

The role and impact of cost-sharing mechanisms for prescription drug coverage

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Two linked research studies discuss the impact of cost-sharing mechanisms on cost-related nonadherence to drugs by looking at the introduction of income-based deductibles for older adults in British Columbia. Law and colleagues¹ report that income-based deductibles did not significantly affect drug use or physician and hospital resource utilization among older adults, which runs counter to findings from other such studies. The authors conclude that, in some circumstances, income-based deductibles can be used to help finance drug coverage without affecting adherence to treatment. However, Canada has one of the highest rates of cost-related nonadherence, at 10.2% (Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.170169/-/DC1), and BC has one of the highest provincial rates, at 13.3%.² It is possible that introducing additional deductibles in a region with an already high rate of cost-related nonadherence would make it more difficult to show statistical significance. In the other linked study, Morgan and colleagues³ used a more stratified analysis by focusing on health status and specific diseases. They report that not having such deductibles increased the odds of filling one or more necessary antihypertensive prescriptions by 15%, which is in line with findings from another study.⁴

These studies raise questions about what the role and impact of drug cost-sharing mechanisms should be, and what portion of drug costs should shift to patients. Cost-sharing mechanisms for prescription drugs are used in almost every OECD (Organisation for Economic Co-operation and Development) country in the form of deductibles, copayments or coinsurance rates, both to finance drug costs and to steer choice of drugs. Yet are they really effective in achieving these two aims?

The financing role of cost-sharing seems straightforward if we look at prescription drug expenditures in a silo, but this is not useful. By introducing a financial burden on patients, cost-sharing increases the proportion of patients who do not fill their prescription or who skip doses.^{5,6} Decreased use may sometimes be desirable (e.g., patients demand fewer antibiotics when such use could be ineffective), but it can also be harmful if lower adherence to essential medicines with high therapeutic benefits

KEY POINTS

- Cost-sharing mechanisms for prescription drugs are used in almost every OECD country in the form of deductibles, copayments or coinsurance rates, both to finance drug costs and to steer choice of drugs.
- By introducing a financial burden on patients, cost-sharing increases the proportion of patients who do not fill their prescription or who skip doses of drugs, which has been shown to lead to greater burdens on other health system domains.
- Deductibles and coinsurance are based on the official prices of prescription drugs, not the actual prices paid by public or private insurers, who routinely bargain for a confidential rebate on the official price of drugs and buy them more cheaply.
- Cost-sharing mechanisms may drive the prescribing of more appropriate and less expensive drugs; this is best achieved through the use of reference pricing (usually a cap imposed on reimbursement for specific therapeutic categories that covers entirely the most cost-effective treatments in a category), which provides a sound basic coverage for patients.

results in increased usage and costs of other health care services.⁷ For example, the introduction of deductibles and copayments in the Quebec public drug plan in 1996 and 1997 led to older patients decreasing their use of essential drugs by 9%, and individuals on social assistance decreasing their use by more than 14%.⁸ Although the indirect costs associated with the decreased use of essential medicines are difficult to estimate, emergency department visits and hospital stays rose substantially enough for the Quebec government to revise its strategy and restore full coverage in 2007.

Another Canadian study examined the impact of introducing higher copayments on prescription adherence and increased health costs among older patients with rheumatoid arthritis in BC. This study concluded that “patients had fewer prescriptions filled but used more physician services during the postpolicy period, which suggested that prescription drugs and physician visits were economic substitutes.”⁴ In a study in Ontario, more than 700 diabetic patients younger than 65 were estimated to

have died prematurely each year between 2002 and 2008 as a result of inequitable access to essential prescription drugs, and cost-related nonadherence to drug treatments was the main reason behind the disparities in health outcomes among those older than 65.⁹ Because prescription drugs and physician visits represent economic substitutes, compensation for lower copayments in a system where everyone is covered may be achieved, at least partially, by avoiding unnecessary health system costs related to nonadherence.

Also important to consider is that deductibles and coinsurance are rates based on the official prices of prescription drugs, which are not the actual prices paid by public or private insurers. Insurers routinely bargain for a confidential rebate on the official price of drugs, through confidential risk-sharing agreements, which often means that the actual prices paid are far lower. Requiring patients to pay deductibles or coinsurance based on higher prices while insurers enjoy substantial savings is simply dishonest and unfair.

Some have argued that eliminating copayments to reduce both administration costs and cost-related nonadherence might be an optimal choice at a systemic level.¹⁰ Others argue that not requiring a copayment would lead to moral hazard and associated waste;¹¹ however, opinions differ about how copayments would accomplish this. Appropriate prescribing habits by physicians would likely be more useful in reducing waste. For public plans with a copayment in the context of artificially inflated official drug prices, having a fixed copayment per prescription with subsidies available for people with low income could prevent the pitfalls of inequitable copayments and of harmful nonadherence. Although this may generate some revenues, it would also markedly increase administration costs.

When it comes to influencing choice of drugs, cost-sharing mechanisms may drive the prescribing of more appropriate and less expensive drugs. Cost-sharing policies can also be implemented to introduce financial incentives to encourage generic substitution. France, for example, has a tiered system of coinsurance rates (from 15% to 100%) based on the clinical benefit of covered drugs and the severity of disease. The country's integrated cost-sharing mechanisms are designed to steer patients' choice toward the more clinically valued drugs.

Using cost-sharing mechanisms as a way to influence patients' decisions implies that the choice of treatment is left to the patients' discretion. However, this thinking is outdated. Clinical practice is increasingly evidence based, and budgets are increasingly limited. Using cost-sharing mechanisms means taking a risk that patients' use of the payer's desired drug treatments will be reduced, which increases cost-related nonadherence and could ultimately lead to higher costs for the health care system.

One way in which cost-sharing mechanisms have been successful in steering prescribing and dispensing decisions is through the use of reference pricing.¹² A reference price is a cap imposed on reimbursement for specific therapeutic categories (e.g., statins and proton pump inhibitors). It normally covers the most cost-effective treatments in specific therapeutic categories, providing sound basic coverage for patients. Patients who prefer to receive a more expensive treatment in the same therapeutic

category (without any medical justification) must pay the cost difference between the reference price and that of the desired drug. This cost-sharing mechanism maintains access and affordability of essential medicines for all, while allowing some additional level of patient choice. Many countries and regions are moving in that direction. Except for copayments applicable under a reference-price system, no copayments are charged in the Netherlands, Wales, Scotland and Northern Ireland, as well as in some regions in Italy and Malta.

Although cost-sharing mechanisms may be viewed as helpful in funding a public drug plan, they are problematic and should be implemented with caution. The best way to use them may be as copayments to cover only the additional cost of drugs that are more expensive than equivalent cost-effective reference products. This approach would help to minimize cost-related nonadherence, increase cost-effectiveness and still offer patients choice.

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