Reference-based drug insurance policies can cut costs without harming patients

The Issue: Rising drug costs

Spending on prescription drugs is skyrocketing in Canada — Canadians spent a whopping $18 billion on prescription drugs in 2004, up 600 percent since 1985. While many factors contribute to the increase, research has found that about one-third of this can be explained by the use of newer drugs, which tend to be more expensive than the ones they replace.

Spending more on drugs can be money well spent if the new drugs have a real benefit over what’s already available. However, there are situations where less-expensive treatments are just as effective or even more effective, depending on the patient’s condition. In these cases, spending more represents inappropriate use of limited funds.

Strategy for Change

There are many ways to ensure public drug insurance plans provide safe and effective drug therapy while at the same time coping with rising spending. All of Canada’s provincial drug plans have a policy of generic substitution, where patients who want a brand-name drug that has an identical generic version must pay the price difference.

Nova Scotia was the first to introduce a policy of maximum allowable cost, followed by New Brunswick and Saskatchewan.

The policy that has been most frequently evaluated is British Columbia’s reference-based pricing program. Under this strategy, the drug insurance plan caps subsidies for similar drugs that treat the same condition, rather than paying whatever price the drug company chooses. The subsidy is normally enough to cover the full cost of the least expensive alternative or “reference” drug in a therapeutic class. Patients can choose to take a more expensive drug, but they must pay the difference between its price and the reference price.

Research Base

In 1994, British Columbia introduced its reference drug program with a policy of generic substitution. In 1995, Pharmacare expanded the policy to areas where different drugs with different prices have been approved to treat the same conditions — in other words, medication A treats the same condition as medication B but at a different price. These drugs may have different chemical properties, in the case of brand-name drugs, and an important feature of the policy is the exceptions for patients who, for a variety of medical reasons, can’t take the reference drug. These reasons include being on other medications that would cause a negative reaction when mixed with the reference drug, an allergy, or any other problem specific to the individual patient.
In these cases, doctors can apply for “special authority” for these patients to have their non-reference drugs fully covered.\textsuperscript{xi}

Pharmacare introduced the policy in three areas: histamine-2 receptor antagonists (H2RAs), which are used to treat ulcers, heartburn, and conditions where the stomach produces too much acid; nitrates for heart pain; and nonsteroidal anti-inflammatory drugs, used mainly for arthritis. In 1997, the province expanded the policy again to include some drugs for the treatment of hypertension — angiotensin-converting enzyme (ACE) inhibitors and calcium channel blockers. Finally, in 1999, Pharmacare began restricting payment for nebulization therapy for asthma and similar respiratory diseases in favour of hand-held inhalers, a less-expensive alternative.\textsuperscript{xi}

Several research teams evaluated the effectiveness of the reference pricing program. These studies show the program has saved a significant amount of money — up to $44 million a year, depending on the methodology used.\textsuperscript{vi-xi} This was done without negative health effects for patients, as measured by increased hospital admissions or mortality. (The studies were not sensitive enough to pick up subtle effects on health-related quality of life or patient-reported outcomes.)\textsuperscript{vi-xi} While there was a temporary increase in visits to physicians for patients taking calcium channel blockers, ACE inhibitors, and nitrates, this was likely a result of patients needing information about switching their medications.\textsuperscript{vii, viii, ix}

Reference pricing is not just a provincial phenomenon in British Columbia. In addition to the policies described above, Ontario is considering introducing a reference pricing policy much like B.C.’s.\textsuperscript{xii} Reference pricing is based on formulary management practices frequently used in hospitals,\textsuperscript{vi} and it is used in insurance plans around the world, including in Germany, the Netherlands, Sweden, Denmark, New Zealand, Poland, Slovenia, Spain, the U.S., Italy, and Australia.\textsuperscript{xiii}

**Conclusion**

Drug plan administrators can apply clinical research evidence when deciding which drugs to reference price, using both published and grey literature. However, opposition from pharmaceutical companies often makes the issue controversial. The Pharmaceutical Manufacturers Association of Canada (now Rx&D), which represents brand-name drug companies, launched an unsuccessful lawsuit to block the introduction of reference pricing in B.C. As well, lobby groups in B.C. and Ontario have also challenged the policy.\textsuperscript{vi, xii}

Reference pricing of drugs is one successful way for insurers to cut costs without negatively affecting patients, allowing public funds to be better spent on effective treatments. Coupled with a communications plan that focuses on the clinical evidence behind reference pricing, the support of physicians and patients can be achieved as well.

**References**


iii. For example, see Alberta Health and Wellness: [www.health.gov.ab.ca/ahcip/prescription/non_group.html](http://www.health.gov.ab.ca/ahcip/prescription/non_group.html); Ontario Health and Long-Term Care: [www.health.gov.on.ca/english/public/pub/drugs/generic.html](http://www.health.gov.on.ca/english/public/pub/drugs/generic.html).


