
Generic Drug Prices: A Canada US Comparison

Abstract

OBJECTIVE. This paper compares the prices of top selling generic drugs in Canada with prices for comparable generic products in the United States. **METHODS.** We examined the prices of 27 top selling (in 2001) generic prescription medicines in Canada that were marketed in both Canada and the United States. The sample represented approximately 39% of total generic sales in Canada. For each of the generic medicines a representative presentation (strength/dosage form) was selected – generally the top selling presentation of the medicine. The prices were the Q1 2002 Canadian ex-factory prices as listed in the Québec provincial government formulary and the US Federal Supply Schedule (FSS) prices. These prices generally represent the best available prices in the two countries. **RESULTS.** Preliminary results indicate that of the 27 leading generic drug products examined, 21 had higher prices in Canada than in the U.S. By all measures Canadian generic prices of the sample drugs were higher than those in the U.S.: Mean: +155%; Weighted Mean: +37%; Median +51%. Annual savings in excess of C\$150 million would result if Canadians had access to FSS prices for the sample drugs. If the price differences seen in the sample can be extrapolated to all generic drugs available in Canada, the potential annual savings could approach C\$400 million. **CONCLUSIONS.** It is generally accepted that the ex-factory prices of innovator (brand name) prescription drugs are significantly lower in Canada than in the United States. It was therefore surprising to find the opposite result for generic drugs. Several factors may contribute to higher Canadian generic prices. The Canadian generic industry is highly concentrated (relative to the US) with the market dominated by two large generics firms. Secondly, provincial government reimbursement policies discourage discounting and feature published formularies that typically establish ex-factory prices for all classes of customer.

Introduction¹

Generic manufacturers are able to offer products at lower prices than brand name products because they do not have to duplicate the cost of research and marketing conducted by the original manufacturer. Sales of generics in Canada were \$1.44 billion² in 2001 with provincial drug plans being major buyers. Generics represent approximately 40% of all prescriptions and 15% of drug costs.³ New generic drugs are typically introduced at prices that are 70% of comparable branded drugs.⁴ As additional

¹ This report has been funded through PDCI's independent economic research program – no financial support has been received from industry or government for preparation of the report. The opinions expressed are solely those of Palmer D'Angelo Consulting Inc.

² IMS HEALTH, Drug Store and Hospital Purchases, 2001

³ <http://www.imshealthcanada.com>

⁴ Ontario Drug Benefit Program requires that the first generic entry be priced no higher than 70% of the brand name equivalent. Subsequent generics can be priced no more than 63% of the

Generic Drug Prices: A Canada US Comparison

generics are introduced for a particular molecule or chemical entity, the difference between the brand and generic prices widens. The provincial drug benefit programs rely heavily on generic drugs for cost savings and compare generic prices with brand prices when considering cost-effectiveness, however they typically do not make international price comparisons.

It is generally accepted that Canadian drug prices are lower than those in the United States. Indeed, the Patented Medicine Prices Review Board (PMPRB) has reported that Canadian prices of patented medicines are on average 40% below those in the United States. Moreover, the "re-importation" debate in the United States Congress has focused on brand name prescription drugs that are often cheaper in Canada. Canadian generic drug prices may be another issue however.

Indeed, concerns with respect to generic drugs prices in Canada are not new and have been the subject of several enquiries by Canadian government agencies. A Federal / Provincial / Territorial (FPT) task force that examined prices of multi-source products reported that "notwithstanding the potential for greater competition in this sector given the existence of multiple suppliers of the same drug, questions remain about whether prices are higher than necessary."⁵ The Provincial Auditor of Ontario reported in its 2001 report that for a sample of multi-source (primarily generic drugs) the US Department of Veterans Affairs (DVA) paid prices that were on average 60% lower than the prices paid by the Ontario Drug Benefit Plan.⁶

The objective of this study is to examine the ex-factory prices of generic drugs in Canada and the United States using comparable publicly available prices.

