

Shopping for Drugs

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Executive Summary

As Congress debates ways to lower the cost of prescription drugs for seniors, and state governments debate ways to lower drug costs for almost everyone else, it may be time to consider a commonsense solution: smart shopping.

Seniors, the uninsured and others who pay for drugs out of pocket do not have to wait for political solutions to the problem of rising drug prices. By becoming aggressive consumers, they can cut their costs substantially. In fact, the cost of some common drug therapies can be reduced by more than 90 percent using buying techniques consumers normally use to shop for other goods. But they should be forewarned. Patients buying drugs from multiple sources may 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 also makes it easy to look up information on government and private programs that assist elderly, low-income and disabled patients with drug expenses. Additionally, Web-based services help patients find medications comparable to but cheaper than the ones they currently take.

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 saved consumers almost 10 percent on branded drugs and a whopping 81 percent on generics, on the average.

Drug Substitution. When a drug is being prescribed, a patient should ask his or her physician if there are cheaper alternatives. Often there are.

Pill Splitting. All supermarket patrons know that choosing larger packages usually lowers the unit cost. The same is true of drugs. Patients can purchase many medications in doses double that of the prescribed amount and split them in half. Often, the pharmacist will split the pills for them. This saves money because many medications are sold for about the same price regardless of the dosage. Savings of 30 percent to 50 percent are not uncommon.

Generic Medications. For most patients, generic medications work just as well as branded drugs, and they 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.

Over-the-Counter Drugs. Patients often self-medicate with over-the-counter (OTC) drugs. 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 OTC drugs were previously available only by prescription.

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. For patients with chronic conditions that require continuing medication, mail-order and Internet pharmacies offer the best deals on prescription drugs. Some patients even buy drugs from Canada and 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 individuals with the cost of drugs. For example, Together RX is a joint program run by several drug companies. It 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. Slightly less than three-quarters of states have some type of drug assistance program for the low-income, the elderly and/or people with disabilities. Just over half of the states help seniors pay for drugs with state funds, while nine states have drug discount programs that allow seniors to purchase drugs at below-retail prices.

Potential Savings. How much can patients expect to save by using these techniques? We reviewed prices on Web-based pharmacies during the first quarter of 2003. We found that prices for the cardiovascular drug Tenormin, for instance, varied widely:

- In our survey, the price of 100 (50mg) doses of Tenormin ranged from \$121.90 at Drugstore.com to \$100.77 at AARP.
- Patients can save at least 75 percent over the lowest cost for the brand-name drug by switching to the generic alternative Atenolol.
- For the generic drug, prices ranged from \$25.33 at Eckerd.com to \$9.60 at Drugstore.com.
- Thus, consumers can lower the cost another 30 percent (from \$9.60 to \$6.75) by buying larger pills (100mg) and splitting them in half.

Smart buying of this drug lowers the potential overall cost by 94 percent — from a high of \$121.90 to a low of \$6.75.

Another example of potential savings is the antianxiety drug Xanax:

- In our survey, the price of 100 (0.5mg) doses of Xanax ranged from \$121.30 at AARP to \$109.92 at Drugstore.com.
- The generic substitute Alprazolam promises savings of at least 77 percent.
- Among the generics, the price ranged from \$25.33 at Eckerd to \$12.00 at Drugstore.com.
- Buying the larger dose (1mg) of the generic from Drugstore.com and splitting the pills in half cuts the cost from \$12.00 to \$6.00, another 50 percent reduction.

In all, patients can reduce the cost of Xanax from \$121.30 to \$6.00 — a 95 percent decrease — through smart buying techniques.

Introduction

Americans spent more than \$161 billion on prescription medicines last year and about \$16 billion more on over-the-counter (OTC) remedies.¹ Two-thirds of office visits to physicians result in prescription drug therapy.² Drug therapy is among the most efficient methods to treat many illnesses, but these drugs can be expensive. However, in many cases newer drugs are more effective than older, less expensive drugs.³ However, most patients can easily lower their annual 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 some tips on smart shopping, see Sidebar: “Checklist for Saving Money on Drugs.”]

Note: Some of the techniques described below involve buying different drugs from different 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 forgo one-source shopping need to be aware that they must find another way of ensuring that the drugs they take are not interacting in harmful ways.

Comparing Prices

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

Local Pharmacies. 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 the same brand-name medication and by 39 percent to 159 percent for generic medications.⁴

Wider price variations for generic equivalents are not unusual. An example is the generic form of Prozac (Fluoxetine) used to treat depression:⁵

- Many stores mark up Fluoxetine by 3,000 to 5,000 percent over its wholesale cost.⁶
- A survey in Pennsylvania found 100 20mg capsules selling for \$18.18 at one store, and \$286.99 at another; the average, across 13 stores surveyed, was \$148.⁷
- A similar survey in Florida found Fluoxetine varied from \$16.47 at one store to \$267.19 at another.⁸
- A survey of central Kansas found the identical Fluoxetine prescription for as little as \$12.69 and as much as \$226.39.⁹

“Prudent shopping can save consumers almost 10 percent on branded drugs and 81 percent on generics.”

