

# **Shopping for Drugs: 2004**

by

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## Executive Summary

Seniors, the uninsured and others who pay for prescriptions out of pocket are looking for ways to cope with rising drug costs. While many seniors can lower their drug bills by using the new Medicare discount drug cards and the new subsidies for low income retirees, every patient interested in saving money on drug therapy should consider a common-sense solution: smart shopping.

Patients can cut costs substantially by becoming aggressive consumers. In fact, seniors can reduce the cost of some common drug therapies by more than 90 percent if they use the same buying techniques they routinely use when shopping for other goods and services. But they should be forewarned. Patients buying drugs from multiple sources forgo the safeguard of using a single licensed pharmacist who checks for drug interactions. To ensure this does not occur, patients should make all pharmacies they use aware of all drugs they are taking.

Consumers have never had more opportunities to obtain information about drugs. A patient with a prescription can find a range of prices by clicking on a few Internet pharmacy Web sites. The Internet makes it easy to look up information on government and private programs to assist elderly, low-income and disabled patients. Additionally, Web-based services help patients find comparable medications that are cheaper than their current prescriptions. But Internet shopping means buyer beware. Consumers should verify the identity and location of sellers, the sources of their products and the security of their financial and health information.

**Drug Substitution.** When physicians prescribe drugs, patients should ask if there are cheaper alternatives. Often there are.

**Generic Medications.** For most patients, generic medications work as well as brand-name drugs and cost 20 percent to 80 percent less. The average cost for a generic prescription was \$14.70 in 2002, compared to \$77.02 for branded medications.

**Price Comparisons.** Many people assume that drug prices are uniform and do not bother to comparison shop. In fact, drug prices vary considerably. One survey found that prudent shopping among local pharmacies saved consumers almost 10 percent on brand-name drugs and a whopping 81 percent on generics, on the average.

**Over-the-Counter Drugs.** As an alternative to prescription drugs, patients may find that an over-the-counter (OTC) drug does just as well. Americans buy more than five billion OTC drug products each year — 60 percent of all drugs used. Today, consumers have access to a market with more than 100,000 different OTC drug products. More than 600 of them were previously available only by prescription.

**Bulk Buying.** All supermarket patrons know that choosing larger packages usually lowers the unit cost. The same is true of drugs. Pills purchased 90 or 100 at a time usually sell for less per dose than quantities bought 30 at a time. This is especially true for generic drugs ordered by mail.

**Pill Splitting.** Patients can purchase many medications in doses double the prescribed amount and split them in half. Often, pharmacists will split the pills for them. Savings of 30 percent to 50 percent are not uncommon, because many medications are sold for about the same price regardless of the dosage.

**Mail-Order Pharmacies.** Although drugstore chains still sell the most drugs, mail order pharmacies are gaining ground and now account for about 17 percent of the retail drug market. Mail-order and

Internet pharmacies offer the best deals on prescription drugs for patients with chronic conditions that require continuing medication. Some patients even buy drugs from other countries over the Internet, although the practice is illegal and the drugs may not be safe.

**Pharmaceutical Company Assistance Programs.** Many drug companies have discount card programs to assist disabled, low-income and/or elderly patients with the cost of drugs. For example, Together RX, a joint program run by several drug companies, offers savings of up to 40 percent on more than 150 different drugs. Medicare beneficiaries earning up to \$38,000 per couple qualify.

**State Drug Assistance Programs.** Almost three-quarters of the states have created some type of drug assistance program for the elderly, low-income patients, and/or people with disabilities. More than half of the states help seniors pay for medicine with state funds, and nine offer drug discount programs that allow seniors to purchase drugs at below retail prices.

**Medicare Discount Drug Cards.** Seniors now have an opportunity to combine smart shopping techniques with the new Medicare drug discount card, using the price information for thousands of pharmacies available at Medicare.gov. In addition, the new prescription drug benefit offers financial help to low-income seniors.

**Potential Savings.** How much can patients expect to save by using these techniques? We reviewed prices on Web-based pharmacies during the third quarter of 2004 and found that they varied widely. Take the cardiovascular drug Tenormin, for example:

- Our survey found that the price of 100 (50mg) doses of Tenormin ranged from \$138.40 at Drugstore.com to \$120.59 at Eckerd.com.
- But patients could save at least 75 percent over the lowest cost brand-name drug by switching to the generic alternative Atenolol.
- One hundred doses of the generic drug ranged from \$26.63 at Drugstore.com to \$8.29 at Costco.com.
- Finally, consumers could lower the cost yet another 40 percent (from \$8.29 to \$4.75) by buying larger pills (100mg) and splitting them in half.

Smart buying of this drug lowered the potential overall cost by 97 percent — from a high of \$138.40 to a low of \$4.75.

For another example of potential savings, consider the heartburn drug Nexium:

- If purchased in small quantities from RxUSA's Web site, Nexium (20mg) costs about \$419.83 per 100 tablets; however, a shopper opting for Drugstore.com would pay \$385.52 for 100 tablets, an 8 percent savings.
- Buying the generic equivalent of a therapeutic substitute, such as 20mg Omeprazole, would save about 41 percent.
- Furthermore, because Prilosec, a branded form of the generic drug Omeprazole, is now available over-the-counter, a savvy consumer opting to pay \$62.62 for a 100-day supply from Drugstore.com would save 85 percent off the most expensive option.

Seniors can use these shopping techniques to achieve even greater savings from their prescription drug discount cards.

## Introduction

*“Patients paying their own drug bills can save money by smart shopping.”*

Americans spend more than \$200 billion on prescription medicines each year and about \$16 billion or more on over-the-counter (OTC) remedies.<sup>1</sup> Two-thirds of office visits to physicians result in prescription drug therapy, which is often the best way to treat an illness.<sup>2</sup> New drugs may offer more effective treatment, but they are more expensive than the drugs they replace.<sup>3</sup> However, most patients can easily lower their drug bills by employing some or all of the strategies detailed below. To do so, they must treat drug purchases as they do other prospective purchases — by shopping and comparing prices. [For tips on smart shopping, see the nearby “Checklist for Saving Money on Drugs.”]

**Warning No. 1:** Some of the techniques described below involve buying drugs from a variety of sources. While this may cut costs, there is a danger. Pharmacists are trained to recognize drugs that may have dangerous interactions. Many pharmacists use software that performs this function automatically. Patients who purchase drugs from more than one source must find another way to ensure that the drugs they take will not interact in harmful ways.

**Warning No. 2:** When shopping for drugs on the Internet, patients should stick with trusted vendors. Some Web sites that claim to be Canadian are actually based in other countries. The drugs offered in e-mails may be adulterated, expired or contain no medication. And there is no guarantee that consumers will receive shipments for which they have paid.

## Comparing Prices

Consumers have never had more opportunities to obtain information about drugs and possible substitutes, and to compare their prices. Shopping around town or on the Internet for price information can pay off.

**Local Pharmacies.** Surveys show that prices for generic equivalents vary widely. In a Missouri survey conducted for the Heartland Institute, prudent shopping saved consumers almost 10 percent on branded drugs and a whopping 81 percent on generics, on the average. Moreover, prices within a single city differed by 3 percent to 16 percent for brand-name medications and by 39 percent to 159 percent for generic medications.<sup>4</sup> In Houston, Texas, a physician who surveyed the prices of generic drugs she prescribed found that they varied by 50 percent to 80 percent.<sup>5</sup>

Interestingly, small independent pharmacies often have better prices for generic medications than large chain stores.<sup>6</sup> Wholesale club chain stores consistently have the best prices. (Although they require memberships to purchase other goods, Costco and Sam’s Wholesale do not require membership to use their pharmacies.) Local drug prices may also vary depending on

## Checklist for Saving Money on Drugs

### Opportunities for Saving Money on a Brand-Name Drug

- Check on government programs to assist low-income, elderly and/or disabled persons with drug costs in your state at [benefitscheckup.com](http://benefitscheckup.com).
- Check on drug manufacturers' programs to assist low-income, elderly and/or disabled patients with drug costs at [needy meds.com](http://needy meds.com) and [HelpingPatients.org](http://HelpingPatients.org).
- Compare local prices.
- Compare prices over the Internet at [DestinationRx.com](http://DestinationRx.com).<sup>1</sup>
- Consider buying in larger quantity.
- If practical, consider splitting pills.

### Opportunities for Saving Money by Drug Substitution

- Check for a less expensive drug with the same therapeutic benefits at [Rxaminer.com](http://Rxaminer.com).
- Look for a generic drug.
- Look for an OTC drug with therapeutic benefits.
- Compare prices locally.
- Compare prices over the Internet.
- Consider buying in larger quantity.
- If practical, consider pill splitting.

<sup>1</sup> Consumers should exercise caution to ensure that any Internet-based drug supplier is reputable. Patients using multiple drugs sources should inform all pharmacies of all medications taken to prevent adverse drug interactions.

*"Patients should consider all options for drug purchases."*

geographic location. Thus the lowest local price may not be the best price a consumer can get. Take the generic form of Prozac (Fluoxetine) used to treat depression. Many pharmacies mark up Fluoxetine by 3,000 to 5,000 percent over its wholesale cost.<sup>7</sup> As a result:<sup>8</sup>

- Thirty doses of 20mg Fluoxetine cost as much as \$55 at Walgreen's in central Iowa.<sup>9</sup>
- In Hampton Roads, Va., the same prescription sold for \$45.<sup>10</sup>
- In Florida, the cost at major drug chains ranged from \$40 at Walgreen's to just under \$43 at Eckerd.<sup>11</sup>
- In Detroit, Fluoxetine cost almost \$47 at CVS stores, but sold for less than \$9 at Beacon Hill Pharmacy.<sup>12</sup>

Fluoxetine is also available from the Costco chain Web site for only \$7.09. Thus, the lowest-price source for a drug may not be local, but on the Internet.

**Internet Information Services.** Generally, whether patients are comparing prices or learning about drug interactions, the Internet is their most valuable tool. Patients with prescriptions can find a wide range of prices by

checking a few Internet pharmacy Web sites. A unique Web site called DestinationRx.com collects prices from numerous competing online pharmacies, allowing consumers to compare prices without going to individual pharmacy Web sites.

The new Medicare.gov Web site is an important tool for seniors with Medicare discount drug cards. In less time than it would take to compare bread prices in grocery store sales circulars, seniors can find the prices charged at dozens of local pharmacies.<sup>13</sup> [See below: “Special Opportunities for Seniors: Medicare Discount Drug Cards.”] Prices can vary considerably. As the case studies in the appendices illustrate, consumers can save as much as 90 percent or more in some cases. [See Appendices B, C and D.]

## Therapeutic Drug Substitution

The doctor’s office is a good place for patients to start lowering their drug bills. It is an outdated notion to leave the choice of medications completely to physicians without question. Patients should ask if there are cheaper alternatives to a prescribed medication — including alternative drug therapies, generic substitutes or OTC drugs. Research on patients with chronic conditions found that when they discussed drug costs with their doctors, 72 percent found the conversation helpful. After such discussions, they were switched to a lower-cost alternative more than two-thirds (69 percent) of the time.<sup>14</sup> Unless patients bring up the subject, physicians may not even be aware of the cost of medications they prescribe, the extent of the patient’s insurance coverage, or their patient’s ability to bear significant out-of-pocket costs. By communicating with their doctors, patients may find a wealth of drug options.

