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Seniors and Drug Prices in Canada and the United States, 2008 edition

This is the Fraser Institute's third report comparing Canada-US price differences for the prescription drugs that are most important to Canadian seniors (aged 60 and older). This year's report analyzes prices for the drugs most commonly prescribed to Canadian seniors in 2007, and compares Canadian and American prices for brand name and generic prescription drugs separately.



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Price differences paid by Canadian and American seniors for identical drugs

The results (see figure 1) show that on average in 2007, prices for the generic drugs that were most commonly prescribed to Canadian seniors were 101 percent higher in Canada than for identical drugs in the United States. By contrast, prices for the brand name drugs that were most commonly prescribed to seniors were on average

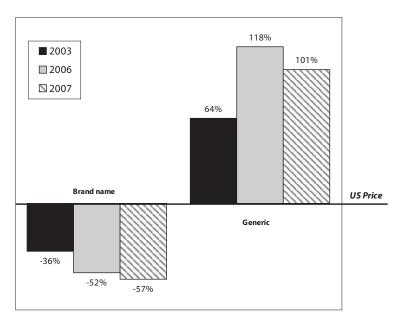
57 percent less in Canada than for identical drugs in the United States.

Last year's analysis found similar results; generic prescription drugs that were most commonly prescribed to seniors in Canada in 2006 were on average 118 percent higher than American prices, whereas identical brand name drugs were on average 52 percent less in Canada. The one-year change in our findings indicates that average generic drug prices in Canada have slightly declined relative to American prices from 2006. Nevertheless, it shows

Main Conclusions

- On average, Canadian seniors pay 101 percent more than American seniors for identical *generic* drugs
- On average, Canadian seniors pay 57 percent less than American seniors for identical *brand name* drugs.
- Higher Canadian *generic* prices are caused by government policies that shield retail pharmacies and *generic* manufacturers from competitive market forces that would put downward pressure on *generic* prices.

Figure 1: Average Canada-US price differences for the brand name and generic drugs most commonly prescribed to seniors, 2003, 2006, and 2007



Sources: IMS Health Canada Inc., 2008; Skinner, 2005; Skinner and Rovere, 2007; calculations by authors.

that on average, Canadian seniors are still paying more than double the prices paid by American seniors for the same generic medicines.

In fact, data show that generic prices have increased significantly relative to US prices over time. As figure 1 shows, a 2003 analysis of Canadian and American drug prices for drugs most commonly

prescribed to seniors found that average prices for identical generic drugs were 64 percent higher in Canada, and average prices for the same brand name drugs were 36 percent lower in Canada. This means that over a five-year period (2003 to 2007), the average cost of generic drugs most commonly prescribed to seniors living in Canada has risen substantially relative to US

Table 1: Top 4 therapeutic classes for Canadian seniors, 2006

Top 4 therapeutic classes by gender (age 60 +)

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WOMEN	MEN
Diuretics, non-injectable	Cholesterol reducers
Tranquillizers	Ace inhibitors and combinations
Cholesterol reducers	Beta-blocker and combinations
Calcium-blocking agents	Analgesics
Source: Cavallucci, 2006.	

prices, while prices for the brand name drugs most important to seniors have decreased.

Why is this important?

The results provide evidence that Canadian drug policies are failing to provide better outcomes on generic drug prices than more free-market policies could produce, and therefore such policies are unnecessary.

Most publicly funded drug programs base eligibility for benefits on age. Most public drug plans also try to restrict public reimbursement to generic drug products only. Therefore, the high average prices observed for the generic drugs most commonly prescribed to seniors in Canada are having a significant impact on the cost of public drug programs, unnecessarily raising the burden on taxpayers.

Data and methodology

This current study used data from previous research that contained price and volume information on the 100 most commonly prescribed brand name drug products in Canada, and the 100 most commonly prescribed generic drug products in Canada in 2007, as well as actual US price data for identical drugs (Skinner and Rovere, 2008). Data were also obtained on the top-ranked therapeutic classes for drugs most commonly prescribed to Canadian seniors (see table 1). Published data were available on the top four therapeutic classes by gender. Ranking was based on IMS Health Inc. data for the number of prescriptions dispensed to Canadian seniors aged 60 and older in 2006 within each therapeutic class (Cavalucci, 2006). The

2006 IMS list of the top-ranked therapeutic classes for drugs most commonly prescribed to Canadian seniors was used for this study because 2007 data were not available. It is assumed that the top-ranked therapeutic classes for drugs most commonly prescribed to Canadian seniors did not significantly change from 2006 to 2007.

High prices for generics in Canada are caused by various misguided public policies that shield retail pharmacies and generic drug manufacturers from the competitive market forces that would put downward pressure on the price of generic drugs ...

The top therapeutic classes for seniors shown in table 1 were described more generally than those specified by Health Canada's Therapeutic Products Directorate in the price data for the top 100 brand name and 100 generic drug products. We included all drugs among the top 100 brands and 100 generics with therapeutic class descriptions

that could also be included under the more general descriptions of the top therapeutic classes for seniors in table 1. This allowed us to isolate a sample of Canada-US price comparisons for the drugs most commonly prescribed to Canadian seniors.

To make cross-national comparisons, all prices were converted to 2007 US dollars at purchasing power parity (PPP). Price differences are stated as a percentage of the US price. Detailed methodology for comparing prices has been published in previous research (Skinner and Rovere, 2008).