Checklist for Saving Money on Drugs

Options for Saving Money on a Branded Drug

- Check on government programs to assist low-income, elderly and/or disabled persons with drug costs in the state where you live.¹
- Check on the drug manufacturer's programs to assist low-income, elderly and/or disabled patients with drug costs.²
- Compare prices in your locality.
- Compare prices over the Internet.³
- If practical, consider splitting pills.

Options for Saving Money on Drug Substitution

- Look for a less expensive drug with the same therapeutic benefits.
- Look for a generic drug.
- Look for an OTC drug with therapeutic benefits.
- In all cases, compare prices locally.
- Compare prices over the Internet.
- Consider buying in larger quantity and, where practical, pill splitting.

¹ For an evaluation of public and private programs that provide patients with drug assistance, see benefitscheckup.com.

² For information on drug company programs available to seniors, see needymeds.com.

³ Consumers should exercise caution to ensure that any Internet-based drug supplier is reputable. Patients using multiple sources for drugs should ensure that all pharmacies are aware of all medications taken to prevent adverse drug interactions.

“Small independent pharmacies often have better prices for generic medications than larger chain stores.”

Interestingly, the surveys show that small independent pharmacies often have better prices for generic medications than the large chain stores.¹⁰

Internet Information Services. A patient with a prescription can find a range of prices by checking a few Internet pharmacy Web sites. A unique Web site called DestinationRx.com collects prices from several competitive pharmacies, allowing consumers to compare prices without having to go to those individual pharmacy Web sites. The variation in prices can be considerable. At last check, they ranged from \$118.15 to a mere \$15.80 for a generic equivalent — a potential savings of more than \$100 on one prescription alone.¹¹

Rxaminer.com, cofounded by cardiologist Joseph C. Rogers, is a Web-based service that helps patients find medications that are comparable to but cheaper than the ones they currently take. Customers enter the names of medications and the dosages, and Rxaminer compares the medications, suggests substitutes (often two choices) and enables the user to print a report detailing potential savings from the substitutes. The patient can then discuss the report with his or her physician to see if a less costly medication is an option.

Therapeutic Drug Substitution

“Patients should ask their doctors if there are cheaper medications available.”

Patients can take the first step to saving on drugs at their physicians’ offices. This involves asking the physician if a prescribed medication is the only one available or whether there are cheaper alternatives — which may include alternative drug therapies, generic substitutes or over-the-counter drugs. For example, a recent study in the *Journal of the American Medical Association* found that two daily aspirins were as effective at preventing recurrent strokes in African Americans as a daily 500mg dose of the drug Ticlopidine.¹² This is significant, given that Ticlopidine can easily cost patients from \$60 to almost \$100 per month.¹³

The notion that patients should leave the choice of medications to physicians without any input is outdated. Unless they are informed, physicians may not consider the cost of medications, or be aware of their patient’s income or out-of-pocket costs. Physicians may not consider the willingness of patients to replace a branded drug with a less expensive generic drug that works just as well. By communicating with their doctors, patients may find a wealth of drug options.

Two conditions for which alternative medications are readily available are allergies and heartburn.

Case Study: Allergy Medications. Patients suffering from seasonal allergies have a myriad of choices, including prescription drugs, over-the-counter 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, but they can cause drowsiness.¹⁴ Studies have shown that these sedating antihistamines are often just as effective as newer, non-sedating ones.¹⁵

Second-generation antihistamines like Claritin are popular because they do not cause drowsiness.¹⁶ Although Claritin and its generic equivalent (Loratadine) are now available over the counter, they are more expensive than older OTC antihistamines. However, Claritin is cheaper than prescription alternatives, such as Allegra and Zyrtec.

How much can patients save by considering other treatments for their allergies? [See Appendix A.] Consider that:

- 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 more than \$205 for Claritin’s prescription-only replacement (Clarinet).¹⁷

“Another way to lower drug bills is to seek generic equivalent medications.”

- However, OTC Claritin (Loratadine) and its generic equivalent are available from Walgreens for less than \$65, about two-thirds less than other competing (second-generation) antihistamines.¹⁸
- For some patients other substitutes may work, such as the first-generation antihistamine Benadryl and its generic equivalent Diphenhydramine, which are available at Drugstore.com for about \$12 if purchased in quantities of 100 tablets.¹⁹ Although Benadryl causes drowsiness, those suffering with nighttime allergies might find this is the ideal drug. And at 12 cents per tablet, it costs 90 percent less than newer prescription drugs.²⁰