Patients already taking prescribed drugs can explore alternatives prior to scheduling their next doctor’s appointments. Rxaminer.com, cofounded by cardiologist Joseph C. Rogers, is a Web-based service that helps patients find cheaper medications comparable to the ones they currently take.<sup>15</sup> Customers enter the names and dosages of medications, Rxaminer compares them, suggests substitutes (often several choices) and allows users to print reports detailing potential savings. Patient can discuss these reports with their physicians to see if the cheaper medications are appropriate.

In many cases, newer drugs are only “better” than older ones because they have fewer side effects. For example, numerous studies show that newer antidepressants, called selective serotonin reuptake inhibitors (SSRI), are similar in effectiveness to older tricyclic antidepressants.<sup>16</sup> But SSRIs are better tolerated — resulting in more patients adhering to their treatment protocols.

There are numerous therapies to treat most conditions. [See Table I.] In some cases, a drug class includes OTC medications, as well as brand-name prescription drugs and generics. Drugs within a therapeutic class may be

*“Patients should discuss drug therapy choices with their physicians.”*

similar, but their prices often vary substantially. For example, alternative therapies are readily available for three fairly common conditions: allergies, heartburn and gastro-esophageal reflux disease (GERD).

**Case Study: Allergy Medications.** Patients suffering from seasonal allergies have a myriad of choices, including prescription drugs, OTC drugs, decongestants, antihistamines and nasal inhalers. All of them offer symptomatic relief, but some have fewer or less severe side effects than others. The most popular sinus allergy medications are antihistamines, the cheapest of which are first-generation antihistamines. They are economical and available over the counter.<sup>17</sup> Although they can cause drowsiness, studies have shown that they are often just as effective as newer, nonsedating drugs.<sup>18</sup>

The allergy medication Claritin and its generic equivalent (Loratadine) are now available over the counter. Although they still cost more than older OTC antihistamines, they are cheaper than prescription alternatives, such as Allegra, Zyrtec and Clarinex. (Clarinex is a new prescription variant of Claritin from the same manufacturer; some critics claim it is about the same as the older drug.)<sup>19</sup> How much can patients save by considering other treatments for their allergies? As shown in detail in Appendices A-1 and A-2:

- For the newer (prescription-only) antihistamines, patients shopping at Drugstore.com’s Web site can expect to pay about \$123 per 100 doses of Allegra compared to about \$181 for Zyrtec and almost \$210 for Clarinex.<sup>20</sup>

*“The cost of drug therapies for many conditions varies widely.”*

TABLE I

### Therapeutic Substitutes

<u>Drug Class</u>	<u>Number of Drugs<sup>1</sup></u>	<u>Cheapest Cost/ Yr.</u>	<u>Highest Cost/ Yr.</u>
Antidepressants	13	\$52.42	\$2,501.64
Antiulcer	10	\$87.05	\$1,945.14 <sup>2</sup>
Antihistamines	5	\$18.47	\$810.04 <sup>3</sup>
Cholesterol lowering agents	11	\$219.48	\$1,403.06
ACE Inhibitors	12	\$60.66	\$1,084.16
Angiotensin Receptor Blockers	6	\$315.58	\$561.71
Calcium Channel Blockers	9	\$123.70	\$1,013.98
NSAIDS	15	\$70.27	\$2,030.25

<sup>1</sup> List of options may not be inclusive of all that exist.

<sup>2</sup> Prilosec OTC would only cost \$228.56

<sup>3</sup> OTC Claritin generic equivalent Loratadine could be substituted for any of the drugs listed and is available on Costco.com for \$32.42 per year.

Source: Trinity Health Plan Pricing Guide, [www.carechoices.com/provider/default.asp](http://www.carechoices.com/provider/default.asp).

- However, 100 doses of OTC Claritin sells for less than \$68 at Walgreen's Web site, while its generic equivalent (Loratadine) is available from Costco.com for less than \$9.<sup>21</sup>
- Another substitute that may work for some patients is the first-generation antihistamine Benadryl and its generic equivalent (Diphenhydramine), which is available at Drugstore.com for about \$6.50 if purchased in quantities of 200 tablets.<sup>22</sup>

Although there are many medications to treat allergy symptoms, there are tradeoffs with respect to side effects. For example, antihistamines tend to raise blood pressure. Ideally, patients should confirm the safety of any drug taken regularly—including OTC medications—with a pharmacist or physician. However, side effects may not be an issue. For example, Benadryl can cause drowsiness, but those suffering from nighttime allergies may find it is the ideal drug. And at less than seven cents per tablet, it is 95 percent less than newer prescription drugs.<sup>23</sup>

**Case Study: Heartburn Medications.** Some newer therapies may offer most patients only a slight advantage over older therapies—but at a much higher price. Experts suggest this may be the case with the newest heartburn medications, known as proton pump inhibitors (PPI). For those with severe heartburn (called gastroesophageal reflux disease or GERD) such PPIs as Nexium, Prevacid, Protonix or similar drugs are the treatment of choice. PPIs were the second most popular class of drugs in 2003 with \$13 billion in sales.<sup>24</sup> Prilosec was the leading prescription PPI until it was moved over the counter in the fall of 2003.<sup>25</sup> However, the PPI Nexium is often prescribed for garden variety heartburn even though there are cheaper OTC drugs. Critics contend that Prilosec OTC is just as effective as Nexium, the drug that replaced it. And drugs in an older class (called H<sub>2</sub> receptor antagonists) that includes Zantac and Pepcid are much cheaper.

PPIs are not cheap. The cost for 100 doses of Nexium is almost \$420 if purchased in small quantities from RxUSA.com Web site.<sup>26</sup> Prevacid is similarly priced. However, purchasing 100 doses of Protonix (pantoprazole sodium) from Drugstore.com would save \$112.<sup>27</sup> Prilosec OTC is a less expensive option, currently available from Costco.com for \$59.50 for 100 doses.<sup>28</sup> For patients with little more than occasional indigestion, Zantac or its generic equivalent Ranitidine may be sufficient.<sup>29</sup> Although Ranitidine is now available over the counter in 75mg tablets, it is often prescribed in 150mg doses.<sup>30</sup> Among patients' options:

- Purchasing 100 (150mg doses) of Ranitidine from Costco's Web site would cost slightly less than \$5, or 5 cents a dose.<sup>31</sup>
- Drugstore.com sells 200mg generic Tagamet (Cimetidine) in quantities of 70 tablets for \$9.79, or about 28 cents for a 400mg dose.<sup>32</sup>

*"Smart Shopping: Consider therapeutic substitutes."*



- Patients who do not do well on Zantac or Tagamet can choose the generic equivalent of Pepcid (Famotidine) for around 12 cents per 40mg dose at Costco.com.<sup>33</sup>

**Caution: Advertised and Sampled Drugs.** Why is it so important to be an informed drug consumer? One reason is that the few drug therapies that are advertised are generally the most expensive. The free samples given to physicians are often the most expensive drugs.

*Direct-to-Consumer Advertising.* Drug advertising is beneficial because it educates patients about new clinical treatments and often prompts them to seek care for previously untreated medical problems.<sup>34</sup> However, the drugs advertised are also likely to be the most expensive.<sup>35</sup> In 2000, drug manufacturers spent \$2.5 billion on direct-to-consumer advertising; about \$1.5 billion dollars was spent to promote a mere 20 drugs.<sup>36</sup> Advertising is by no means representative of all therapies available. The newest innovative therapies are the ones most likely to be advertised because these drugs are under patent protection and the manufacturer profits by informing potential consumers. Drugs that have lost patent protection are rarely promoted because doing so benefits competing generic drug manufacturers.

Newer drugs may offer considerable advantages over older products. A new drug advertised on television may indeed be right for some patients. But patients and their doctors should make the decision after considering all options — not just the ones seen on TV.

*Free Samples.* Drug company marketing also benefits patients by providing free samples to doctors. Drug samples allow patients to try new medications without cost. In fact, pharmaceutical companies spend about half of their marketing budgets promoting medications by distributing free samples.<sup>37</sup> When offered samples by their doctors, however, consumers should also ask if there are other, nonsampled medications that might also have therapeutic benefits. Although samples are free at the doctor's office, refills may be costly. Many clinics and university teaching hospitals no longer use free samples. They claim that it is cheaper in the long run to prescribe (and purchase) generic medications than to offer patients free samples of expensive medications that often must be refilled at significant cost.<sup>38</sup>

## Bulk Buying

Consumers can save the most on medications when they purchase in quantity. About 85 percent of employer-sponsored health plans offer members medicine by mail order.<sup>39</sup> Under these plans, a 90-day drug supply often costs the same as a 30-to-60 day supply at a community pharmacy. Generic drugs are especially subject to deep discounts. In many cases, ordering quantities of 100 tablets costs only a few dollars more than ordering 30 tablets.<sup>40</sup>

*“Drugs that are advertised and sampled are usually expensive.”*

Although drugstore chains still sell the most drugs, accounting for 42 percent of the market, mail-order pharmacies are gaining ground and now hold about 17 percent of the retail drug market.<sup>41</sup>

Consumers without a mail order option through their health plan can order drugs from an Internet mail order-pharmacy that serves the general public. For example:

- At Eckerds.com, 30 Atenolol tablets costs \$5.
- At Costco.com 100 Atenolol tablets costs less than \$9.
- The cost for 180 at Drugstore.com is only \$17.

Larger packages of OTC medications may also be cheaper. At Drugstore.com, 20 Loratadine tablets (generic Claritin) cost \$9.99. A 60-count box of the same brand sells for \$16.99. At Costco.com, a 180-count box of generic Loratadine sells for \$15.99.<sup>42</sup>

AARP Pharmacy Services has a discount prescription drug program that provides medications and other health care products through the mail to the 35 million members of AARP. According to the AARP's chief pharmacy officer, customers can save as much as 47 percent on prescription drugs, with an average of 19 percent off regular retail prices.<sup>43</sup>

Although ordering a prescription by mail may not work for occasional-use drugs, many patients taking a medication on a regular basis for a chronic ailment can save by using mail-order pharmacies. This is also true for Medicare patients with a drug discount card (as discussed below).

## Pill Splitting

Another method to lower drug costs is to purchase medications in doses double that of the prescribed amount and split them in half. Many tablets are scored across the center to facilitate splitting. This works because many medications sell for about the same price regardless of the dose of medicine in the pill. Take Viagra, for example. If ordered from Costco.com, 12 Viagra tablets cost \$110.77, regardless whether the dose is 25mg, 50mg or 100mg.<sup>44</sup> Viagra is an odd-shaped tablet, difficult to split into two perfect halves.<sup>45</sup> To solve this problem, several firms now produce splitters designed just for the diamond-shaped Viagra tablet. Thus, patients will save 50 percent when they buy double dose tablets and split them in half. An important consideration is whether or not a patient is able to accurately cut a tablet. Elderly patients may find pill splitting difficult; however, some pharmacists will split or crush and encapsulate pills. Precision Pill Splitters is a firm that makes pill splitting devices. The splitters have stainless steel blades to create two perfect halves. One model has interchangeable pill beds that exactly fit the shape of specific medications. The company makes a similar device that will quarter a pill as well.<sup>46</sup> Many popular

*“Smart Shopping: Buy drugs in larger quantities.”*

“Smart Shopping: Split higher-dose pills.”