Methods

We examined the prices of 27 top selling Canadian generic drugs that were also available in the United States as of December 2001.⁷ These drugs represented 39% of total generic sales in Canada. Top selling drugs were identified as the most relevant sample set because they have the greatest budget impact on drug plans and consumers.

brand name drug. Other provincial drug programs (notably Quebec) insist on receiving the lowest or best available price in Canada and therefore, for the most part, generic prices are the same across Canada.

⁵ Drug Prices and Cost Drivers, Report of the F/P/T Task Force on Pharmaceutical Prices, April 1999

⁶ Ontario Provincial Auditor Annual Report 2001 Section 3.09 Drug Programs Activity www.gov.on.ca/opa

⁷ US generic versions of Mevacor (lovastatin) and Glucophage (metformin) have recently been launched, however these products were not included in the analysis as they were not on the market as of December 2001. Other top selling generics in Canada - pravastatin, lisinopril and sertraline have not yet been genericized in the US.

Generic Drug Prices: A Canada US Comparison

The price comparison was conducted by comparing the Canadian and U.S. prices for the top-selling (based on Canadian sales) strength/dosage form of each of the 27 generic molecules. It is assumed that the price comparison of the top selling presentation (strength/dosage form) of a molecule will be representative of the molecule as a whole. For example, if a generic drug is available in 5 mg, 10 mg and 20 mg tablets and the 10 mg tablets are the top sellers in Canada, it is assumed for purposes of this analysis that the price differences observed for the 10 mg tablets will be representative of the price differences for all strengths of the drug. Random verification supports the validity of this assumption. Because there can be significant price differences between manufacturers (particularly in the United States) the prices for all manufacturers were included in the analysis. Moreover, the prices for all package sizes available were included.

The Canadian prices used in the analysis were the reimbursement prices (Liste de Médicaments) published by the Regie de l'assurance maladie du Québec (RAMQ – the Quebec government drug plan). The Quebec drug plan has a policy of requiring the lowest prices in Canada for all drugs listed on its formulary.

The US prices used in the analysis were those published by the US Department of Veteran Affairs (DVA) on the US Federal Supply Schedule (FSS) for January 2002. The DVA prices typically include a minimum discount of 24% off the listed ex-factory prices. In both cases the prices were selected as they are publicly available and generally represent the lowest prices offered to public payers in their respective jurisdictions.

International price comparisons are challenging and US/Canadian comparisons of generic prices are no exception. In the US, generic prices are discounted substantially from list prices for all customers, so comparisons based on average wholesale price (AWP) or wholesale acquisition cost (WAC) are not meaningful. This is confirmed by a US government study of pharmacy acquisition costs that found that on average, the acquisition price paid by pharmacies for generic drugs was 32% below the published list price (wholesale acquisition cost or WAC) and 67% below the theoretical average wholesale price (AWP).⁸ By comparison the same study concluded that the acquisition prices for branded (innovator) drugs were very close to the published WAC price.

In Canada, because generic prices are set and limited in drug benefit lists, generic manufacturers compete not on price, but on the other services and benefits they can offer their retail pharmacy customers. These services and benefits may lower the true price to the pharmacy, but not to the ultimate payer (government drug plan, third party payer or cash paying patient) who pays the published prices plus mark-ups and professional (dispensing) fees.

⁸ Department of Health and Human Services, Office of the Inspector General, *Review of Pharmacy Acquisition Costs for Drugs Reimbursed under the Medicaid Prescription Drug Program of the Wisconsin Department of Health and Family Services*, March 2002

Generic Drug Prices: A Canada US Comparison

Results

Table 1 shows the US and Canadian prices for the top selling strengths of the 27 generics and their brand equivalents. Products are listed in alphabetical order by generic name. Prices have been converted to Canadian dollars using the average monthly exchange rates for January and February from the Bank of Canada (1.59806568).

