting evolves, policy tools in Australia and New Zealand may begin to converge. From an outsider's perspective, one might expect these two countries to emerge (again) as exemplary cases for pharmaceutical benefits management.

Building on the evidence-based coverage processes established to date, leadership in the contracting era of pharmaceutical benefits management will require reasonable transparency of the process and evidence. Since these contracts effectively result in an undisclosed lower price for government drug plans based on certain volume or bundling arrangements, agencies will have to fight to keep only the most essential components of a contract confidential and ensure clinical data are made public.

Foremost, we hope that Australia and New Zealand do not let go of the fundamental principles that set their drug benefits schemes apart from other countries – a commitment to universal benefits and the systematic application of evidence-based decision making.

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* Table 2 is available online with this editorial at www.australianprescriber.com/magazine/33/1/2/4

References

1. Raftery JP. Paying for costly pharmaceuticals: regulation of new drugs in Australia, England and New Zealand. Med J Aust 2008;188:26-8.
2. Morgan S, Kennedy J, Boothe K, McMahon M, Watson D, Roughead E. Toward an understanding of high performance pharmaceutical policy systems: a 'triple-A' framework and example analysis. Open Health Serv Policy J 2009;2:1-9.
3. Hall J. Incremental change in the Australian health care system. Health Aff (Millwood) 1999;18:95-110.
4. Reekie WD. Drug prices in the UK, USA, Europe and Australia. Aust Econ Pap 1984;23:71-8.
5. Harvey K, Murray M. Medicinal drug policy. In: Gardner H, editor. The politics of health: the Australian experience. Melbourne: Churchill Livingstone; 1995.
6. Pharmaceutical Management Agency (PHARMAC). PHARMAC releases data on Australia vs NZ comparison [media release]. 2006.
7. Thomas MC, Mann J, Williams S. The impact of reference pricing on clinical lipid control. N Z Med J 1998;111:292-4.
8. Austvoll-Dahlgren A, Aaserud M, Vist GE, Ramsay C, Oxman AD, Sturm H, et al. Pharmaceutical policies: effects of cap and co-payment on rational drug use. Cochrane Database of Systematic Reviews 2008;1:CD007017.
9. Gibson TB, Ozminkowski RJ, Goetzel RZ. The effects of prescription drug cost sharing: a review of the evidence. Am J Manag Care 2005;11:730-40.
10. Adams AS, Soumerai SB, Ross-Degnan D. The case for a medicare drug coverage benefit: a critical review of the empirical evidence. Annu Rev Public Health 2001;22:49-61.
11. Faunce T, Lofgren H. Drug price reforms: the new F1–F2 bifurcation. Aust Prescr 2007;30:138-40.

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