Case Study: Heartburn Medications. Patients also have many choices of stomach medications to treat peptic ulcers and gastroesophageal reflux disease (GERD) [see Appendix B]. Drugs to treat gastrointestinal (GI) conditions have been among the top sellers for well over a decade. For those with severe GERD, proton pump inhibitors (Prilosec, Prevacid, etc.) are the treatment of choice. Proton pump inhibitors were the most popular class of drugs in 2002 — with \$13 billion in sales.²¹ But they are not cheap. The cost for 100 doses of Prilosec is almost \$410 if purchased in small quantities from Walgreen’s Web site.²² Prevacid is similarly priced. However, purchasing 100 doses of generic Prilosec (Omeprazole) from Eckerd would save \$73.²³ For patients with little more than occasional indigestion, a histamine receptor antagonist such as Zantac or its generic equivalent Ranitidine may be sufficient.²⁴ Although Ranitidine is now available over the counter in 75mg tablets, it often prescribed in 150mg doses.²⁵ Among patients’ options:

- Purchasing 100 (150mg doses) from AARP’s Web site would cost slightly less than \$27, or 27 cents a dose.²⁶
- The AARP mail-order pharmacy sells 300mg generic Tagamet (Cimetidine) in quantities of 100 tablets for \$20.44, or about 20 cents per dose.
- Patients who do not do well on Zantac or Tagamet can choose the generic equivalent of Pepcid (Famotidine) for around 75 cents per 40mg tablet at Drugstore.com.²⁷
- Beginning in the fall of 2003, patients can purchase an OTC version of Prilosec for an anticipated price of \$25 to \$30 per month.²⁸

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 Walgreens.com, 10 Viagra tablets cost \$91.99 regardless of whether the dose is 25mg, 50mg or 100mg. Viagra is an odd-shaped tablet, difficult to split into two perfect halves.²⁹ To solve this problem, several firms now produce splitters designed just for the diamond-shaped Viagra tablet. Patients who buy double-dose tablets and split them in half literally save 50 percent.³⁰

An important consideration is whether or not a patient is able to accurately split a tablet in half. Elderly patients may find pill splitting difficult; however, some pharmacists will split or crush and encapsulate pills. Some medications are not good candidates for splitting, including extended release tablets, capsules and medications for many serious disorders.

Researchers at Stanford University found substantial consumer savings from splitting 11 of 265 commonly prescribed medications. These medications were not prepackaged by dose in, for instance, blister packs, were available in tablet form and came in several dosages.³¹ [See Table I.] Potential savings range from 23 percent to 50 percent for these drugs.³²

Generic Drug Substitutes

An effective way to lower drug bills is to seek generic equivalent medications whenever possible. According to the Prime Institute at the University of Minnesota, only 10 of the 50 drugs most frequently used by seniors in 2001 were generics; the remaining 40 were brand names.³³ By contrast, two-thirds

“Purchasing medications in doses double that of the prescribed amount and splitting them in half can often lower drug costs.”

TABLE I

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, pages 706-12.

of the drugs dispensed by the Veterans Affairs (VA) health system are generic, and they represent only 8 percent of the VA's prescription costs. In other words, brand-name drugs, comprising only one-third of the drugs dispensed by the VA, account for 92 percent of that system's drug costs.³⁴

For retail customers, generic drugs are generally priced from 20 percent to 80 percent lower than the original branded drug.³⁵ Thus the average cost for a generic prescription was \$14.70 in 2002, compared to \$77.02 for branded medications.³⁶ Only those medications whose patent has expired are available in generic form, however.

Generic medications now comprise almost half of the market for pharmaceuticals — up from just over 20 percent in 1985. This ratio is likely to increase, as many of the so-called blockbuster drugs have recently lost patent protections or will face generic competition within the next few years. By 2005, name-brand drugs with combined annual sales of \$100 billion will lose patent protection and face generic competition.³⁷ 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). When a blockbuster drug faces competition from multiple generic manufacturers, the price usually falls. For example, although 19 brand-name drugs had sales revenue of \$1 billion or more in 2000, no single generic drug did so precisely because of the fierce competition among drugs without patent protection.³⁸ 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 proposed regulatory change by the Bush administration would allow patent holders to receive only one 30-month delay while contesting competition from generic products.³⁹ Additionally, both the Bush administration and Congress are taking steps to speed generic drugs to market.⁴⁰ Thus consumers will have more opportunities to substitute generics for brand-name medications over the next few years.

“Generic medications now comprise almost half of the market for pharmaceuticals — up from just over 20 percent in 1985.”

Switching to Over-the-Counter Drugs

About 80 percent of the time, patients initially treat their medical problems with over-the-counter (OTC) drugs. Americans buy more than 5 billion OTC drug products each year — accounting for 60 percent of drugs used.⁴¹ Today consumers can choose from among more than 100,000 different OTC drug products.⁴² More than 600 OTC drugs were previously available only by prescription.⁴³ Utilizing these OTC medications can save patients money. For example:

- Over the past few years, powerful prescription ulcer medications such as Zantac (Ranitidine), Pepcid and Tagamet (Cimetidine) were moved from prescription-only to over the counter.⁴⁴
- In addition, strong pain relievers such as Advil (Ibuprofen) and Aleve (Naproxen) were approved for OTC sales.

