

Pharmaceutical cost containment with reference-based pricing: time for refinements

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nderlying the policy of reference-based pricing (RP) for drug reimbursement is the assumption that certain medications within a specific drug class are interchangeable, and that a common level of reimbursement can be established. If there is no evidence that one drug is more effective or has fewer toxic effects than another lower-priced drug, then the extra cost should not be covered by a publicly funded drug-benefit plan. Currently, the RP policy covers the cost of drugs priced at or below the reference price; if a physician prescribes a more expensive medication, the patient pays the difference. This approach is designed to provide complete coverage for prescription drugs, reduce the amount paid out by drug-benefit plans and provide an incentive for pharmaceutical manufacturers to lower their prices.¹

The introduction of RP in British Columbia in 1995 was expected to save money and to contain the increasing cost of drugs borne by the province's publicly funded drug-benefit plan, Pharmacare. However, between 1987 and 1999, drug costs per Pharmacare beneficiary increased by 150%;² an increase that mirrors worldwide trends.^{3,4} Between 1995 and 1997, when RP was actively expanding, increases in Pharmacare's costs were contained. Then, lobbying by drug manufacturers and other political factors delayed the expansion of the RP policy. In 1998, the increase in Pharmacare's costs returned to its pre-RP rate of about 15% per year. The BC government initiated a public review of its RP policy in late 2001, and although the report has been completed, it has not been released publicly.

There is more evidence supporting the economic and clinical value of BC's RP policy than exists for any other drug-benefit policy. Different strategies to contain drug costs have been tried and are currently in use around the world.^{4,5} However, few have undergone rigorous evaluation to determine the effects on health and costs. The few policies outside BC that have been thoroughly evaluated have shown worrisome effects.⁶⁻⁹ Implementing an entirely new policy in BC could have severe consequences for patients and could mean uncertainties for Pharmacare managers. We argue here that it would be better to improve the existing RP policy than to try a new untested approach.

The results of studies analyzing the BC experience are summarized as follows:

1. RP resulted in moderate to large savings in drug expenditures.¹⁰⁻¹² For ACE inhibitors alone, the net savings amounted to 6% of all cardiovascular drug expenditures by Pharmacare.¹³

2. Savings were largest in drug classes in which a frequently used drug was priced substantially above the average price of competitor drugs (e.g., nitrates).¹¹
3. Substitution of more costly medications from another class for RP drugs was not substantial.¹⁰
4. There appeared to be no increase in the rate of drug discontinuation.¹⁰
5. There was a modest implementation cost, because physicians monitored patients more closely after they switched from a higher-priced drug to an RP drug.^{14,15}
6. No severe negative effects (i.e., hospital admissions, long-term care admissions or mortality) could be attributed to the RP policy.^{14,16}
7. An authorization process, allowing physicians to request RP exemptions for patients in frail health or with special clinical needs, appears to have lessened resistance to RP; other effects of this process have not been formally studied.
8. Requesting authorization for RP exemptions involved significant administrative costs for Pharmacare¹⁷ and more paperwork for physicians.

Although the results of these analyses support the economic benefits and clinical safety of RP, it was also found that the cost savings were smaller than expected. As drug costs continue to escalate, more intensive cost containment is needed. One way to do this is to expand RP to other drug classes, but refinements are needed to reduce administrative costs and ease the burden of applying for RP exemption for Pharmacare, physicians and pharmacists.

An instructive example is the German experience with RP, implemented in 1990. Savings tapered off in 1993 as costs rose above pre-RP rates.¹⁸ Consequently, Germany added "physician drug budgets." Drug expenditures for each of the 16 states were initially capped at 1992 levels, with increases renegotiated between insurance funds and physician organizations every year thereafter. Within each state's budget, *all* prescription drugs were initially covered. If drug expenditures exceeded the budget cap, physicians were required to repay the difference from the budget allotted for their incomes. The threat of such repayment, although never actually enforced, reduced drug expenditures in 1993 by about 11%, and afterwards reduced the rate of expenditure increase to the pre-RP rate.^{4,19} The budgets came with no education concerning cost-effective prescribing; many physicians exceeded their limit before the end of the quarterly budget periods and began to write private prescriptions not covered by insurance. Consequently, patients had to pay for prescriptions until the next

budget period started, or were admitted to hospitals, which were not affected by the budget caps.²⁰ This approach was eventually terminated in October 2001 because of physicians' resistance, and drug costs immediately surged by 13%–14%.²¹ Although the German experience has not been thoroughly evaluated, it indicates that physician drug budgets do control drug expenditures, but do not enforce more cost-effective prescribing. Restricting budgets can lead to the underuse of drugs and to preventable morbidity and related costs.

To refine BC's RP policy, a system that builds on evidence from BC and Germany could combine RP with physician-specific "flexibility accounts." Instead of an exemption process requiring approval from Pharmacare, each physician would have a flexibility account to cover the cost of drugs prescribed that exceed the reimbursed amount. Coverage of drugs prescribed at or below the reference price would be complete, and physicians would have the option of prescribing more expensive drugs without going through a cumbersome RP exemption process. Concurrently, CME-accredited training in cost-effective prescribing would be provided.^{22,23} Unspent funds in a physician's flexibility account could be rolled over to the next fiscal year to cover the prescription of non-RP drugs in the future. If a physician exhausted his or her flexibility account, then he or she would be required to return to the system of applying for RP exemption to prescribe non-RP drugs.

Such a system would differ from the physician drug budgets in Germany (or the general practitioner fundholding system in the United Kingdom²⁴) in that it would guarantee that drugs at or below the reference price would be covered and it would prevent the underprescribing seen in Germany. Clinical and economic decisions would be transferred from the payer to physicians and patients. The underlying assumption ensuring the safety of this strategy is that RP would be implemented only within classes of drugs that are therapeutically interchangeable.

Pharmacare could control its overall costs by changing reference prices and the amount in the flexibility accounts. Manufacturers would have a strong incentive to keep prices at or below the reference price to maintain market share. They would also have a greater incentive to develop drugs that are more effective than existing drugs.

The primary goal of every policy designed to contain drug costs must be to provide the best patient care with the allotted resources. Refining existing policies that have undergone clinical and economic evaluations²⁵ rather than implementing new policies with unknown consequences could bring us closer to the goal of comprehensive and affordable care.

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