Table 1. Canada / US Price Differences in Generic Drug Prices					
Generic Drug Products			Generic Prices (\$Cdn/unit)		% Price Difference Canada vs US
Generic Name	Corresponding Brand Name(s)	Strength	United States	Canada	
Acebutolol	Sectral	200MG	\$ 0.1935	\$ 0.2440	+26%
Acyclovir	Zovirax	200MG	\$ 0.1244	\$ 0.8783	+606%
Amiodarone	Cordarone	200MG	\$ 0.7518	\$ 1.2971	+73%
Amoxicillin	Amoxil	500MG	\$ 0.1029	\$ 0.2010	+95%
Atenolol	Tenormin	50 MG	\$ 0.0480	\$ 0.3514	+632%
Captopril	Capoten	50MG	\$ 0.0464	\$ 0.5590	+1104%
Carbamazepine	Tegretol	200MG	\$ 0.1204	\$ 0.0816	-32%
Cefaclor	Ceclor	500MG	\$ 0.4922	\$ 1.2625	+156%
Clindamycin	Dalacin c	150MG	\$ 0.5532	\$ 0.5433	-2%
Clonazepam	Rivotril	0.5MG	\$ 0.0887	\$ 0.1195	+35%
Cyclobenzaprine	Flexeril	10MG	\$ 0.1299	\$ 0.3765	+190%
Diclofenac	Voltaren	50MG	\$ 0.3089	\$ 0.3937	+27%
Diltiazem	Cardizem CD	180MG	\$ 0.7818	\$ 1.0646	+36%
Famotidine	Pepcid	40MG	\$ 0.1940	\$ 1.0612	+447%
Fluoxetine	Prozac	20MG	\$ 1.4870	\$ 1.0112	-32%
Fluvoxamine	Luvox	100MG	\$ 1.8331	\$ 0.8902	-51%
Glyburide	Diabeta	5MG	\$ 0.1003	\$ 0.0683	-32%
Ipratropium	Atrovent udv	0.25MG/ML	\$ 0.1804	\$ 0.7550	+318%
Medroxyprogesterone	Provera	2.5MG	\$ 0.0715	\$ 0.0794	+11%
Metoprolol	Lopresor/Betaloc	50MG	\$ 0.0732	\$ 0.1225	+67%
Minocycline	Minocin	50MG	\$ 0.4232	\$ 0.5350	+26%
Naproxen	Naprosyn	500MG	\$ 0.1352	\$ 0.2110	+56%
Ranitidine	Zantac	150MG	\$ 0.1446	\$ 0.4042	+180%
Salbutamol	Ventolin	100MCG/DOSE	\$ 0.0336	\$ 0.0232	-31%
Sotalol	Sotacor	160MG	\$ 0.4453	\$ 0.6492	+46%
Terazosin	Hytrin	5MG	\$ 0.2178	\$ 0.6025	+177%
Verapamil	Isoptin SR/ Chronovera	240MG	\$ 0.4967	\$ 0.8720	+76%
Sources: US prices US Federal Supply Schedule 2002, Canadian Prices: Regie de l'Assurance du Québec as published by AQPP 2002, Exchange Rate of 1.59806568 from Bank of Canada Jan-Feb 2002.; Sales IMS Health Canada			Simple Average		+156%
			Sales Weighted Average		+37%
			Median		+56%

Table 1 Highlights

- 21 of the 27 top selling generics (78%) were priced higher in Canada.
- 6 generics had lower prices in Canada: carbamazepine, clindamycin, fluoxetine, fluvoxamine, glyburide and salbutamol.

Generic Drug Prices: A Canada US Comparison

- Canadian generic prices were on average more than double the prices charged in the US.
- The median (mid-point) price difference was 56% higher in Canada.
- The weighted average (weights based on Canadian generic sales of each product) indicates that generic prices were on average 37% higher in Canada than in the United States.
- A few products were significantly higher than the average. The Canadian price of captopril 50mg tablet was more than ten times the comparable US generic price. Canadian prices for atenolol 50mg tablet and acyclovir 200mg tablet were more than six times the US price.

Table 2 examines generic prices with reference to the corresponding branded prices in each country.