- Cold and allergy medications such as first-generation antihistamines (e.g., Benadryl and its generic Diphenhydramine, Chlor-Trimeton and its generic Chlorpheniramine) and decongestants like Sudafed (Pseudoephedrine) have now been joined by Claritin (Loratadine), a second-generation antihistamine.

In fact, many blockbuster drugs originally available only by prescription are ultimately sold over the counter. In years past, the switch was usually done only at the request of the drugmaker, who had little incentive to make the request until patent protection was about to expire.⁴⁵ Recently the Food and Drug Administration (FDA) has taken a much more aggressive stance. Acting on a request from WellPoint Health Networks, which manages health care plans, an FDA panel voted to recommend OTC status for Claritin, Allegra and Zyrtec — the first time the FDA had taken such an action when the manufacturers had not requested and were opposed to the switch.⁴⁶

Over the next few years, many analysts predict that a flood of relatively new blockbuster drugs will enter the OTC market.⁴⁷ For example, an OTC version of the popular antiulcer drug Prilosec — which had \$3.7 billion sales and was the second biggest-selling drug in 2001⁴⁸ — should be available in the fall of 2003. It will be sold for around \$1 per capsule compared to \$4 for the prescription version.⁴⁹ Analysts expect several more non-sedating antihistamines, and possibly cholesterol-fighting drugs such as Mevacor (Lovastatin) and Pravachol (Pravastatin) will be approved for OTC sale.⁵⁰

When products move to the OTC market, their prices drop sharply.⁵¹ For example, Claritin, one of the best-selling allergy medications, was moved to the OTC market in December 2002. Analysts predict worldwide sales will drop to \$500 million in 2003 from \$3.1 billion in 2001.⁵² This does not mean people are buying less Claritin. Rather, they are paying less for what they buy and, in many cases, buying generic (Loratadine) versions of the drug.

Mail-Order Pharmacies

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.⁵³ For many patients with chronic conditions, mail-order pharmacies offer the best deals on prescription drugs. This is especially true if consumers are willing to purchase in quantity. Generic medications are especially subject to deep discounts for quantity purchases through mail-order firms. In many cases, ordering quantities of 100 tablets costs only a few dollars more than ordering 30 tablets.

For example, AARP Pharmacy Services has a discount prescription drug card program that provides medications and other health care products to the 35 million members of AARP. According to their chief pharmacy officer, customers save as much as 47 percent on prescription drugs, with an average of 19 percent off regular retail prices.⁵⁴

“Over the next few years, many blockbuster prescription drugs will be available over the counter.”

“Only branded drugs still under patent protection are cheaper in Canada; generic drugs are cheaper in the United States.”

Although ordering a prescription by mail may not work for occasional-use drugs, persons with chronic ailments taking medication on a regular basis would undoubtedly benefit from the savings mail-order pharmacies can bring.

Global Options

Pundits complain 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.⁵⁵ Nonetheless, Internet pharmacies based in Canada have recently become popular with some consumers.⁵⁶

This avenue is not without risks however. For one thing, Internet pharmacies claiming to be Canadian may not be. A study of Internet pharmacies appearing in the *Annals of Internal Medicine* found that only about 11 percent revealed the actual locations of the business.⁵⁷ A more recent study found that about one-third of Internet pharmacies purported to be Canadian were located elsewhere.⁵⁸ Furthermore, under the Prescription Drug Marketing Act of 1988, it is illegal to re-import drugs into the United States from foreign countries.

FDA officials say it is impossible for them to vouch for the safety and authenticity of drugs coming from sources outside the United States.⁵⁹ Prior to the 1988 act, counterfeit drugs were making their way onto pharmacy shelves after having been smuggled into the United States.⁶⁰ In two widely reported cases:

- About two million counterfeit birth control pills containing little or no active ingredient were smuggled into the United States.
- U.S. customs inspectors seized 1,800 counterfeit bottles of the antibiotic Ceclor.

Americans obtaining drugs abroad for personal use face similar hazards. In recent hearings, the FDA confirmed that some of the drugs illegally reimported into the United States for personal use are likely to be counterfeit, expired, incorrect dosage, tainted or mislabeled.⁶¹ Other potential risks of drug reimportation include fake or unapproved drugs, poor quality control involving packaging and storage, and a possibly incorrect diagnosis if the prescription is obtained online.⁶²

The World Health Organization (WHO) and others estimate that anywhere from 5 percent to 8 percent of drugs shipped to the United States are counterfeit, substandard or unapproved for use in this country.⁶³ Furthermore, a survey of foreign drug manufactures conducted for the Association of International Pharmaceutical Manufacturers found that about 12 percent of drugs consumed in Russia were counterfeit.⁶⁴ Another report estimated that up to 90 percent of the Viagra sold in Shanghai, China, was counterfeit.⁶⁵ Worldwide, the market in counterfeit drugs is estimated to be somewhere between \$20 billion and \$48 billion.⁶⁶

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

Financial Assistance to Lower Drug Costs

Doctors are often provided free samples by drug manufacturers, and 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.