TABLE II

## Candidates for Pill Splitting

Drug	Potential Saving
Klonopin (Clonazepam), panic disorder	41%
Cardura (Doxazosin), hypertension	46%
Celexa (Citalopram), depression	46%
Lipitor (Atorvastatin), high cholesterol	33%
Paxil (Paroxetine), depression	46%
Pravachol (Pravastatin), high cholesterol	23%
Serzone (Nefazodone), depression	49%
Viagra (Sildenafil), impotence	50%
Zestril (Lisinopril), congestive heart failure	38%
Zoloft (Sertraline), depression	46%
Zyprexa (Olanzapine), schizophrenia; bipolar disorder	31%

Source: Randal S. Stafford and David C. Radley, “The Potential of Pill Splitting to Achieve Cost Savings,” *American Journal of Managed Care*, Vol. 8, No. 8, August 2002, pp. 706-12.

medications may be suitable for splitting or quartering.<sup>47</sup> However, other medications are not good candidates for splitting, including extended release tablets, capsules and medications for many serious disorders.

Some public health advocates question whether splitting can result in halves equal enough in weight to be safe — especially if pill splitting is required by the insurance company’s formulary.<sup>48</sup> Research from the University of Maryland found that pill splitting is a viable option.<sup>49</sup> Researchers at Stanford University found substantial consumer savings from splitting 11 of 265 of commonly prescribed medications.<sup>50</sup> Potential savings range from 23 percent to 50 percent for these drugs.<sup>51</sup> Table II illustrates the potential savings for selected drugs.

## Generic Drug Substitutes

Another effective way to lower drug bills is to seek generic equivalent medications whenever possible. Although half the drugs sold are generic medications — up from just over 20 percent in 1985 — they are still underutilized. According to the Prime Institute at the University of Minnesota, only 10 of the 50 medications most frequently used by seniors in 2001 were generics; the remaining 40 were brand names.<sup>52</sup> Branded drugs are more expensive. For example, two-thirds of the drugs dispensed by the Veterans Affairs (VA) health system are generic, but they represent only 8 percent of the VA’s prescription costs. In sharp contrast, the one-third of the drugs dispensed by the VA that are branded account for 92 percent of its drug costs.<sup>53</sup>

For retail customers, generic drugs are generally priced 20 percent to 80 percent lower than the original branded drug.<sup>54</sup> Thus the average cost for a generic prescription was \$14.70 in 2002, compared to \$77.02 for branded medications.<sup>55</sup> Only those medications whose patent has expired are available in generic form, however.

The number of generic equivalents available will increase over the next few years, as many of the so-called blockbuster drugs lose patent protection and face generic competition. More than 30 of the nation's 57 largest-selling drugs will lose patent protection by 2008.<sup>56</sup> Some well-known drugs that have either lost patent protection or will do so shortly include Prozac and Zoloft (for depression), Claritin (for allergy relief), Zocor (to lower blood cholesterol) and Prilosec (for ulcers and gastric reflux disease). Generic drug producers claim that the major pharmaceutical firms delay competition (and effectively extend the life of the original patent) through time-consuming legal maneuvers. However, a regulatory change by the Bush administration that became effective in 2003 limits patent holders to one 30-month delay while contesting competition from generic products.<sup>57</sup> Both the Bush administration and Congress are taking additional steps to speed generic drugs to market.<sup>58</sup> Thus consumers will find more opportunities to substitute generics for brand-name medications over the next few years.

*"Smart Shopping: Consider generic drugs."*

## Switching to Over-the-Counter Drugs

About 80 percent of the time, patients initially treat their medical problems with OTC drugs. Americans buy OTC drugs more than 5 billion times each year.<sup>59</sup> Today consumers can choose from among more than 100,000 different OTC drug products.<sup>60</sup> Physicians recommend them more frequently than in the past.<sup>61</sup> According to Ipsos Pharm Trends, more than half of doctors recommend OTC products to their patients when appropriate. In fact, in the first six months after Claritin was switched from a prescription drug to OTC status, 42 percent of those purchasing it had been advised to do so by their doctor.<sup>62</sup> More than 600 OTC drugs were previously available only by prescription.<sup>63</sup> For example:

- Over the past few years, such powerful prescription ulcer medications as Zantac (Ranitidine), Pepcid and Tagamet (Cimetidine) were moved from prescription-only to over the counter.<sup>64</sup> These were joined by Prilosec, one of a newer class of ulcer medications, in September 2003.<sup>65</sup>
- In addition, strong pain relievers such as Advil (Ibuprofen) and Aleve (Naproxen) were approved for OTC sale.
- Claritin (Loratadine), a second-generation antihistamine, has now joined the OTC market along with first-generation cold and allergy medications such as the antihistamines Benadryl and Chlor-

“Smart Shopping: Consider over-the-counter versions of prescription drugs.”

Trimeton, and their generic equivalents Diphenhydramine and Chlorpheniramine. Sudafed (Pseudoephedrine) was one of the first popular branded decongestants to become an OTC medication.

Utilizing OTC medications can save patients money. For instance, before moving to the OTC market, prescription Claritin cost \$2.92 per day.<sup>66</sup> Currently, OTC Claritin costs 52 cents per day at Costco and its generic equivalent costs less than nine cents per day.<sup>67</sup> Before moving to the OTC market, Prilosec cost \$122.99 for 30 capsules at Walgreens.com, a daily cost of about \$4.10.<sup>68</sup> Currently, Walgreens.com sells a box of OTC Prilosec with 28 capsules for \$19.99, or a daily cost of 71 cents.<sup>69</sup>

In years past, drugs were usually only switched from prescription-only to OTC status at the request of the drug maker, and only when patent protection was about to expire.<sup>70</sup> In 2002, however, an FDA panel voted to recommend OTC status for Claritin on a request from the health plan manager WellPoint Health Networks. That was the first time the FDA took such an action without an initial request from the manufacturer. In response, Claritin’s manufacturer asked for OTC status — which the FDA granted — so that it would be able to market the drug as a nonprescription medication while it was still under patent.<sup>71</sup>

Many analysts predict that over the next few years a flood of relatively new blockbuster drugs will enter the OTC market.<sup>72</sup> For example, the OTC version of the popular anti-ulcer drug Prilosec — which had \$3.7 billion sales and was the second biggest-selling drug in 2001 — became available in the fall of 2003.<sup>73</sup> The price fell from \$4 per capsule to 60 cents.<sup>74</sup> Analysts expect the FDA to approve several more nonsedating antihistamines, and possibly cholesterol-fighting medications such as Mevacor (Lovastatin) and Pravachol (Pravastatin) for OTC sale.<sup>75</sup>

When products move to the OTC market, their prices drop sharply.<sup>76</sup> For example, Claritin, one of the best-selling allergy medications, was moved to the OTC market in December 2002.<sup>77</sup> The number of Claritin doses sold increased dramatically, while the dollar value of prescription antihistamines sold fell 28 percent in 2003.<sup>78</sup>

## Weighing the Cost and Benefits of a Drug

Patients often begin taking a drug and never question the necessity later. They should periodically ask their doctors if they still need to take a prescribed drug.<sup>79</sup> Furthermore, not all prescriptions are appropriate for older patients. According to studies published in the *Archives of Internal Medicine*, a senior receives one inappropriate medication for roughly every 12 doctor visits.<sup>80</sup> The likelihood of inappropriate medication is about double for women and increases when multiple drugs are prescribed.<sup>81</sup> Currently, some 20 percent of seniors are taking at least one medication that is not recommended for their age group,

15 percent are taking two drugs and 4 percent are on three drugs deemed inappropriate.<sup>82</sup>

Patients taking expensive medications often overlook the possibility of nondrug alternatives. For instance, the drugs most widely used by seniors are cholesterol-lowering medicines called statins (antihyperlipidemics). Yet many seniors would probably be healthier if they controlled cholesterol through diet.<sup>83</sup> Physicians say losing weight and exercise are the best option for controlling high blood pressure.<sup>84</sup> The first line of defense against obesity and Type-2 diabetes is prevention by changing diet and exercise.<sup>85</sup> The same is true for GERD. Gastroenterologists suggest most patients with GERD should first change their lifestyle before trying H<sub>2</sub> receptors antagonists or before taking the more costly PPI drugs.<sup>86</sup>

Patients also often overlook cheaper drug options. For example, research has found that a “water pill” (diuretic) is more effective than newer, more expensive antihypertensive medications.<sup>87</sup> In addition, a recent study in the *Journal of the American Medical Association* found that two daily aspirins were as effective in preventing recurrent strokes in African Americans as a daily 500mg dose of the drug Ticlopidine.<sup>88</sup> This is a significant finding, given the fact that Ticlopidine can easily cost patients up to almost \$90 per month.<sup>89</sup>

Treatment of migraine headaches provides another example. A drug trial found that acetaminophen combined with aspirin and caffeine (ACC) provided more sustained relief than the prescription drug Sumatriptan.<sup>90</sup> Those taking Sumatriptan reported faster relief—29 percent versus 19 percent of those on AAC had little or no pain after 30 minutes. But at two hours, the AAC treatment group fared significantly better (84 percent versus 65 percent).<sup>91</sup>

Some seniors may not be getting their money’s worth from the new generation of “super-aspirins” called Cox-2 Inhibitors. They relieve pain and inflammation without the stomach irritation sometimes experienced by taking daily doses of aspirin, ibuprofen or naproxen. But they may offer most seniors only modest benefits over cheaper drugs.<sup>92</sup>

A recent study found that two-thirds of patients on Cox-2 inhibitors were not at risk for gastrointestinal conditions like ulcers or bleeding, and most of them had not tried cheaper alternatives.<sup>93</sup> Another study by Express Scripts, a pharmacy benefits management company, found that about three-quarters (76 percent) of these prescriptions are written for patients who are not at risk of gastrointestinal side effects. On average, patients receiving new prescriptions of Cox-2 inhibitors use the drugs for less than 60 days. This suggests that the drug is not necessarily prescribed for conditions that require long-term therapy, where the risk of serious gastrointestinal bleeding is a concern.<sup>94</sup> Furthermore, a recent study found that many patients taking Cox-2 inhibitors also take aspirin

“Some conditions can be treated with lifestyle changes.”

daily to benefit their heart, which can negate the gastrointestinal benefits associated with the more expensive pain reliever.<sup>95</sup>

There are more than a dozen selective and nonselective nonsteroidal anti-inflammatory drugs (NSAIDs) to relieve pain from such diseases as arthri-

TABLE III

### Yearly Cost for Arthritis Pain Relievers

<u>Drug</u>	<u>Daily Dose</u>	<u>Annual Cost</u>
<b>Cox-2 Inhibitors</b>		
Vioxx 50mg	1	\$1,420.47
Vioxx 25mg	1	\$940.75
Vioxx 50mg	1/2	\$710.24
Vioxx 12.5mg	1	\$967.25
Vioxx 25mg	1/2	\$710.24
Celebrex 100mg	2	\$1,168.58
Celebrex 200mg	1	\$924.55
Celebrex 100mg	1	\$584.29
Bextra 20mg	1	\$965.10
Bextra 10mg	1	\$965.10
Bextra 20mg	1/2	\$482.55
<b>Nonselective NSAIDs</b>		
Etodolac 200mg	4	\$656.71
Salsalate 500mg	6	\$259.52
Naproxen 250mg	4	\$189.80
Naproxen 500mg	2	\$149.65
Naproxen 220mg	5	\$164.07
Naproxen 220mg	5	\$109.41
Ibuprofen 400mg	6	\$159.65
Ibuprofen 800mg	3	\$136.77
Ibuprofen 200mg	12	\$113.79
<b>PPI<sup>1</sup></b>		
Prilosec OTC	1	\$228.30

“There are many drugs to relieve arthritis pain.”