Table 2. Generic to Brand Price Differences, Canada & US				
Generic Drug Products			% Differences Generic to Brand Prices	
Generic Name	Corresponding Brand Name(s)	Strength	United States	Canada
Acebutolol	Sectral	200MG	-78%	-39%
Acyclovir	Zovirax	200MG	-92%	-24%
Amiodarone	Cordarone	200MG	-41%	-37%
Amoxicillin	Amoxil	500MG	-19%	-47%
Atenolol	Tenormin	50 MG	-95%	-37%
Captopril	Capoten	50MG	-96%	0%
Carbamazepine	Tegretol	200MG	-72%	-72%
Cefaclor	Ceclor	500MG	-90%	-37%
Clindamycin	Dalacin c	150MG	-53%	-32%
Clonazepam	Rivotril	0.5MG	-90%	-35%
Cyclobenzaprine	Flexeril	10MG	-88%	-34%
Diclofenac	Voltaren	50MG	-79%	-40%
Diltiazem	Cardizem CD	180MG	-40%	-34%
Famotidine	Pepcid	40MG	-90%	-38%
Fluoxetine	Prozac	20MG	-52%	-37%
Fluvoxamine	Luvox	100MG	-29%	-37%
Glyburide	Diabeta	5MG	-70%	-64%
Ipratropium	Atrovent udv	0.25MG/ML	-73%	-43%
Medroxyprogesterone	Provera	2.5MG	-76%	-37%
Metoprolol	Lopresor/Betaloc	50MG	-90%	-41%
Minocycline	Minocin	50MG	-72%	-10%
Naproxen	Naprosyn	500MG	-91%	-77%
Ranitidine	Zantac	150MG	-93%	-62%
Salbutamol	Ventolin	100MCG/DOSE	-79%	-62%
Sotalol	Sotacor	160MG	-91%	0%
Terazosin	Hytrin	5MG	-73%	-37%
Verapamil	Isoptin SR/ Chronovera	240MG	-75%	-23%
Sources: Price Differences from Table 1; US Prices US RedBook, FSS; Canadian Prices AQPP			Average	-74%
			Median	-38%
			Average	-78%
			Median	-37%

Generic Drug Prices: A Canada US Comparison

Table 2 Highlights

- Canadian generics were on average 38% lower than the comparable brand price in Canada whereas US generic prices were 74% lower than the comparable US brand price.
- For two products in Canada, the generic prices were the same as the branded drug. For these two drugs, the brand companies lowered their prices to compete with the generics. However, the generic did not in turn lower their prices below the brand price.

Table 3 examines the cost impact to consumers and payers of generic drug prices in Canada relative to US prices. The cost impact is calculated as the difference between the actual sales revenues (at Canadian prices) and the sales revenues that would have resulted at the corresponding US generic price.

Table 3. Cost Impact of Canada / US Generic Price Differences					
Generic Drug Products			%	(\$Cdn Millions)	
Generic Name	Corresponding Brand Name(s)	Strength	Price Difference	Cdn Sales (\$Cdn M)	Cost Impact
Acebutolol	Sectral	200MG	+26%	\$ 14.6	\$ 3.0
Acyclovir	Zovirax	200MG	+606%	\$ 9.9	\$ 8.5
Amiodarone	Cordarone	200MG	+73%	\$ 16.2	\$ 6.8
Amoxicillin	Amoxil	500MG	+95%	\$ 21.1	\$ 10.3
Atenolol	Tenormin	50 MG	+632%	\$ 47.5	\$ 41.0
Captopril	Capoten	50MG	+1104%	\$ 7.0	\$ 6.4
Carbamazepine	Tegretol	200MG	-32%	\$ 10.1	-\$ 4.8
Cefaclor	Ceclor	500MG	+156%	\$ 7.1	\$ 4.3
Clindamycin	Dalacin c	150MG	-2%	\$ 11.1	-\$ 0.2
Clonazepam	Rivotril	0.5MG	+35%	\$ 19.7	\$ 5.1
Cyclobenzaprine	Flexeril	10MG	+190%	\$ 10.5	\$ 6.9
Diclofenac	Voltaren	50MG	+27%	\$ 15.7	\$ 3.4
Diltiazem	Cardizem CD	180MG	+36%	\$ 70.6	\$ 18.8
Famotidine	Pepcid	40MG	+447%	\$ 11.7	\$ 9.6
Fluoxetine	Prozac	20MG	-32%	\$ 47.9	-\$ 22.5
Fluvoxamine	Luvox	100MG	-51%	\$ 12.1	-\$ 12.8
Glyburide	Diabeta	5MG	-32%	\$ 16.4	-\$ 7.7
Ipratropium	Atrovent udv	0.25MG/ML	+318%	\$ 9.6	\$ 7.3
Medroxyprogesterone	Provera	2.5MG	+11%	\$ 10.6	\$ 1.1
Metoprolol	Lopresor/Betaloc	50MG	+67%	\$ 23.1	\$ 9.3
Minocycline	Minocin	50MG	+26%	\$ 13.8	\$ 2.9
Naproxen	Naprosyn	500MG	+56%	\$ 14.7	\$ 5.3
Ranitidine	Zantac	150MG	+180%	\$ 65.4	\$ 42.0
Salbutamol	Ventolin	100MCG/DOSE	-31%	\$ 30.5	-\$ 13.7
Sotalol	Sotacor	160MG	+46%	\$ 13.6	\$ 4.3
Terazosin	Hytrin	5MG	+177%	\$ 16.5	\$ 10.5
Verapamil	Isoptin SR/ Chronovera	240MG	+76%	\$ 19.1	\$ 8.2
Sources: Price Differences from Table 1; Sales IMS Health Canada			Total	\$ 566.1	\$ 153.2