Free Samples. About half of the money pharmaceutical companies spend on marketing is for drug samples for physicians to hand out to patients.⁶⁷ Physicians like this practice since it allows them to do something for their patients at no cost to either. Patients also like the practice since they feel they are getting something for nothing. In addition, free samples allow patients to try new therapies before purchasing expensive drugs. And for many patients, free samples are a convenience, allowing them to begin treatment without waiting for a prescription to be filled.

“About half of the money pharmaceutical companies spend on marketing is for physicians' drug samples.”

However, critics charge that drug samples strongly influence prescribing behavior. Often, the key to a sale is getting a sample into the hand of a patient with a chronic condition. Estimates vary, but Ipsos PharmTrends, a syndicated service that tracks consumer drug purchase behavior, claims that up to 50 percent of those who receive a sample prescription ultimately have it refilled with the same drug.⁶⁸ Although free samples reduce the initial treatment cost, patients should consider costs over the long term. Drug firms do not sample their cheaper products facing generic competition. They sample only their latest, most expensive medications.⁶⁹ For chronic conditions, patients may want to ask about alternative products that might be both effective and less expensive.⁷⁰

Pharmaceutical Company Assistance Programs.⁷¹ Many drug companies have programs to assist low-income, disabled or elderly individuals with the cost of drugs.⁷² Web site www.helpingpatients.org describes numerous drug company programs to assist seniors with drug needs. 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-McNeil, Bristol-Myers Squibb, GlaxoSmithKline and Janssen pharmaceuticals. Medicare beneficiaries having 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.

Novartis has its own Novartis Care Card. Medicare beneficiaries with no drug coverage and income no greater than 300 percent of the federal poverty level qualify. The discount is the same as the Together RX program for Novartis products — typically 25 percent to 40 percent. GlaxoSmithKline has

a medical savings program for seniors called the Orange Card. To be eligible, one must be a Medicare beneficiary without drug coverage whose income is no greater than \$26,000 per individual or \$35,000 per couple. The savings average about 30 percent. The Pfizer Share Card is particularly generous, charging a flat \$15 for each 30-day prescription. It is available to Medicare beneficiaries without drug coverage whose income is no greater than \$18,000 for individuals or \$24,000 per couple.

Lilly Answers is a discount program for seniors and people with disabilities. This program covers all Eli Lilly and Company products except controlled substances. To qualify for this program, one must have income of less than \$18,000 as an individual or \$24,000 as a couple. It too is very generous, with a \$12 flat rate for each 30-day prescription.

State Drug Assistance Programs. Slightly less than three-quarters of states have created or authorized a drug assistance program for the low-income, the elderly and/or the disabled. Just over half the states provide some type of direct subsidy, while nine states give a discount but not a subsidy.⁷³ In addition, many states provide drug subsidies under the Medicaid program. Persons 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 www.benefitscheckup.com.

“Most states have drug assistance programs for low-income, elderly and/or disabled patients.”

Price Comparisons for Specific Drugs

Consumers might use one of the methods previously discussed or combine them all. Total savings can be significant, as the following case studies show.

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

- The average cost for 100 tablets purchased 30 pills at a time on Drugstore.com is slightly less than \$122, but the same 50mg tablets would sell for \$100.77 at AARP’s pharmacy if purchased 100 at a time.
- By switching to generic Tenormin (Atenolol), the consumer can pay \$25.33 rather than \$100.77, saving about 75 percent over the cost of a name-brand drug.
- Further, the price of Atenolol varies from \$25.33 per 100 tablets at Eckerd.com if purchased in small quantities to \$9.60 if purchased 100 tablets at one time from Drugstore.com.
- Finally, if double-strength (100 mg) Atenolol tablets are purchased in quantity and split in half, the cost per 100 (50mg) doses falls to \$6.75.

“Drug companies offer discount cards that can save 20 to 40 percent.”