<sup>1</sup> Patients experiencing, or at risk for, gastrointestinal symptoms can combine a proton pump inhibitor (PPI) with a less expensive pain reliever such as Ibuprofen or Naproxen. Recent research suggests many seniors might do as well on a nonselective NSAID when paired with a PPI such as Prilosec as they do on newer COX-2 inhibitors. See Francis K.L. Chan, et al., “Celecoxib Versus Diclofenac and Omeprazole in Reducing the Risk of Recurrent Ulcer Bleeding in Patients with Arthritis,” *New England Journal of Medicine*, Vol. 347, No. 26, December 26, 2002, pp. 2, 104-10.

Source: Author’s Web site surveys conducted Summer 2004.

*“New drugs may have fewer side effects.”*

tis.<sup>96</sup> [See Table III.] The price per dose ranges from \$2.35 per capsule for Cox-2 inhibitors to mere pennies for aspirin. Cox-2 inhibitors and other (non-selective) NSAID pain relievers are equally effective at controlling pain, but Cox-2 inhibitors cost more — up to \$1,420.47 per year for someone taking 50mg per day of Vioxx, for example.<sup>97</sup> Some experts say they are not always worth the additional price.<sup>98</sup> In fact, many patients taking the more expensive Cox-2 inhibitors may do as well on nonsteroidal anti-inflammatory drug pain relievers taken with proton pump inhibitors.<sup>99</sup> For example, 20mg Prilosec OTC costing 63 cents per day, if taken with 12 tablets of 200mg Ibuprofen throughout the day, would cost only \$343 annually compared with \$900 or more for most COX-2 Inhibitors.

## Case Studies: Price Comparisons for Specific Drugs

Consumers can use one of the methods previously discussed or combine them all. Total savings can be significant, as the following case studies show. [For an additional example, see Appendix D for potential savings on anti-anxiety drugs.]

**Case Study: Cardiovascular Drugs.** Patients prescribed 50mg of Tenormin daily can save money by comparison shopping for the best price and quantity. [See the sidebar: “How to Save on Cardiovascular Drugs” and Appendix C.] For instance:

- Our survey found that the price of 100 (50mg) doses of Tenormin ranged from \$138.40 at Drugstore.com to \$120.59 at Eckerd.com.
- But patients could save at least 75 percent over the lowest cost brand-name drug by switching to the generic alternative Atenolol.
- One hundred doses of the generic drug ranged from \$26.63 at Drugstore.com to \$8.29 at Costco.com.
- Finally, consumers could save another 40 percent (from \$8.29 to \$4.75) by buying larger pills (100mg) and splitting them in half.

Smart buying of this drug lowered the potential overall cost by 97 percent — from a high of \$138.40 to a low of \$4.75.

**Case Study: Heartburn Drugs.** By smart shopping, a consumer prescribed the heartburn drug Nexium can save as much as 85 percent. [See the sidebar “How to Save on Heartburn Drugs.”] For example:

- If purchased in small quantities from RxUSA’s Web site, Nexium (20mg) costs about \$419.83 per 100 tablets; however, a shopper opting for Drugstore.com would pay \$385.52 for 100 tablets, an 8 percent savings.



## How to Save 97 Percent on a Cardiovascular Drug

(Prices for 100 Doses, Dose = 50mg)

<u>Tenormin (brand) 50mg</u>	<u>Cost of 100 doses</u>	
Drugstore.com (buying 30 at a time)	\$138.40	} Comparison Shopping Savings: 13%
Costco.com (buying 100 at a time)	\$125.49	
Drugstore.com (buying 100 at a time)	\$124.24	
Eckerd.com (buying 100 at a time)	\$120.59	
		} Generic Substitution Savings: 80%
<u>Atenolol (generic) 50mg</u>		
Drugstore.com (buying 30 at a time)	\$26.63	} More Comparison Shopping Savings: 69%
Drugstore.com (buying 100 at a time)	\$12.21	
Eckerd.com (buying 100 at a time)	\$10.50	
Costco.com (buying 100 at a time)	\$8.29	
<u>Atenolol (generic) 100mg split in half</u>		
Eckerd.com (buying 100 at a time)	\$4.75	} Pill Splitting Savings: 43%

Consumers can choose one of the following methods or combine them all. Total savings can be significant. Using all of these methods, a consumer for whom the cardiovascular drug Tenormin (Atenolol) is prescribed can save as much as 97 percent from an Internet pharmacy.

**Comparison Shopping for the Lowest-Price Brand-Name Drug:** By shopping for the best price and quantity, a consumer can save 13 percent off the price of the branded drug Tenormin.

**Substituting a Generic:** The generic equivalent Atenolol would save about 80 percent over the branded drug.

**Shopping for the Lowest Price for Generic Drug:** A consumer can save 69 percent off the price of its generic equivalent Atenolol.

**Pill Splitting:** Splitting a double-strength pill might save an additional 43 percent.

Source: Appendix C.

*“Smart Shopping: Buy the lowest price generic equivalent of the antiplaque (betablocker) drug Tenormin.”*

- Buying the generic equivalent of a therapeutic substitute, such as 20mg Omeprazole, would save about 41 percent.
- Furthermore, because Prilosec, a branded form of the generic drug Omeprazole, is now available over the counter, a savvy consumer opting to pay \$62.62 for a 100-day supply from Drugstore.com would save 85 percent off the most expensive option.

## Buying Drugs Abroad

*“Smart Shopping: Buy the least expensive alternative therapy for common heartburn.”*

Some consumers have turned to Internet pharmacies based in Canada to lower their drug bills.<sup>100</sup> However, due to the problems consumers may encounter in purchasing drugs from out-of-country Web sites, these purchases may not be a bargain.

### How to Save 85 Percent on a Heartburn Drug

(Prices for 100 Doses)

<u>Nexium 20mg</u>	<u>Cost of 100 doses</u>	
RxUSA (buying 30 tablets at a time)	\$419.83	} Comparison Shopping Savings: 8%
Costco.com (buying 100 tablets at a time)	\$402.67	
Drugstore.com (buying 90 tablets at a time)	\$385.52	
		} Therapeutic Substitute in a generic form Savings: 41%
<u>Omeprazole (generic) 20 mg</u>		
RxUSA (buying 100 tablets at a time)	\$300.00	} More Comparison Shopping Savings: 43%
Walgreens (buying 30 tablets at a time)	\$426.63	
Drugstore.com (buying 90 tablets at a time)	\$319.99	
Eckerd (buying 100 tablets at a time)	\$246.50	
<u>Prilosec OTC 20 mg</u>		} OTC Savings: 75%
Drugstore.com (buying 42 tablets at a time)	\$62.62	

Combining all of these methods, a consumer prescribed a heartburn drug can save as much as 85 percent.

**Comparison Shopping for the Lowest-Price Brand-Name Drug:** By shopping for the best price and quantity, a consumer can save more than 8 percent off the price of the branded drug Nexium.

**Substituting a Generic:** A therapeutic substitute in generic form from the same class versus the brand name Nexium would save almost 41 percent.

**Shopping for the Lowest Price for Generic Drug:** A consumer can save 43 percent off the price of the generic equivalent Omeprazole.

**Switching:** Switching to the OTC version of the generic drug Omprazole would save an additional 75 percent.

Source: Appendix B-1.

*“Drugs are not always cheaper in Canada.”*

**Problem: Many Drugs Aren’t Cheaper in Canada.** Pundits claim that drugs are cheaper in Canada. However, this is true only for branded drugs still under patent protection. Generic medications — the ones that represent the best value for most patients — tend to be cheaper in the United States than in Canada.<sup>101</sup>

**Problem: Drugs May Be Confiscated.** Under the Prescription Drug Marketing Act of 1988, only drug manufacturers can legally import large quantities of drugs into the United States from foreign countries. Travelers with a prescription can return to the United States with a 90-day supply of legal pharmaceuticals. Over the past year, several attempts have been made to change laws to legalize drug importation. Proposed legislation would not merely make it legal for patients to order medications from Canada — it would allow large-scale importation by pharmacies, drug wholesalers and distributors.

Currently, however, large quantities of prescription drugs brought back by travelers from abroad are subject to confiscation by customs officials. Drugs from overseas pharmacies shipped through the mail are subject to confiscation by postal inspectors.

**Problem: Seller Misrepresentation.** Consumers who think they are buying from Internet pharmacies in Canada may actually be buying from the Web sites of substandard pharmacies in less-developed nations. A study in the *Annals of Internal Medicine* found that only about 11 percent of Internet pharmacies revealed the actual location of their business.<sup>102</sup> It is very difficult to ascertain the exact location of online pharmacies. Internet addresses indicating the country of origin are often falsified.<sup>103</sup> For instance, many Internet Web sites registered as Canadian pharmacies are far from Canada. The Web site CanadaRXfree.com appears to be a Canadian pharmacy, but the name is registered to an address in Mexico City. Another Web site, TrustedCanadianPharmacy.com was registered in Barbados.<sup>104</sup> Many others have covered their tracks so well it is impossible to tell where they are located. A more recent study found that about one-third of Internet pharmacies purported to be Canadian were located elsewhere.<sup>105</sup>

**Problem: Drug Safety and Efficacy.** Another problem is that not all the drugs sold on Canadian Web sites come from developed nations with FDA-type safeguards. One Canadian Web site was found to be selling drugs made in Mexico.<sup>106</sup> In fact, according to Marv Shepherd, director of the Center for Pharmacoeconomic Studies at the University of Texas at Austin, Canada obtains drugs “from over 100 countries including Ecuador, Mexico, Brazil, and China.”<sup>107</sup>

A recent article in the journal *Science* illustrates how drugs manufactured in some countries may not be the same quality as those made domestically. The drug Zocor (Simvastatin), a powerful cholesterol-lowering drug made in the United States, was compared to generic copies purchased over the Internet from Mexico, Thailand, India and Brazil. Analysis of the imported

versions showed that the active ingredients were not uniformly mixed with inert fillers in the tablets. Due to this lumping, consumers who split tablets would not receive a consistent dose, making the medication less effective. Lumps may not be absorbed into the bloodstream at the same rate, affecting the efficacy of the medication.<sup>108</sup>

About two-thirds of countries in which drugs are manufactured either do not have or do not enforce regulatory controls comparable to the United States. And about half the countries that do have controls lack the ability to enforce them.<sup>109</sup> Consequently, officials say it is impossible for the FDA to vouch for the safety and authenticity of drugs from abroad.<sup>110</sup> The 1988 act that restricted drug imports was passed in response to smuggled counterfeit drugs that found their way to some U.S. pharmacy shelves.<sup>111</sup> In one case, U.S. customs inspectors seized 1,800 counterfeit bottles of the antibiotic Ceclor. In another case, about two million counterfeit birth control pills containing little or no active ingredient were smuggled into the United States.

As more people order drugs from unknown Web sites abroad, counterfeit and fake drugs are again becoming a problem. Recently, for example:

- Several Web sites were found to be selling contraceptive patches containing no active ingredients.<sup>112</sup>
- When the U.S. Government Accountability Office made straw purchases from 68 Web-based pharmacies, in four cases it received counterfeit drugs and in six cases never received the order for which it paid.<sup>113</sup>
- Fourteen Web sites from which the GAO made purchases were under investigation for selling counterfeit drugs.<sup>114</sup>

As more Americans turn to foreign sources for prescription medications, the market in counterfeit drugs is bound to grow. And of course drugs obtained out of the country at low prices are not bargains if they jeopardize patients' health.

**Problem: Drug Availability.** Some brand-name drugs are cheaper in other countries because prices are controlled. Due to price controls, there may be only a limited supply available. In fact, in some countries, if a new, more effective (and expensive) medication has not been added to the list of drugs the government will pay for, it may not be available to most patients in that country. As a result, drug distributors may stock few of these medications, or they are simply unavailable.