Generic Drug Prices: A Canada US Comparison

Table 3 Highlights

- The 2001 sales revenues for the 27 generic drugs (for all strengths and dosage forms) included in the sample totaled \$566 million. The sample represents 39% of the total Canadian generics market (\$1.44 billion).
- If Canadians had access to prices comparable to those in the US, consumers, government drug plans and private insurers would have saved more than \$153 million on those products in 2001.
- If the Canada US differences observed for the 27 sample drugs hold for all generic drugs in Canada, the potential cost impact for 2002 would be \$392 million.

Discussion

Generic drugs play an important role in most private and all government drug benefit plans. All government drug benefit plans mandate generic substitution and therefore depend on generic pricing to deliver savings once branded products go off patent.

An analysis of Ontario Drug Benefit (ODB) claims data for 2001 shows a drug cost (excluding mark ups and professional fees) for all generic drugs of \$370 million. Quebec has a lower proportion of claims for generic drugs than Ontario, however, total spending is still substantial at \$191 million in 2001.⁹

Many top selling generic products listed on the ODB formulary have high prices when compared with the US despite the fact that they are supplied by a number of different manufacturers and have been listed for many years. It may be that the ODB generic price rules discourage price competition. Ranitidine is the generic with the highest drug cost claimed under the ODB plan in 2001. The drug cost allowed for ranitidine in 2001 was \$34.5 million. The 150 mg tablet is listed with an ODB drug benefit price of \$0.40 which is almost three times the US DVA price of \$0.14 (Cdn). There are 6 manufacturers of ranitidine listed on the ODB formulary however Canada's leading generic firm, Apotex, accounted for half of the drug cost allowed in 2001.

Why are generic prices higher in Canada?

A recent report noted that when a generic drug is launched in the US market at the time a patent expires, it is usually priced at around 30% less than the original branded drug. By the time five or six generic manufacturers have entered the market, the prices fall to

⁹ Palmer D'Angelo Consulting Inc. Provincial Claims Database - 2001 claims data for Ontario and Quebec

Generic Drug Prices: A Canada US Comparison

60% - 70% less than the branded product.¹⁰ The competitive bidding process also drives down prices necessary to win contracts to supply large purchasers such as the Department of Veteran Affairs.