How to Save 94 Percent on a Cardiovascular Drug

(Prices for 100 Doses, Dose = 50mg)

	<u>Cost of 100 doses</u>	
<u>Tenormin (brand) 50mg</u>		
Drugstore.com (buying 30 tablets at a time)	\$121.90	} Comparison Shopping Savings: 17%
Eckerd (buying 30 tablets at a time)	\$114.87	
Drugstore.com (buying 90 tablets at a time)	\$111.64	
Eckerd (buying 100 tablets at a time)	\$109.02	
Walgreens (buying 60 tablets at a time)	\$104.98	
AARP (buying 100 tablets at a time)	\$100.77	
		} Generic Substitution Savings: 75%
<u>Atenolol (generic) 50mg</u>		
Eckerd (buying 30 tablets at a time)	\$25.33	} More Comparison Shopping Savings: 62%
Eckerd (buying 100 tablets at a time)	\$19.50	
CVS.com (buying 90 tablets at a time)	\$17.21	
Walgreens (buying 60 tablets at a time)	\$16.65	
Drugstore.com (buying 100 tablets at a time)	\$9.60	
		} Pill Splitting Savings: 30%
Atenolol (generic) 100mg split in half	\$6.75	

Consumers might choose to use one of the following methods or they might combine all of them. Total savings can be significant. Using all of these methods, a consumer for whom the cardiovascular drug Tenormin (Atenolol) is prescribed might save as much as 94 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 17 percent off the price of the branded drug Tenormin.

Substituting a Generic: The generic equivalent Atenolol would save almost 75 percent over the branded drug.

Shopping for the Lowest Price for Generic Drug: A consumer can save 62 percent off the price of its generic equivalent Atenolol.

Pill Splitting: Splitting a double-strength pill might save an additional 30 percent.

In this case, a patient could either spend \$121.90 per 100 doses of a name-brand drug or \$6.75 for 100 (split) doses of the equivalent generic medication, saving 94 percent.

How to Save 95 Percent on a Antianxiety Drug

(Prices for 100 Doses, Dose = 0.5mg)

	<u>Cost of 100 doses</u>	
Xanax (brand) 0.5mg		
AARP (buying 30 tablets at a time)	\$121.30	{ Comparison Shopping Savings: 17%
Eckerd (buying 30 tablets at a time)	\$117.60	
Walgreens (buying 60 tablets at a time)	\$116.65	
Drugstore.com (buying 30 tablets at a time)	\$116.33	
AARP (buying 100 tablets at a time)	\$113.29	
Eckerd (buying 100 tablets at a time)	\$111.76	
Drugstore.com (buying 90 tablets at a time)	\$109.92	
		{ Generic Substitution Savings: 77%
Alprazolam (generic) 0.5mg		
Eckerd (buying 30 tablets at a time)	\$25.33	{ More Comparison Shopping Savings: 53%
Eckerd (buying 100 tablets at a time)	\$19.50	
Walgreens (buying 60 tablets at a time)	\$18.32	
CVS.com (buying 90 tablets at a time)	\$17.32	
Drugstore.com (buying 90 tablets at a time)	\$12.00	
		{ Pill Splitting Savings: 50%
Alprazolam (generic) 1mg split in half	\$6.00	

Combining all these methods, a consumer prescribed the antianxiety drug Xanax (Alprazolam) might save as much as 95 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 17 percent off the price of the branded drug Xanax.

Substituting a Generic: The decision to go with the generic equivalent Alprazolam versus the brand name Xanax would save almost 77 percent.

Shopping for the Lowest Price for Generic Drug: A consumer can save 53 percent off the price of its generic equivalent Alprazolam.

Pill Splitting: Splitting a double-strength pill might save an addition 50 percent.

Case Study: Antianxiety Drugs. By smart shopping, a consumer prescribed the antianxiety drug Xanax (Alprazolam) might save as much as 95 percent. [See Sidebar: “How to Save on Antianxiety Drugs.”] For example:

- If purchased in small quantities from AARP’s Web site, Xanax (0.5mg) would cost about \$121.30 per 100 tablets; however, a shopper opting for Drugstore.com would pay \$109.92, a 17 percent savings.
- Generic Xanax (Alprazolam) can be purchased (100 0.5mg tablets) for about \$12.00 from Drugstore.com for a cost per dose of 12 cents.⁷⁴
- Furthermore, because double-strength (1mg) Alprazolam tablets are priced the same as 0.5mg tablets, patients can split the larger pills in half. The cost for 100 (0.5mg) doses would fall 50 percent to only to \$6, resulting in a savings of 95 percent off the most expensive option.

Conclusion

Drug therapy is often 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 drug 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.

“Most patients can easily lower their annual drug bills through smart shopping.”