With respect to Canada, for example, the United States is simply too populous to fulfill all our drug needs from there.<sup>115</sup>

- Americans could exhaust the entire supply of Canadian drugs in just 38 days.

*“Some foreign Web sites sell fake, expired or adulterated drugs.”*

- Canada would need to boost its supply of drugs by a factor of five just to meet the needs of elderly Americans.

American manufactured drugs are sold in some other national markets at lower prices to compensate for lower average incomes in those countries. Pharmaceutical companies are financially able to do so because they can recoup the cost of drug development in the United States. Importation would tend to equalize drug prices worldwide — at a level much closer to (if not the same as) current prices found in the United States. Less prosperous countries would buy fewer American-made drugs. Worse, they could follow India’s lead by violating patents and producing low-priced copies for their own citizens.

## **Special Opportunities for Seniors: Medicare Discount Drug Cards**

The new Medicare-approved prescription drug card is a valuable tool for seniors. Although the firms offering the cards may charge an annual enrollment fee of up to \$30 per year, many are free. In most cases a senior can switch cards once a year, although they can switch more frequently under certain circumstances.<sup>116</sup> These cards offer discounted drug prices at area pharmacies and by mail. However, a benefit far greater than the discounts themselves is the way the cards help seniors shop for the best prices by using the Internet. For each participating card, the Web site Medicare.gov tracks prescription drug prices at pharmacies across the country. With a few key-strokes at a computer terminal, seniors can easily identify the pharmacies in their area offering the best deals on the drugs they take.<sup>117</sup> The Web site also provides information on possible therapeutic substitutes that cost less — including the annual savings. To use this feature, seniors enter their current medications and monthly costs, then select the tab “more ways to save.” [See the sidebar, “How to Use Medicare’s Drug Card Web Site.”]

By using smart shopping techniques and the Medicare.gov Web site, seniors can reap the greatest savings from their new drug benefits. [See the sidebar “Seniors’ Checklist for Saving Money on Drugs.”]

**Prices Vary Across Cards.** Prices for drugs vary based on the specific drug card, so seniors will want to compare benefits before selecting a drug card. For example, a survey of Dallas pharmacies found that:

- Using the EnvisionRx Plus card, the price for 30 tablets of 20mg Fluoxetine (for depression) ranges from \$4.28 to \$4.78 at Dallas-area retail pharmacies.
- Using the MedImpact card or the InStil Health Solutions card, the retail price ranges from \$9.57 to \$77.94.
- Of the 30 plus participating cards accepted in the area surveyed, almost half offered 30 tablets of 20mg Fluoxetine at prices that ranged from \$61.56 to \$76.10.

*“Seniors can save more using their drug discount cards.”*

## How to Use Medicare's Drug Card Web Site

To determine which Medicare drug card is best for you, have the names and prices of your current prescription drugs available, then take the following steps to compare cards and pharmacy prices.

**Step One:** Go to the Medicare.gov Web site and select the link "Find available Medicare-approved drug discount cards, and compare prices for your prescriptions." Select the link "Quick Search."

**Step Two:** At the bottom of the Web page that appears is an input box with the instruction "search by drug name." Enter the name of a drug or drugs and press the enter key.

**Step Three:** When prompted, verify the drug's name, milligram size and number of doses taken per month.

**Step Four:** Enter a zip code and search participating pharmacies for all Medicare-approved drugs cards in your area. Select a checkbox for each Medicare drug card that you want to compare.

**Step Five:** Once a plan card is selected, compare prices on that one plan.

**Step Six:** An additional option allows you to search selected pharmacies.

**Step Seven:** The Web site also suggests generic alternatives and offers information on mail order options.

The same store may have very different prices for a drug depending upon which Medicare discount card a senior uses.

- A senior shopping in many Dallas-area Eckerd and Kroger pharmacies will pay \$76.60 for 30 tablets of 20mg Fluoxetine if the card presented is MedCare USA.
- However, the same pharmacies charge only \$4.78 to those holding the EnvisionRx Plus card.
- Indeed, for seniors with the right card the lowest price for a month's supply of 20mg Fluoxetine was \$4.28 while the highest was \$77.44 — or 18 times as much.

**Prices Vary across Stores Using the Same Card.** Once they have selected a card, seniors should also consider which pharmacy to patronize, since prices can vary substantially. For example:<sup>118</sup>

- With the MedCare USA card, a senior would pay \$76.60 for 30 tablets of 20mg Fluoxetine at Dallas-area Eckerd or Kroger pharmacies.
- Using the same card, a senior would pay \$10.57 at Target pharmacies.

**Mail Order Prices Vary by Card.** For chronic ailments, seniors may want to consider the potential savings from bulk buying, using the mail order

*"Seniors can compare drug prices at Medicare.gov."*

option featured by many discount cards. Mail order prices also vary widely by card. For instance:

- Using the EnvisionRx Plus card, a senior can mail-order 90 tablets of 20mg Fluoxetine for \$5.35 at the Rite Aid Pharmacy in Swedesboro, New Jersey.
- Yet, for consumers using the MedImpact card or the InStil Health Solutions card, mail order costs \$210.19 for 90 tablets.
- Among mail order pharmacies, prices for Fluoxetine vary by a factor of 41 to 1.

The Medicare.gov Web site is a powerful tool to find the lowest drug prices in any area. But it has another important effect. This Web site also creates transparency in pricing between competing pharmacies, since seniors can quickly identify drug stores with excessive markups. It provides an incentive for drugstores to do their own comparisons to stay competitive with other pharmacies.

## **Financial Assistance to Lower Drug Costs**

There are programs to assist patients who must pay some or all of their drug bills. In addition to smart shopping, patients can save by taking advantage of these opportunities.

**Pharmaceutical Company Assistance Programs.** Many drug companies have programs to assist low-income, disabled or elderly individuals.<sup>119</sup> The Web site [www.helpingpatients.org](http://www.helpingpatients.org) describes numerous drug company programs to assist seniors. Many of these programs provide a discount card that patients can use at their local pharmacy. For example, Together RX is a joint program that covers more than 150 different drugs. Participating companies include Novartis, Abbott, AstraZeneca, Aventis, Ortho-McNiel, Bristol-

*“Low-income seniors may be eligible for a \$600 credit on discounted drugs.”*

### **Seniors’ Checklist for Saving Money on Drugs**

- Identify the Medicare-approved drug discount card with the best savings for you at Medicare.gov.
- Check eligibility for the \$600 credit to low-income seniors on approved drug cards at Medicare.gov.
- Check other programs to help seniors at NeedyMeds.com.
- Check local programs that help seniors purchase drugs.
- Compare prices at local pharmacies in the Medicare.gov database.
- Check for therapeutic substitutes at Rxaminer.com.
- Consider buying drugs in quantity.
- Consider pill splitting if appropriate.
- Look for an over-the-counter substitute.

*“Many states and drug companies have programs to assist with drug prices.”*

Myers Squibb, GlaxoSmithKline and Janssen pharmaceuticals. Medicare beneficiaries with no drug coverage are eligible if their annual income is less than \$28,000 for an individual or \$38,000 per couple. Discounts range from 20 percent to 40 percent.

Medicare beneficiaries qualify for the Novartis Care Card if they have no drug coverage and income less than 300 percent of the federal poverty level. The discount is the same as the Together RX program for Novartis products — typically 25 percent to 40 percent. GlaxoSmithKline has a drug program called the Orange Card for Medicare beneficiaries without drug coverage whose income is no greater than \$26,000 per individual or \$35,000 per couple. The savings average about 30 percent.

Eli Lilly and Company offers its products at a discount to seniors and people with disabilities. To qualify for this program, called Lilly Answers, income must be less than \$18,000 for individual or \$24,000 for couples. It charges a \$12 flat rate for each 30-day prescription.

**State Drug Assistance Programs.** Almost three-quarters of U.S. states have created or authorized a drug assistance program for the low-income, the elderly and/or the disabled. Three-fifths of the states provide direct subsidies, while two-fifths offer drug discounts.<sup>120</sup> In addition, many states provide drug subsidies under the Medicaid program. Patients can find out if they qualify for a government or private drug assistance plan by filling out the questionnaire on the Web site of the National Council on Aging at <http://www.benefitscheckup.com>.

## Conclusion

Drug therapy is the most effective treatment for many illnesses, but drugs can be expensive. The cost can be especially high for seniors with chronic conditions, and those without health insurance or drug coverage. Yet most patients can easily lower their annual medicine bills through smart shopping. Patients who have prescription drug coverage have little incentive to be wise consumers. Still, they should note that while drug coverage by an insurer makes the high cost of pharmaceuticals easier to bear at the time of purchase, yearly premium increases are partly due to the lack of cost control.

Consumers can use a number of strategies to lower their drug costs. Which are appropriate will depend on their medical conditions and circumstances. But if patients treat drugs like other consumer goods — by informing themselves, shopping among alternatives and comparing prices, they are almost assured of lower drug bills.

NOTE: Nothing written here should be construed as necessarily reflecting the views of the National Center for Policy Analysis or as an attempt to aid or hinder the passage of any bill before Congress.



## Notes

- <sup>1</sup> See Ray Moynihan, "Drug Spending in North America Rose by 11% in 2003," *British Medical Journal*, Vol. 328, No. 7442, March 27, 2004, p. 727; "Rx Sales Jump 11%, Top \$200 Billion," *America's Pharmacist*, April 2004, 10; also see Kathleen D. Jaeger, "Drug Pricing & Consumer Costs," Presentation to the U.S. Senate Commerce Committee, April 23, 2002; and "Fact Sheet: The Use of Over-the-Counter Medicines," National Council on Patient Information and Education, January 2002.
- <sup>2</sup> National Center for Health Statistics, cited in "Many Patients Receiving Medication," USA Today Snapshots, *USA Today*, January 31 – February 2, 2003.
- <sup>3</sup> Frank Lichtenberg, "Benefits and Costs of Newer Drugs: An Update," Working Paper No. 8996, June 2002, National Bureau of Economic Research.
- <sup>4</sup> "2002 Missouri Prescription Drug Pricing Survey," Public Issue Management, 2002.
- <sup>5</sup> Al Tompkins, "Monday Edition: Generic Drug Prices," KHOU (News 11), November 30, 2003.
- <sup>6</sup> Kathy Times, "Independents Often Beat Chains in Prescription Prices," NBC13.com, November 25, 2002.
- <sup>7</sup> Barbara West, "Massive Mark-Ups Found on Generic Drugs," WFTV9, October 21, 2002.
- <sup>8</sup> Although some of the following anecdotes are from regional surveys conducted by the news media, the results are consistent with a recent multistate survey by a research institute. See RetireSafe.org, "Take the Rx Challenge: 2003 Retail Pharmacy Pricing Survey," June 2003, Council for Government Reform.
- <sup>9</sup> Editorial, "Generic Meds Not Panacea Some Believe," *Iowa City Press-Citizen*, June 18, 2003.
- <sup>10</sup> Chris Hopkins, "Generic Drug Price Mark-Ups, WTKR.COM (News Channel 3, Hampton Roads, Va.) April 30, 2004.
- <sup>11</sup> ABC Action News, "Pill Patrol: Generic Drugs Marked up as much as 3,000 Percent," abcactionnews.com (WFTS ABC Action News Tampa, Fla.), November 27, 2003.
- <sup>12</sup> Steve Wilson, "Steve Wilson Exposes Huge Prescription Drug Price Markups," WXYZ.com (Channel 7 Detroit), February 6, 2004.
- <sup>13</sup> On the Web site Medicare.gov, select "Find available Medicare-approved drug discount cards, and compare prices for your prescriptions," <http://www.medicare.gov/assistanceprograms/home.asp>. Select "Quick Search" and enter the desired drug.
- <sup>14</sup> John D. Piette, Michele Heisler and Todd H. Wagner, "Cost-Related Medication Underuse: Do Patients With Chronic Illnesses Tell Their Doctors?" *Archives of Internal Medicine*, Vol.164, No. 16, September 13, 2004, pp. 1749-1755.
- <sup>15</sup> The Web site is [www.Rxaminer.com](http://www.Rxaminer.com); address confirmed July 12, 2004.
- <sup>16</sup> Jim Nuovo, "Cost Comparison of Fluoxetine and Tricyclic Antidepressants," *American Family Physician*, December 1, 1999.
- <sup>17</sup> First-generation antihistamines also include Clistin (Carbinoxamine), Tavist (Clemastine), Chlor-Trimeton (Chlorpheniramine) and Dimetane (Brompheniramine).
- <sup>18</sup> Philipp S. Muether and Jack M. Gwaltney Jr., "Variant Effect of First- And Second-Generation Antihistamines as Clues to Their Mechanism of Action on the Sneeze Reflex in the Common Cold," *Clinical Infectious Diseases*, November 1, 2001, pp. 1,483-88.
- <sup>19</sup> Ibid.
- <sup>20</sup> Allegra was 60mg, Zyrtec 10mg and Clarinex 5mg. Prices surveyed on June 1, 2004.
- <sup>21</sup> Price of 10mg Claritin for 100 doses purchased 30 tablets at a time. The price for Loratadine (10mg) was based on buying 180 at a time. Prices were sampled on June 1, 2004, and in July 2004, respectively.
- <sup>22</sup> Diphenhydramine (25mg) is available in quantities of 200 for \$13 at Drugstore.com. Price sampled on June 1, 2004.
- <sup>23</sup> Calculation was based on \$13/200. Cost per tablet would vary based on shipping and dosage. This is especially true of cheaper medications like OTC drugs.
- <sup>24</sup> IMS Health, November 2003, cited in Michelle L. Kirsche, "Outlook Bright for 2004 Blockbusters - Chain Pharmacy -