In Canada, competition among generics is not as intense as it is in the US, and most drug plans do not issue competitive tenders. While most top-selling generics are produced by several suppliers, the market for each product tends to be dominated by one or two companies. Apotex and Novopharm are the two largest generics manufacturers in Canada and account for more than half of the total Canadian generics market (in terms of both prescriptions and sales revenues). These two companies' dominance of the market for many products may make it difficult for other manufacturers to compete and for new generics firms to enter the market. Moreover both firms are engaged in substantial multinational enterprises and as a result have developed significant economies of scale. Apotex exports generic products to over 115 countries and has subsidiaries, joint ventures and licensing agreements in many countries.¹¹ Novopharm, Canada's second largest generics firm is a subsidiary of Teva Pharmaceutical Industries, a trans-national generics firm with operations in Europe, North America and the Middle East.¹²

In summary, while further analysis is needed to gain a more complete understanding of the factors that contribute to higher generic prices in Canada, it appears that one reason may be that Canadian manufacturers do not experience the same pressures as American generics to compete on price.

Provincial Strategies to Contain Generic Prices

In order to contain drug plan expenditures, all provinces have implemented lowest cost alternative and mandatory generic substitution policies to ensure that only the least expensive version of a multiple source drug is reimbursed. Other methods to contain costs include a competitive tendering process in Saskatchewan and reference based pricing in BC. The problem with these policies is that while they may encourage the use of generics over brand products, they do not ensure that generic prices will be as low as possible.

Since November 1998, Ontario has limited the price of the first generic listed on the ODB formulary to 70% of the brand name equivalent. Subsequent generics are limited to 90% of the price of the first generic (i.e. 63% of the brand price). Despite the policy, some top selling generics are listed with drug benefit prices higher than 70% of the brand prices. These products were listed on the formulary before the 70% rule came

¹⁰ Fundamental Review of the Generic Drugs Market, Report prepared by OXERA for the UK Department of Health, July 2001, Section A7 - The US Drugs System

¹¹ www.apotex.ca

¹² www.tevapharm.com

Generic Drug Prices: A Canada US Comparison

into effect. For example, Apo-Lisinopril 5mg tablet is listed at a price of \$0.5050 which is 75% of the price of the brands Prinivil and Zestril. Apo-Lovastatin 20 mg tablet is listed at 75% of the price of the brand, Mevacor. The policy has been to “grandfather” these prices and allow the products to remain on the formulary at the higher price levels.

Alberta limits the price of the first generic to 75% of the brand price with some exceptions. The generic price may be higher if it is an older product with limited market potential or if the cost of manufacturing the product is too high to allow a 25% savings based on evidence submitted by the manufacturer. Also, if the product is primarily dispensed by hospital outpatient pharmacies and will have savings of at least 25% because of tenders it may be listed on the provincial formulary at a higher price.¹³

Quebec has a lowest price policy applicable to certain drugs that have been on the RAMQ formulary for 15 years or more and that are produced by two or more manufacturers. The lowest guaranteed selling price submitted by a manufacturer for a package size of a given drug is used to determine the price payable. All manufacturers who agree to adjust their prices to match the lowest price will be reimbursed. Other products are reimbursable at the prices submitted by the manufacturer (even if higher than the lowest price) in cases where the doctor has specified no substitutions are allowed.

BC Pharmacare sets a low cost alternative price (LCA) based on the lowest average Pharmacare claimed price of all alternatives within an LCA category. The price is based on claims experience and is not based on the manufacturers' list prices. Products that fall within one percent of the LCA price are designated as full benefits under the LCA policy. The province also has a Referenced Drug Program (RDP) in place to control costs in selected therapeutic categories. The latest LCA/RDP booklet is effective March 1, 2001. When prices listed in the Pharmacare booklet were compared to the AQPP prices for the 27 generic drugs in the PDCI study it was found that 21 of the 27 products were listed with somewhat higher prices in BC.

The Saskatchewan drug plan requires drug manufacturers annually to provide “guaranteed maximum prices” and sets a Maximum Allowable Cost it will pay for that drug during that formulary period. The drug plan also tenders the drugs in certain high volume interchangeable groups to obtain the lowest possible price. Both brand and generic manufacturers are invited to bid on the tenders. Price and the company's ability to supply the product are two factors considered by the province. An accepted tender, called a Standing Offer Contract (SOC), requires the manufacturer to guarantee delivery of the drug to pharmacies through approved distributors at the contracted price for a one year period commencing on July 1. In return, the manufacturer's product is used almost exclusively. The lower prices are available for all residents even if they are not eligible for reimbursement by the drug plan. According to Saskatchewan Health, the tender