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

- ¹ Prescription drug expenditures were \$121.5 billion in 2000, \$141.6 billion in 2001 and an estimated \$160.7 billion in 2002. See “Prescription Drug Expenditures Aggregate and per Capita Amounts, Percent Distribution and Average Annual Percent Change by Source of Funds: Selected Calendar Years 1980-2012” (Table 11), *National Health Care Expenditures Projections*, Centers for Medicare & Medicaid Services, U.S. Department of Health and Human Services, January 2003. 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.
- ² National Center for Health Statistics, cited in “Many Patients Receiving Medication,” USA Today Snapshots, *USA Today*, January 31 – February 2, 2003.
- ³ Frank Lichtenberg, “Benefits and Costs of Newer Drugs: An Update,” Working Paper No. 8996, June 2002, National Bureau of Economic Research.
- ⁴ “2002 Missouri Prescription Drug Pricing Survey,” Public Issue Management, 2002.
- ⁵ Although some of the following anecdotes are from regional surveys conducted by the news media, the results are consistent with a recent multi-state survey by a research institute. See RetireSafe.org, “Take the Rx Challenge: 2003 Retail Pharmacy Pricing Survey,” June 2003, Council for Government Reform.
- ⁶ Barbara West, “Massive Mark-Ups Found on Generic Drugs,” WFTV9, October 21, 2002.
- ⁷ Becky Thompson, “Generic Prescription Prices,” WPXI-TV (realpittsburgh.com), November 4, 2002.
- ⁸ West, “Massive Mark-Ups Found on Generic Drugs.”
- ⁹ Chris Koeberl, “The I-Team Investigates Pricing of Generic Drugs,” KWCH 12 Eyewitness News (KWCH.com), December 18, 2002.
- ¹⁰ Kathy Times, “Independents Often Beat Chains in Prescription Prices,” NBC13.com, November 25, 2002.
- ¹¹ Sample was taken on June 16, 2003.
- ¹² Philip B. Gorelick, “Aspirin and Ticlopidine for Prevention of Recurrent Stroke in Black Patients,” *Journal of the American Medical Association*, June 11, 2003, pages 2,947-57.
- ¹³ Price comparison was obtained from DestinationRX.com. A patient taking two (250mg) tablets per day purchased in quantity (e.g., 100 tablets) at RXUSA.com would spend \$59.31 per month compared to \$98.15 at Costco.com.
- ¹⁴ First-generation antihistamines also include Clistin (Carbinoxamine), Tavist (Clemastine), Chlor-Trimeton (Chlorpheniramine) and Dimetane (Brompheniramine).
- ¹⁵ 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 Sneezing Reflex in the Common Cold,” *Clinical Infectious Diseases*, November 1, 2001, pages 1,483-88.
- ¹⁶ “Newer Antihistamines,” *Medical Letter*, April 30, 2001.
- ¹⁷ Comparison capsules are Zyrtec 10mg and Clarinex 5mg at Eckerd.com.
- ¹⁸ Loratadine was priced in boxes of 20 tablets at Walgreens.com for \$12.99 per box.
- ¹⁹ Loratadine, sold under the trade name Alavert, is also available in 48-count boxes at Wal-Mart for about \$24, for a cost per tablet of about \$0.50. Diphenhydramine is available at Drugstore.com for about \$12 per 100 tablets, or 12 cents per tablet.
- ²⁰ At Drugstore.com, 100 doses of Allegra sells for \$123.32.
- ²¹ Gardiner Harris, “F.D.A. Approves Over-Counter Sales of Top Ulcer Drug,” *New York Times*, June 21, 2003.
- ²² Purchasing 100 doses of Prilosec (30 capsules at a time) from Walgreens.com costs \$409.97.
- ²³ Purchasing in quantities of 30 capsules would save almost \$0.73 per pill while purchasing in larger quantities would save greater sums.
- ²⁴ Histamine H₂-receptor antagonists also includes Pepcid (Famotidine) and Tagamet (Cimetidine).