Boost in Prescription Drug Sales is Anticipated as Result of New Coverage Provided to 35 Percent to 40 Percent of U.S. Seniors Currently without Prescription Drug Insurance,” *Drug Store News*, January 19, 2004. Data for October 2002 to September 2003.

<sup>25</sup> Gardiner Harris, “F.D.A. Approves Over-Counter Sales of Top Ulcer Drug,” *New York Times*, June 21, 2003.

<sup>26</sup> Purchasing 100 doses of Nexium (30 capsules at a time) from RxUSA.com costs \$419.83. Price sampled on June 1, 2004.

<sup>27</sup> Purchasing 100 doses of Nexium 30 capsules at a time would cost \$419.83 at RxUSA. Switching to Protonix and purchasing larger quantities (90 at a time) Protonix would bring the cost of 100 doses down to \$307.74 at drugstore.com.

<sup>28</sup> The price for Prilosec 20mg at Costco.com is \$59.50 buying 42 at a time. Price was verified on June 1, 2004.

<sup>29</sup> Zantac (Ranitidine), Pepcid (Famotidine) and Tagamet (Cimetidine) are Histamine H<sub>2</sub>-receptor antagonists.

<sup>30</sup> Ranitidine is available over the counter in 75mg tablets but is often prescribed in 150mg or even 300mg doses.

<sup>31</sup> In this example, purchasing 100 150mg doses would require buying 200 75mg tablets and taking two at a time. This is often more economical than purchasing the 150mg prescription strength. Price Kirkland Signature Acid Reducer (Ranitidine), available in packages of 240 75mg tablets, costs \$5.99 at Costco.com. Price verified on June 1, 2004.

<sup>32</sup> Packages of Rite Aid Acid Reducer (Cimetidine) containing 70 200mg tablets cost \$9.79 on Costco.com. Price verified June 1, 2004.

<sup>33</sup> Purchased in quantities of 240 10mg tablets for \$6.99 at Costco.com. A 40mg dose requires four tablets, for a cost of 11.65 cents per dose. Price verified June 4, 2004.

<sup>34</sup> Pat Kelly, “DTC Advertising’s Benefits Far Outweigh Its Imperfections,” *Health Affairs*, Web Exclusive, April 28, 2004; Joel S. Weissman, et al., “Physicians Report On Patient Encounters Involving Direct-To-Consumer Advertising,” *Health Affairs*, Web Exclusive, April 28, 2004.

<sup>35</sup> An exception to this rule is direct-to-consumer advertising of OTC products. A drug company launching a name brand for use over the counter may well advertise to gain market share for their product. Here again, consumers should be wary. Name brand OTC products generally sell for more than their generic competitors’ products.

<sup>36</sup> Meredith B. Rosenthal, Ernst R. Berndt, Julie M. Donohue, Richard G. Frank and Arnold M. Epstein, “Promotion of Prescription Drugs to Consumers,” *New England Journal of Medicine*, Vol. 346, No. 7, February 14, 2002, pp. 498-505.

<sup>37</sup> In 2000, about \$7.9 billion drugs were distributed free as samples — about half of the \$15.7 billion the pharmaceutical industry spent on marketing. The retail value of free samples increased to \$16 billion by 2004. Drug companies employ an estimated 90,000 drug industry reps, and spent \$22 billion in 2003 to inform physicians about their products and influence prescribing behavior. For an exposé on many of the drug industry’s marketing efforts, see Jeff Gammage and Karl Stark, “Under the Influence,” *Philadelphia Inquirer*, March 9, 2002. Also see Liz Szabo, “Health Systems Cutting Costs by Closing Door on Drug Reps,” *USA Today*, August 25, 2004.

<sup>38</sup> Leigh Page, “More Clinics Ban Drug Samples, Citing Cost, Safety Concerns,” *American Medical News*, October 16, 2000.

<sup>39</sup> James Frederick, “Mandatory Mail Battle Heats up as Michigan, Chains Lay Gauntlet,” *Drug Store News*, February 16, 2004.

<sup>40</sup> Price surveys conducted June 1, 2004.

<sup>41</sup> See Diane West, “Mail-Order Rx Chips Away at Retail Sales,” *Drug Store News*, May 20, 2002.

<sup>42</sup> Prices verified on August 5, 2004.

<sup>43</sup> Correspondence from Thomas S. Paul, chief pharmacy officer for Ovations (United Health Group), which administers AARP’s pharmacy program, 2003.

<sup>44</sup> Price verified August 21, 2004.

<sup>45</sup> Amanda Gardner, “How to Break a Blockbuster Drug in Half: Man Invents Device to Cut Odd-Shaped Viagra Pill,” *HealthScoutNews*, December 5, 2002.

<sup>46</sup> Information obtained from Parrish Blaszk (communications director), Precision Pill Splitters ([www.precisionpillsplitters.com](http://www.precisionpillsplitters.com)).

<sup>47</sup> Ibid. A pill bed is a template designed for the exact shape and thickness of a specific dose of medications. According

to the manufacturer, some common medications that may be candidates for quartering are Accupril, Aspirin, Fosamaxx, Imitrex Oral, Levaquin, Lipitor, Norvasc, Pravachol, Viagra, Vioxx, Zocor, Zyrtec and Zyrtec.

<sup>48</sup> Salynn Boyles, "Cutting Pills in Half Could Pose Problems; Pharmacists Suggest Pill-Splitting Practice Can't Be Mandated," *WebMD Medical News*, May 19, 2004.

<sup>49</sup> James E. Polli, Sharon Kim and Brian R. Martin, "Weight Uniformity of Split Tablets Required by a Veterans Affairs Policy," *Journal of Managed Care Pharmacy*, Vol. 8, No. 5, 2003, pp. 401-7.

<sup>50</sup> Randal S. Stafford and David C. Radley, "The Potential of Pill Splitting to Achieve Cost Savings," *American Journal of Managed Care*, Vol. 8, No. 8, August 2002, pp. 706-12.

<sup>51</sup> Susan J. Landers, "11 Pills Score as Candidates for Splitting," *American Medical News*, September 23/30, 2002.

<sup>52</sup> "Bitter Pill: The Rising Prices of Prescription Drugs for Older Americans," Publication No. 02-104, June 2002, Families USA.

<sup>53</sup> William M. Welch, "VA Offers Medicines at Bargain Prices," *USA Today*, June 18, 2003.

<sup>54</sup> Aidan Hollis, "Closing the FDA's Orange Book," *Regulation*, Winter 2001.

<sup>55</sup> The average cost for generic prescriptions was \$14.70 in 2002, compared to \$77.02 for branded medications. Also see Milt Freudenheim (New York Times News Service), "Prices of Generic Drugs Rising Much Faster than Brand-Name Counterparts" *Naples Daily News*, December 27, 2002.

<sup>56</sup> James Frederick, "Stars Align for Generic Drug Industry - Special Report: Generic Drugs," *Drug Store News*, February 16, 2004.

<sup>57</sup> The law became effective Aug. 19, 2003. See Joel B. Finkelstein, "Feds Fire on Patent Law that Delays Generics," *American Medical News*, June 30, 2003.

<sup>58</sup> Leila Abboud, "Bush Acts to Speed Generics to Market," *Wall Street Journal*, June 12, 2003, p. A3.

<sup>59</sup> "Fact Sheet: The Use of Over-the-Counter Medicines," National Council on Patient Information and Education, January 2002.

<sup>60</sup> Harris Interactive, "Attitudes and Beliefs about the Use of Over-the-Counter Medicines: A Dose of Reality," National Council on Patient Information and Education (NCPIE), January 2002.

<sup>61</sup> Ipsos, "Doctor Recommendations of Over-The-Counter Drugs Boost Consumer Loyalty," *PharmTrends*, September 23, 2002.

<sup>62</sup> Ipsos, "Doctors Play Key Role in Sales of Non-Prescription Drugs," *PharmTrends*, September 17, 2003.

<sup>63</sup> Martin S. Lipsky and Theresa Waters, "The 'Prescription-to-OTC Switch' Movement: Its Effects on Antifungal Vaginitis Preparations," *Archives of Family Medicine*, July/August 1999, pp. 297-300. However, the Consumer Healthcare Products Association (CHPA) claims 700 OTC medications were previously available only by prescription.

<sup>64</sup> For a discussion of the process the FDA follows in approving a drug's move from prescription to OTC, as well as a list of classes of medications available OTC, see Lori R. Jacobs, "Prescription to Over-the-Counter Drug Reclassification," *American Family Physician*, May 1, 1998.

<sup>65</sup> Ipsos, "Doctors Play Key Role in Sales of Non-Prescription Drugs," *PharmTrends*, September 17, 2003.

<sup>66</sup> Price surveyed August 2002.

<sup>67</sup> Sixty Claritin tablets cost \$31.39 while 180 generic (Lirkland AllerClear) tablets cost \$15.99. Prices surveyed at Costco.com on September 20, 2004.

<sup>68</sup> Price surveyed in May 2003.

<sup>69</sup> Price surveyed September 20, 2004.

<sup>70</sup> Gaye Perry and Peter Mansell, "Rx-to-OTC Switching: The Way Forward for the Global Pharmaceutical Industry?" research report, Urch Publishing Ltd., September 2000.