¹³ Alberta Health and Wellness Drug Benefit List Criteria for Listing or Retaining Drug Products # 9, October 1, 2001

Generic Drug Prices: A Canada US Comparison

process resulted in \$13.6M in savings to the Drug Plan and Saskatchewan residents in the 2000-2001 plan year.¹⁴

Seventeen of the 27 products included in PDCI's analysis of generic drug pricing had SOC's in place with the Saskatchewan Drug Plan in the 2001-2002 plan year. It is interesting to note that none of the SOC's is held by the leading generic manufacturers, Apotex and Novopharm. In fact, only Nu-Pharm and Dominion Pharmacal have SOC's for the 17 products. It could be that most manufacturers are choosing to stay out of the Saskatchewan market as other provinces would expect to receive the same low prices. This would have a large impact on revenues in Ontario and Quebec where the markets are largest.

Saskatchewan's on-line formulary has been updated effective July 1, 2002, and SOC's for the new plan year have been added. In most cases the new prices are considerably higher than in the previous year. Once again only Nu-Pharm and Dominion hold SOC's on the 17 products.

Conclusion

Given that the prices for brand name drugs have historically been cheaper in Canada than in the United States it is surprising that the opposite appears to be true for the prices of generic drugs. However, there are important differences that need to be taken into account. Brand name drugs are typically patent protected, promoted to physicians and compete in terms of the therapeutic value they offer patients. Generics are promoted to pharmacists and in principle compete solely on the basis of price.

However government regulations and reimbursement policies often interfere with the competitive process. The Ontario Drug Benefit Plan has established rules that require the first generic entrant to be priced at 70% of the brand price and subsequent entrants at 63% of the brand. This policy has effectively displaced the need for competition by establishing rules for generic prices. Moreover, the Quebec government policy requiring the best price in Canada necessarily establishes a single price policy for all of Canada. In essence, government policies in Canada have taken the guesswork out of generic pricing and have inadvertently stifled price competition at the same time. As a result generics firms have found other ways to compete.

Generics manufacturers focus their marketing efforts on pharmacists who make the decisions about which generic to dispense. In the US, generics are usually sold through wholesalers while in Canada they are sold directly from the generic manufacturers to retail pharmacies. Manufacturers who can supply a wide variety of products have a significant advantage as they can provide one stop shopping for retailers. Moreover, the generics may be providing additional value-added services to pharmacists in an effort to secure market share. Little is known about the nature and extent of the additional services and benefits that are offered by the generics firms to pharmacists in Canada.

¹⁴ Saskatchewan Drug Plan Highlights for 2000-2001, www.formulary.drugplan.health.gov.sk.ca

Generic Drug Prices: A Canada US Comparison

While the services and benefits are undoubtedly attractive to the pharmacist, it is not clear if any of the benefits are passed on to patients or payers (governments, insurers).

By comparison, in the United States where there is no price regulation, price competition thrives and generic drug prices are significantly lower than brand prices and lower than prices in Canada. Clearly, price controls are not the answer. Rather governments should be fostering competition among generic firms.

It is clear that comparing generic prices to brand prices is not enough to ensure that drug plans are paying the lowest generic prices. In order to minimize costs, governments may need to look more closely at the impact of their policies on prices, price competition and the barriers to entry for generics firms.

This study focused on Canada US price comparisons for 27 generic drugs. Future research should consider larger samples of generic drug products to examine whether the results observed for top selling drugs also hold for products with more modest sales. Moreover, the international comparison should be expanded to include European generic prices as the government sponsored pricing and reimbursement schemes in Europe are somewhat similar to provincial drug benefit programs in Canada.