Detailed findings

Among the 100 most commonly prescribed brand name drugs in Canada in 2007, 12 drugs matched the most commonly prescribed therapeutic classes for seniors (table 2). For all 12 drugs, Canadian prices averaged 57 percent less than US prices.

Of the top 100 generics prescribed in 2007, 14 drugs (grouped by active ingredients) matched the top prescribed therapeutic classes for seniors (table 3). Four drugs were less expensive in Canada, and the remaining 10 drugs were more expensive in Canada. Of the four that were less expensive in Canada, prices averaged 40 percent less. Prices for the remaining 10 generic drugs that were more expensive in Canada averaged 157 percent higher. Therefore, on average, over the 14 generic active ingredients that were most commonly prescribed to seniors in 2007, Canadian prices averaged 101 percent more than American prices.

Table 2: Canada-US price
differences for the
top-selling 12 brand name
drugs matching the
therapeutic classes most
commonly prescribed to
seniors in Canada, 2007

Brand name product

CAN-US price difference as a percentage of the US price, stated in 2007 US\$ PPP

Lipitor	-40%
Crestor	-57%
Altace	-54%
Ativan	-88%
Celebrex	-62%
Vasotec	-21%
Coversyl	-57%
Diovan HCT	-54%
Arthrotec	-67%
Accupril	-43%
Zestril	-46%
Lopresor Sr	-96%
AVERAGE	-57%

IMS Health Canada Inc., 2008; Skinner & Rovere, 2008; calculations by authors.

Why higher generic prices in Canada?

High prices for generics in Canada are caused by various misguided public policies that shield retail pharmacies and generic drug manufacturers from the competitive market forces that would put downward pressure on the price of generic drugs (Skinner and Rovere, 2007b). Specifically, the reimbursement structure of public drug programs is the primary cause of unnecessarily high prices for generic

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drugs. Public drug programs indirectly reimburse retail pharmacies for the cost of prescriptions dispensed to their insured beneficiaries, instead of directly reimbursing consumers or patients (i.e., the beneficiaries). This insulates consumers from the cost of the drugs, thereby removing incentives for comparative shopping, which would put downward pressure on prices.

Additionally, most public drug programs reimburse the cost of generic drugs at a fixed percentage of the brand name original drug. Under fixed percentage reimbursement, there is no incentive for retailers to compete by offering the lowest prices. This is because the buyer (the government) offers every seller the same price, and the price is known in advance. Large, established generic companies take advantage of the fixed price public

reimbursement system by offering rebates to retailers that are "bundled" across many products, in exchange for exclusive distribution rights. This frequently results in a virtual monopoly within particular retail pharmacy chains for a particular generic label, and because pharmacies are reimbursed directly, discounts are not passed on to consumers. Thus, exclusive distribution allows pharmacies to charge the same inflated generic prices to public and private payers alike. Alternatively, if public drug benefit programs only partially reimbursed consumers directly at a flat percentage of the price of the prescribed drug, all drug sales would be subject to market forces, which would put downward pressure on prices. Direct partial reimbursement for consumers would mean that generic drugs would no longer be publicly reimbursed at a fixed percentage of the original brand name price. Under direct partial reimbursement, the price paid by recipients of public drug benefits would be only a fraction (e.g., 25 percent) of the full price of the drug, but the price would be real because it would be proportional to the full price of the drug being purchased—not to a fixed comparator.

The new real price would introduce an incentive for consumers to shop around for the most cost-efficient alternative available. There would no longer be a fixed single price in the half of the market that is affected by government reimbursement. Instead, there would be multiple prices determined by the level of retail competition and price sensitivities of consumers. The resulting competition between retailers would drive prices down over time.

Table 3: Canada-US price differences for the top-selling 14 generic drugs matching the therapeutic classes most commonly prescribed to seniors in Canada, 2007

Generic active ingredient(s)

can-US
price
difference
as a
percentage
of the US
price,
stated in
2007 US\$
ppp

Furosemide	23%
Hydrochlorothiazide	82%
Lorazepam	-7%
Oxazepam	-69%
Acetaminophen/ oxycodone	-17%
Metoprolol	63%
Bisoprolol	-65%
Simvastatin	694%
Ibuprofen	69%
Atenolol	214%
Triamterene/ hydrochlorothiazide	18%
Pravastatin	169%
Diazepam	17%
Naproxen	220%
AVERAGE	101%

IMS Health Canada Inc., 2008; Skinner & Rovere, 2008; calculations by authors.

References

Cavallucci, Sue (2006). The Top 200: What's Making Waves in Prescription Sales. Pharmacy Practice, vol. 22, no. 12 (Dec.). <http://pharmacygateway.ca/>

Danzon, P.M. and M.F. Furukawa (2003). Prices and Availability of Pharmaceuticals: Evidence from Nine Countries. Health Affairs. Web Exclusive (October 29). Web pages W3-5210 - W3-536. < http://www.healthaffairs.org/>

IMS Health Inc. Canada (2008). CompuScript database description. Special data request.

Skinner, Brett J. (2005). Seniors and Drug Prices in Canada and the United States. Digital Publication (May). Fraser Institute. < http://www.fraserinstitute.org.>

Skinner, Brett J. and Mark Rovere (2007). Seniors and Drug Prices in Canada and the United States. Fraser Alert (Dec.). Fraser Institute.

< http://www.fraserinstitute.org>

Skinner, Brett J. and Mark Rovere (2008). Canada's Drug Price Paradox 2008. Digital Publication (June). Fraser Institute. <http://www.fraserinstitute.org>

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