<sup>71</sup> Holly M. Spencer, "The Rx-to-OTC Switch of Claritin, Allegra, and Zyrtec: An Unprecedented FDA Response to Petitioners and the Protection of Public Health," *American University Law Review*, pp. 999-1050.

<sup>72</sup> Amy K. Erickson, "Rx-to-OTC Switches Offer Golden Opportunity," *Pharmacy Today*, 2002.

- <sup>73</sup> Gardiner Harris, "F.D.A. Approves Over-Counter Sales of Top Ulcer Drug," *New York Times*, June 21, 2003.
- <sup>74</sup> Price of Prilosec OTC is \$26.45 for a box containing 42 capsules at Drugstore.com. Price verified July 12, 2004.
- <sup>75</sup> Erickson, "Rx-to-OTC Switches Offer Golden Opportunity." *New York Times*, June 21, 2003.
- <sup>76</sup> The prices of H<sub>2</sub> antagonists fell by two-thirds after they were switched to OTC status. See Gail D. Newton et al., "New OTC Drugs and Devices 2001: A Selective Review," *Journal of the American Pharmaceutical Association*, 2002, pp. 267-77.
- <sup>77</sup> Prescription sales of Claritin totaled \$3.1 billion in 2001.
- <sup>78</sup> David Vaczek, "Top 200 Prescription Drugs of 2003," *Pharmacy Times*, undated. Online <http://www.pharmacytimes.com/article.cfm?ID=1314>. Accessed August 21, 2004. Due both to tightening of health plan requirements and the movement of Claritin to the OTC market, sales of non-sedating antihistamines fell 22 percent from July 2003 to June 2004. See Jane Erikson, "Allergy Drug Copays Rising," *Arizona Daily Star*, August 18, 2004. <http://www.dailystar.com/dailystar/relatedarticles/34243.php>.
- <sup>79</sup> Bill Hogan, "The Pharmacist Who Says No to Drugs," *AARP Bulletin* online, September 2004. Accessed September 8, 2004. Available: [www.aarp.org/bulletin/prescription/Articles/a2004-08-26-pharmacist.html](http://www.aarp.org/bulletin/prescription/Articles/a2004-08-26-pharmacist.html).
- <sup>80</sup> Margie Rauch Goulding, "Inappropriate Medication Prescribing for Elderly Ambulatory Patients," *Archives of Internal Medicine*, Vol. 164, No. 3, February 9, 2004, pp. 305-312.
- <sup>81</sup> Ibid. Panel members defined drugs to be inappropriate if risk of adverse reactions outweighed potential benefits. Also see "1 in 12 Drugs Inappropriately Prescribed to Elderly," *Healthfacts*, March 2004.
- <sup>82</sup> Lesley H. Curtis, et al., "Inappropriate Prescribing for Elderly Americans in a Large Outpatient Population," *Archives of Internal Medicine*, Vol. 164, No. 15, August 9/23, 2004, pp. 1621-1625.
- <sup>83</sup> "Everything you Need to Know about Statin Drugs – Almost," *Healthfacts*, November 2003.
- <sup>84</sup> PREMIER Collaborative Research Group, "Effects of Comprehensive Lifestyle Modification on Blood Pressure Control," *Journal of the American Medical Association*, Vol. 289, No. 16, April 2003, pp. 2083-2093.
- <sup>85</sup> Rena R. Wing, et al., "Behavioral Science Research in Diabetes: Lifestyle Changes Related to Obesity, Eating Behavior, and Physical Activity," *Diabetes Care*, January 2001.
- <sup>86</sup> Marian McDonagh and Susan Carson, "Drug Class Review on Proton Pump Inhibitors," Oregon Evidence-based Practice Center, Oregon Health & Science University.
- <sup>87</sup> "Diuretics Proved to be Superior to other, more Expensive Anti-hypertensive Drugs," *Healthfacts*, January 2003.
- <sup>88</sup> Philip B. Gorelick, "Aspirin and Ticlopidine for Prevention of Recurrent Stroke in Black Patients," *Journal of the American Medical Association*, June 11, 2003, pp. 2,947-57.
- <sup>89</sup> Price comparisons were obtained from DestinationRX.com. A patient taking two (250mg) tablets per day purchased in quantity (e.g., 100 tablets) could spend at little as \$26.81 at Costco.com compared to \$90.30 per month at Eckerd.com.
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- <sup>91</sup> Ibid.
- <sup>92</sup> Gastroenterologists say most patients with GERD should first try H<sub>2</sub> receptor antagonists. See Marian McDonagh and Susan Carson, "Drug Class Review on Proton Pump Inhibitors," Oregon Evidence-based Practice Center, Oregon Health & Science University.
- <sup>93</sup> Emily R. Cox et Al., "Prescribing COX-2s for Patients New to Cyclo-oxygenase Inhibition Therapy," *American Journal of Managed Care*, Vol. 9, No. 11, pp. 735-42, November 2003. For a layman's discussion see "A New Study from Express Scripts, Inc. Indicates that Patients are being Prescribed Expensive Cox-2 Inhibitor Drugs even When they have no Increased risk for Gastrointestinal Events," *Drug Cost Management Report*, November 21, 2003.
- <sup>94</sup> Theresa Agovino (Associated Press), "Study: Pricey Drugs Overprescribed Oft-Hyped Pain Relievers Often Found Unnecessary, Raise Health Plan Costs," *Detroit News*, June 4, 2002.
- <sup>95</sup> "Over Half of COX-2 Patients take Aspirin, Possibly Negating the COX-2 GI Benefits," Medi-Lexicon ([pharma-lexicon.com](http://pharma-lexicon.com)), June 15, 2004. For a discussion see Emily R. Cox, Mark Frisse, Andrew Behm and Kathleen A. Fairman,

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- <sup>100</sup> “Canadian Pharmacies,” *Drugstore News*, December 16, 2002.
- <sup>101</sup> David Gratzer and Neil Seeman, “Granny Goes North: The Truth about Canada and Prescription Drugs,” *National Review*, May 22, 2000.
- <sup>102</sup> Bernard S. Bloom and Ronald C. Iannacone, “Internet Availability of Prescription Pharmaceuticals to the Public,” *Annals of Internal Medicine*, December 7, 1999, pp. 830-33.
- <sup>103</sup> *Ibid.*
- <sup>104</sup> *Ibid.*
- <sup>105</sup> Sample was of 45 Internet pharmacy Web sites claiming to be Canadian. See “An Analysis of Terrorist Threats to America’s Medicine Supply,” *GlobalOptions, Inc.*, May 22, 2003.
- <sup>106</sup> “Mexican Drugs Shipped to US via Canada, say Consumers,” *Scrip: World Pharmaceutical News*, No 2942, April 9, 2004, p. 17.
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- <sup>111</sup> Michael F. Conlan, “How Safe Is the Drug Supply?” *Drug Topics*, October 15, 2001.
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- <sup>113</sup> Tracy Wheeler “Web May not be Rx for Your Drug Needs,” *Akron (Ohio) Beacon Journal*, July 06, 2004.
- <sup>114</sup> *Ibid.*
- <sup>115</sup> Julie Appleby, “Report Attempts to Show Impact of Cross-Border Access,” *USA Today*, May 17, 2004.
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- <sup>117</sup> All prices in this section were surveyed using the Medicare.gov Web site on July 27, 2004, for a 5-mile radius of the

north Dallas, Texas ZIP code 75251.

<sup>118</sup> All prices in this section were surveyed using the Medicare.gov Web site on July 28, 2004, for a 5-mile radius of the north Dallas, Texas, ZIP code 75251.

<sup>119</sup> For a list of discount programs for specific medications, see Needymeds.com. Also, www.helpingpatients.org can help patients determine whether or not they qualify for various programs. Accessibility to both Web sites verified July 12, 2004.

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## APPENDIX A-1

**Prescription Sinus Allergy Medications****Cost of 100 doses****Clarinet 5mg**

Eckerd (buying 30 tablets at a time)	\$250.53
Walgreens.com (buying 35 tablets at a time)	\$234.26
Drugstore.com (buying 100 tablets at a time)	\$209.97
AARP (buying 100 tablets at a time)	\$196.08

**Zyrtec 10mg**

Walgreens.com (buying 35 tablets at a time)	\$208.54
Eckerd (buying 100 tablets at a time)	\$192.36
Drugstore.com (buying 100 tablets at a time)	\$181.10

**Allegra 60mg**

Eckerd (buying 30 tablets at a time)	\$135.27
Drugstore.com (buying 100 tablets at a time)	\$123.32

Note: Standard daily doses. Some antihistamines may be available in multiple doses while others may be available only in a standard dosage. Some are available in syrup form (more easily given to children). Many antihistamines also include decongestants and pain relievers or come in time-release formulations. Nonsedating antihistamines are usually taken only once a day.

Source: Author's Web site surveys in spring 2004.

## APPENDIX A-2

**Over-the-Counter Sinus Allergy Medications**

<b><u>Claritin (Loratadine) 10mg</u></b>	<b><u>Cost of 100 Doses<sup>1</sup></u></b>
Drugstore.com (buying 20 tablets at a time)	\$99.95
Walgreens (buying 20 tablets at a time)	\$79.95
Walgreens.com (buying 30 at a time)	\$67.63
<b><u>Loratadine (generic) 10mg</u></b>	
Alavert Drugstore.com (buying 30 at a time)	\$63.30
Walgreens (buying 100 tablets at a time)	\$29.99
Wal-Mart (buying 60 at a time)	\$24.12
Costco.com (buying 180 at a time)	\$8.89
<b><u>Benadryl (Diphenhydramine) 25mg</u></b>	
Walgreens (buying 24 tablets at a time)	\$24.96
Drugstore.com (buying 100 tablets at a time)	\$11.99
<b><u>Diphenhydramine (generic) 25mg</u></b>	
Drugstore.com (buying 24 capsules at a time)	\$14.54
Drugstore.com (buying 200 capsules at a time)	\$6.50
<b><u>Chlorpheniramine maleate 4mg</u></b>	
Drugstore.com Chlor-Trimeton (buying 100)	\$16.79
Drugstore.com Chorpheniramine (buying 100)	\$7.99

<sup>1</sup> Standard daily doses. Some antihistamines may be available in multiple doses while others may be only available in a standard dosage. Some are available in syrup form (more easily given to children). Many antihistamines also include decongestants and pain relievers or come in time-release formulations.

Nonsedating (Claritin, Loratadine) antihistamines are usually taken only once a day. First-generation (OTC) antihistamines, because they are inexpensive (and sedating), might be taken in smaller doses two or more times throughout the day. A drug taken in smaller doses several times per day might cost more than one larger dose taken once per day. Multiple dose medications generally cost more than a single daily dose.

Source: Author's Web site surveys in spring 2004.



## APPENDIX B-1

**Prescription Heartburn Medications**

<b><u>Nexium 40mg</u></b>	<b><u>Cost of 100 Doses<sup>1</sup></u></b>
RxUSA (buying 30 capsules at a time)	\$419.83
Costco.com (buying 100 capsules at a time)	\$402.67
Drugstore.com (buying 90 capsules at a time)	\$385.52
<b><u>Prevacid 30mg capsule</u></b>	
Drugstore.com (buying 90 capsules at a time)	\$413.30
Costco.com (buying 30 capsules at a time)	\$400.90
RxUSA (buying 100 capsules at a time)	\$395.00
<b><u>Protonix 40mg</u></b>	
Drugstore.com (buying 30 capsules at a time)	\$329.97
Costco.com (buying 100 capsules at a time)	\$317.47
RxUSA (buying 100 capsules at a time)	\$309.95
Drugstore.com (buying 90 capsules at a time)	\$307.74
<b><u>Omeprazole (generic) 20mg<sup>2</sup></u></b>	
Walgreens (buying 30 capsules at a time)	\$426.63
Drugstore.com (buying 90 capsules at a time)	\$319.99

<sup>1</sup> Standard daily therapeutically equivalent doses. Some ulcer medications may be available in multiple doses, many come in time-release formulations or might be taken more than once a day.