Generic Drug Prices: A Canada US Comparison

Appendices**[Findings of the F/P/T Task Force on Pharmaceutical Prices](#)**

A Federal/Provincial/Territorial task force that examined prices of multi-source products reported that "notwithstanding the potential for greater competition in this sector given the existence of multiple suppliers of the same drug, questions remain about whether prices are higher than necessary."¹⁵

The Task Force conducted an assessment of generic and brand prices for products listed on provincial formularies and found a trend towards higher generic drug prices relative to their brand equivalents. They looked at prices in five provinces and found that in Alberta, the generic/brand price ratio rose from 56.0% in 1993 to 68.9% in 1997. In Saskatchewan, the ratio rose from 41.8% in 1990 to 63.1% in 1997. It appears that policies introduced by other provinces demanding equivalent prices to those offered in Saskatchewan caused the prices in Saskatchewan to rise. The biggest impact was experienced in 1993 when Quebec introduced a lowest price rule requiring manufacturers to offer Quebec the lowest price available in Canada for their drug product. The Task Force reported that in Ontario the median ratio of generic to brand prices remained constant at about 75% despite a decline in generic prices over the period studied. Further analysis of each province revealed that higher introductory prices of generics appeared to be the main factor contributing to the price increases.

The F/P/T Task Force concluded that

Further analysis is required to answer unresolved questions concerning what is an appropriate introductory price for first-entrant generic medicines (e.g., 70%, 60%, 55% or some other percent of the brand name price), and to fully assess the role of competition among multiple source medicines on prices and utilization of these medicines (e.g., Does the number of suppliers of similar drug products in a therapeutic class decrease the average price for similar medicines over time? Does consumption of newer drug products (often at a higher price) increase or decrease?).¹⁶

The F/P/T task force on drug prices also recommended that more attention be paid to the introductory prices of generics, as high launch prices appeared to be a major cost driver for drug plans.

F/P/T task groups have looked at options for bulk purchasing as a way to reduce drug plan costs. However, there are other F/P/T priorities at the moment including best practices and common drug review initiatives and any action on bulk purchasing appears to be on hold for the moment. If bulk purchasing is introduced for high volume multi-

¹⁵ Drug Prices and Cost Drivers, Report of the F/P/T Task Force on Pharmaceutical Prices, April 1999

¹⁶ IBID

Generic Drug Prices: A Canada US Comparison

source products, it is likely that it would lead to lower generic prices in most provinces. However, Saskatchewan would probably be faced with higher prices for some products. There may also be an impact on prices paid by uninsured customers who are not part of a large purchasing group. Governments may need to ensure that all residents are able to purchase drugs at the contract price.

[Ontario Provincial Auditor is questioning the high prices paid by ODB for generics](#)

Ontario Provincial Auditor's Annual Report for 2001¹⁷ highlighted the high prices paid for generic drugs by the Ontario Drug Benefit Program compared with other jurisdictions. The Auditor stated that:

*The Ministry had not reviewed the effectiveness of its generic pricing practices or routinely compared the prices it was paying for drugs with the prices paid by other jurisdictions. For instance, for a sample of generic drugs, we noted that Saskatchewan's prescription drug plan prices were on average 50% lower than Ontario's. We estimated that the Ministry would have saved approximately \$54 million annually had it paid the same price as Saskatchewan for these products.*¹⁸

The Auditor's report looked at generic drugs added to the ODB formulary between December 1998 and November 2000 and found that the generic pricing rules were not always delivering maximum value for the plan. It was noted that:

- 133 generic drugs were added without any savings to the Ministry. The primary reason for this was that third and subsequent generics were all listed on the formulary at 63% of the original price of the brand name drug. While increased competition could create opportunities for drug wholesalers and pharmacists to obtain lower prices from manufacturers, the Ministry could still be paying pharmacists the higher formulary price.
- When first and subsequent generics were added to the formulary simultaneously, the price for all of these was 70% of the original price of the brand.¹⁹

Along with a review of the generic pricing rules, the Auditor recommended that the Ministry should assess the costs/benefits of pricing options that have been successfully implemented in other jurisdictions such as the competitive tendering process used in Saskatchewan and by the US Department of Veterans Affairs and the reference drug program in effect in British Columbia.

¹⁷ Ontario Provincial Auditor Annual Report 2001 Section 3.09 Drug Programs Activity
www.gov.on.ca/opa

¹⁸ IBID

¹⁹ IBID