<sup>2</sup> The brand name medication Prilosec is available over the counter.

Source: Author's Web site surveys in spring 2004.

## APPENDIX B-2

**OTC Ulcer Medications**

<b><u>Prilosec (Omeprazole) 20mg<sup>1</sup></u></b>	<b><u>Cost of 100 doses<sup>2</sup></u></b>
Drugstore.com (buying 42 capsules at a time)	\$62.59
Costco.com (buying 30 capsules at a time)	\$59.50
<b><u>Pepcid (tamotidine) 40mg</u></b>	
Drugstore.com (buying 50 tablets at a time)	\$66.36
Costco.com (buying 75 tablets at a time)	\$53.31
OTC Wholesale.com (buying 90 tablets at a time)	\$50.64
<b><u>Famotidine (generic) 40mg</u></b>	
Walgreens.com (buying 60 tablets at a time)	\$79.93
Drugstore.com (buying 90 tablets at a time)	\$75.51
<b><u>Zantac (Ranitidine) 150mg</u></b>	
Drugstore.com (buy 80 tablets at a time)	\$41.58
OTC Wholesale.com (buying 80 tablets at a time)	\$36.93
Costco.com (buying 124 tablets at a time)	\$22.34
<b><u>Ranitidine (generic) 150mg</u></b>	
Drugstore.com (buying 80 tablets at a time)	\$37.48
Walgreen.com (buying 60 tablets at a time)	\$23.30
Costco.com (buying 240 tablets at a time)	\$4.99
<b><u>Tagamet (Cimetidine) 400mg</u></b>	
Walgreen.com (buying 30 tablets at a time)	\$66.60
Drugstore.com (buy 50 tablets at a time)	\$57.16
OTC Wholesale.com (buying 10 tablets at a time)	\$55.00
<b><u>Cimetidine (generic) 400mg</u></b>	
Drugstore.com (buying 70 tablets at a time)	\$27.97
Walgreens.com (buying 30 tablets at a time)	\$33.27
CVS.com (buying 50 tablets at a time)	\$43.96

<sup>1</sup> The generic form of OTC Prilosec (Omeprazole) is still available only by prescription. Proton Pump Inhibitors are usually taken once per day.

<sup>2</sup> Standard daily therapeutically equivalent doses. Some ulcer medications may be available in multiple doses, many come in time-release formulations or might be taken more than once a day.

Source: Author's Web site surveys in summer 2004.

## APPENDIX C

**Cardiovascular Medications**

<b><u>Tenormin (brand) 50mg</u></b>	<b><u>Cost of 100 doses<sup>1</sup></u></b>
Drugstore.com (buying 30 tablets at a time)	\$138.40
Costco.com (buying 100 tablets at a time)	\$125.49
Drugstore.com (buying 100 tablets at a time)	\$124.24
Eckerd (buying 100 tablets at a time)	\$120.59
<b><u>Tenormin (brand) 100mg split in half</u></b>	
Costco.com (buying 30 tablets at a time)	\$98.95
Eckerd.com (buying 100 tablets at a time)	\$92.68
Costco.com (buying 100 tablets at a time)	\$91.43
AARP (buying 100 tablets at a time)	\$86.15
<b><u>Atenolol (generic) 50mg</u></b>	
Drugstore.com (buying 30 tablets at a time)	\$26.63
Drugstore.com (buying 100 tablets at a time)	\$12.21
Eckerd (buying 100 tablets at a time)	\$10.50
Costco.com (buying 100 tablets at a time)	\$8.29
<b><u>Atenolol (generic) 100mg split in half</u></b>	
Eckerd (buying 30 tablets at a time)	\$8.32
Drugstore.com (buying 100 tablets at a time)	\$7.77
RxUSA (buying 100 tablets at a time)	\$7.00
Eckerd.com (buying 100 tablets at a time)	\$4.75

<sup>1</sup> One dose = 50mg

Source: Author's Web site surveys in spring 2004.

## APPENDIX D

**Anti-anxiety Medications**

<b><u>Xanax (brand) 0.5mg</u></b>	<b><u>Cost of 100 doses<sup>1</sup></u></b>
Eckerd (buying 30 tablets at a time)	\$124.20
Eckerd (buying 100 tablets at a time)	\$118.42
Drugstore.com (buying 30 tablets at a time)	\$116.33
Drugstore.com (buying 90 tablets at a time)	\$109.92
<b><u>Xanax (brand) 1mg split in half<sup>2</sup></u></b>	
Eckerd (buying 30 tablets at a time)	\$83.28
Eckerd (buying 100 tablets at a time)	\$80.36
Drugstore.com (buying 30 tablets at a time)	\$78.32
Drugstore.com (buying 90 tablets at a time)	\$74.43
<b><u>Alprazolam (generic) 0.5mg</u></b>	
CVS.com (buying 90 tablets at a time)	\$17.32
Eckerd (buying 30 tablets at a time)	\$16.63
Drugstore.com (buying 90 tablets at a time)	\$12.19
Eckerd (buying 100 tablets at a time)	\$10.50
<b><u>Alprazolam (generic) 1mg split in half</u></b>	
Drugstore.com (buying 30 tablets at a time)	\$13.32
CVS (buying 90 tablets at a time)	\$11.61
Eckerd (buying 30 tablets at a time)	\$11.17
Eckerd (buying 100 tablets at a time)	\$8.25
AARP (buying 100 tablets at a time)	\$7.74
Drugstore.com (buying 90 tablets at a time)	\$6.09

<sup>1</sup> One dose = 0.5mg

<sup>2</sup> Xanax, due to its addictive nature, may not be a good candidate for bulk buying and pill splitting since many physicians may be reluctant to prescribe 100 double-strength tablets at a time.

Source: Author's Web site surveys in spring 2004.

## **About the Author**

**Devon Herrick**, Ph. D., is a senior fellow with the National Center for Policy Analysis. He concentrates on such health care issues as Internet-based medicine, health insurance and the uninsured, and pharmaceutical drug issues. His research interests also include managed care, patient empowerment, medical privacy and technology-related issues.

Dr. Herrick received a Ph.D. in Political Economy and a Master of Public Affairs degree from the University of Texas at Dallas with a concentration in economic development. He also holds an MBA with a concentration in finance from Oklahoma City University and an MBA from Amber University, as well as a BS in accounting from the University of Central Oklahoma.

## About the NCPA

The NCPA was established in 1983 as a nonprofit, nonpartisan public policy research institute. Its mission is to seek innovative private sector solutions to public policy problems.

The center is probably best known for developing the concept of Medical Savings Accounts (MSAs). The *Wall Street Journal* called NCPA President John C. Goodman “the father of Medical Savings Accounts.” Sen. Phil Gramm said MSAs are “the only original idea in health policy in more than a decade.” Congress approved a pilot MSA program for small businesses and the self-employed in 1996 and voted in 1997 to allow Medicare beneficiaries to have MSAs. And a June 2002 IRS ruling frees the private sector to have a flexible medical savings account and even personal and portable insurance. A series of NCPA publications and briefings for members of Congress and the White House staff helped lead to this important ruling.

The NCPA also outlined the concept of using tax credits to encourage private health insurance. The NCPA helped formulate a bipartisan proposal in both the Senate and the House, and Dr. Goodman testified before the House Ways and Means Committee on its benefits. Dr. Goodman also helped develop a similar plan for then presidential candidate George W. Bush.

The NCPA shaped the pro-growth approach to tax policy during the 1990s. A package of tax cuts, designed by the NCPA and the U.S. Chamber of Commerce in 1991, became the core of the Contract With America in 1994. Three of the five proposals (capital gains tax cut, Roth IRA and eliminating the Social Security earnings penalty) became law. A fourth proposal — rolling back the tax on Social Security benefits — passed the House of Representatives in summer 2002.

The NCPA’s proposal for an across-the-board tax cut became the focal point of the pro-growth approach to tax cuts and the centerpiece of President Bush’s tax cut proposal. The repeal by Congress of the death tax and marriage penalty in the 2001 tax cut bill reflects the continued work of the NCPA.

Entitlement reform is another important area. With a grant from the NCPA, economists at Texas A&M University developed a model to evaluate the future of Social Security and Medicare. This work is under the direction of Texas A&M Professor Thomas R. Saving, who was appointed a Social Security and Medicare trustee. Our online Social Security calculator ([www.mysocialsecurity.org](http://www.mysocialsecurity.org)) allows visitors to discover their expected taxes and benefits and how much they would have accumulated had their taxes been invested privately.

An innovative nationwide volunteer campaign called Team NCPA ([www.teamncpa.org](http://www.teamncpa.org)) is under way to raise awareness of the problems with the current Social Security system and the benefits of personal retirement accounts. The late Sen. Daniel Patrick Moynihan (D-N.Y.), speaking at an NCPA Summers Lecture, said there is no serious proposal anywhere in the United States that would cut benefits for current retirees.

In the 1980s, the NCPA was the first public policy institute to publish a report card on public schools, based on results of student achievement exams. We also measured the efficiency of Texas school districts. Subsequently, the NCPA pioneered the concept of education tax credits to promote competition and choice through the tax system. To bring the best ideas on school choice to the forefront, the NCPA

and Children First America published an *Education Agenda* for the new Bush administration, policy makers, congressional staffs and the media. This book provides policy makers with a road map for comprehensive reform. And a June 2002 Supreme Court ruling upheld a school voucher program in Cleveland, an idea the NCPA has endorsed and promoted for years.

The NCPA's Environmental Center works closely with other think tanks to provide commonsense alternatives to extreme positions that frequently dominate environmental policy debates. A pathbreaking 2001 NCPA study showed that the costs of the Kyoto agreement to halt global warming would far exceed any benefits. The NCPA's work helped the administration realize that the treaty would be bad for America, and it has withdrawn from the treaty.

NCPA studies, ideas and experts are quoted frequently in news stories nationwide. Columns written by NCPA scholars appear regularly in national publications such as the *Wall Street Journal*, the *Washington Times*, *USA Today* and many other major-market daily newspapers, as well as on radio talk shows, television public affairs programs, and in public policy newsletters. According to media figures from Burrelle's, nearly 3 million people daily read or hear about NCPA ideas and activities somewhere in the United States.

The NCPA home page ([www.ncpa.org](http://www.ncpa.org)) links visitors to the best available information, including studies produced by think tanks all over the world. Britannica.com named the [ncpa.org](http://ncpa.org) Web site one of the best on the Internet when reviewed for quality, accuracy of content, presentation and usability. NCPA Web sites average 4 million hits per month.

### **What Others Say about the NCPA**

*"...influencing the national debate with studies, reports and seminars."*

**- TIME**

*"Increasingly influential."*

**- EVANS AND NOVAK**

*"I don't know of any organization in America that produces better ideas with less money than the NCPA."*

**- SEN. PHIL GRAMM**

*"Oftentimes during policy debates among staff, a smart young staffer will step up and say, 'I got this piece of evidence from the NCPA.' It adds intellectual thought to help shape public policy in the state of Texas."*

**- FORMER TEXAS GOV. (NOW PRESIDENT) GEORGE W. BUSH**

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