- ²⁵ Ranitidine is available over the counter in 75mg tablets but is often prescribed in 150mg or even 300mg doses.
- ²⁶ 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.
- ²⁷ Purchased in quantities of 100 40mg tablets for \$75 per 100 40mg tablets.
- ²⁸ Gardiner Harris, "F.D.A. Approves Over-Counter Sales of Top Ulcer Drug," *New York Times*, June 21, 2003. The OTC version of Prilosec is expected in fall 2003, selling for about \$1 per capsule.
- ²⁹ Amanda Gardner, "How to Break a Blockbuster Drug in Half: Man Invents Device to Cut Odd-Shaped Viagra Pill," *HealthScoutNews*, December 5, 2002.
- ³⁰ Tara Parker-Pope, "An Easy Remedy: Cut Your Drug Bills in Half by Cutting Pills in Half," *Wall Street Journal*, July 27, 2001.
- ³¹ Randal S. Stafford and David C. Radley, "The Potential of Pill Splitting to Achieve Cost Savings," *American Journal of Managed Care*, August 2002, pages 706-12.
- ³² Susan J. Landers, "11 Pills Score as Candidates for Splitting," *American Medical News*, September 23/30, 2002.
- ³³ "Bitter Pill: The Rising Prices of Prescription Drugs for Older Americans," Publication No. 02-104, June 2002, Families USA.
- ³⁴ William M. Welch, "VA Offers Medicines at Bargain Prices," *USA Today*, June 18, 2003.
- ³⁵ Aidan Hollis, "Closing the FDA's Orange Book," *Regulation*, Winter 2001.
- ³⁶ Milt Freudenheim (New York Times News Service), "Prices of Generic Drugs Rising Much Faster than Brand-Name Counterparts" *Naples Daily News*, December 27, 2002.
- ³⁷ "Maximizing the Drug Lifecycle," Research Reports, *Reuters Business Insight*, August 2001.
- ³⁸ Prescription drug expenditures were \$121.8 billion in 2000. See Jaeger, "Drug Pricing & Consumer Costs."
- ³⁹ Chris Adams, "Pharmaceuticals Industry Blasts Bush's Bid to Ease Generic Rules," *Wall Street Journal*, December 26, 2002.
- ⁴⁰ Leila Abboud, "Bush Acts to Speed Generics to Market," *Wall Street Journal*, June 12, 2003, page A3.
- ⁴¹ "Fact Sheet: The Use of Over-the-Counter Medicines," National Council on Patient Information and Education, January 2002.
- ⁴² Harris Interactive, "Attitudes and Beliefs about the Use of Over-the-Counter Medicines: A Dose of Reality," National Council on Patient Information and Education (NCPPIE), January 2002.
- ⁴³ 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, pages 297-300. However, the Consumer Healthcare Products Association (CHPA) claims 700 OTC medications were available only by prescription 30 years ago.
- ⁴⁴ 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.
- ⁴⁵ Gaye Perry and Peter Mansell, "Rx-to-OTC Switching: The Way Forward for the Global Pharmaceutical Industry?" research report, Urch Publishing Ltd., September 2000.
- ⁴⁶ 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*, pages 999-1,050.
- ⁴⁷ Amy K. Erickson, "Rx-to-OTC Switches Offer Golden Opportunity," *Pharmacy Today*, 2002.
- ⁴⁸ "OTC Prilosec One Step Closer in US," *Pharmafocus News*, June 26, 2002; "Prilosec OTC Launch Delayed," *Pharmafocus News*, November 4, 2002.
- ⁴⁹ Gardiner Harris, "F.D.A. Approves Over-Counter Sales of Top Ulcer Drug," *New York Times*, June 21, 2003.
- ⁵⁰ Erickson, "Rx-to-OTC Switches Offer Golden Opportunity." *New York Times*, June 21, 2003. "Drugstore.com is taking advanced orders for OTC Prilosec at a price of \$29.99 per box of 42."

- ⁵¹ The prices of H₂ 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, pages 267-77.
- ⁵² “OTC Claritin to Hit Markets by Mid-December,” FDAnews Daily Bulletin, FDAnews.com, December 3, 2002.
- ⁵³ Correspondence from Thomas S. Paul, chief pharmacy officer for Ovations (United Health Group) which administers AARP’s pharmacy program.
- ⁵⁴ Diane West, “Mail-Order Rx Chips Away at Retail Sales,” *Drug Store News*, May 20, 2002.
- ⁵⁵ David Gratzner and Neil Seeman, “Granny Goes North: The Truth about Canada and Prescription Drugs,” *National Review*, May 22, 2000.
- ⁵⁶ “Canadian Pharmacies,” *Drugstore News*, December 16, 2002.
- ⁵⁷ Bernard S. Bloom and Ronald C. Iannacone, “Internet Availability of Prescription Pharmaceuticals to the Public,” *Annals of Internal Medicine*, December 7, 1999, pages 830-33.
- ⁵⁸ 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.
- ⁵⁹ See, for example, William K. Hubbard, Senior Associate Commissioner for Policy, Planning and Legislation, Food and Drug Administration, “Continuing Concerns over Imported Pharmaceuticals,” Testimony before the Subcommittee on Oversight and Investigations, U.S. House Committee on Energy and Commerce, June 7, 2001.
- ⁶⁰ Michael F. Conlan, “How Safe Is the Drug Supply?” *Drug Topics*, October 15, 2001.
- ⁶¹ Ibid.
- ⁶² Ibid.
- ⁶³ “Are Bogus Rxs from Abroad Killing Americans?” *Drug Topics*, June 19, 2000.
- ⁶⁴ Association of International Pharmaceutical Manufacturers, “Counterfeit Medicines Rise to 12 Percent of Total Russian Market,” Press Release, Association of International Pharmaceutical Manufacturers, April 25, 2002.
- ⁶⁵ Bernard A. Olsen, “Screening for Counterfeit Drugs Using Near-Infrared Spectroscopy,” *Pharmaceutical Technology*, June 2002.
- ⁶⁶ Judy Chi, “Experts Give Clues on How to Stay Clear of Counterfeit Drugs,” *Drug Topics*, May 6, 2002.
- ⁶⁷ In 2000, about \$7.9 billion drugs were distributed free as samples. This is about half of the \$15.7 billion the pharmaceutical industry spent on marketing in 2000. For a critical article on many of the drug industry’s marketing efforts, see Jeff Gammage and Karl Stark, “Under the Influence,” *Philadelphia Inquirer*, March 9, 2002.
- ⁶⁸ Between one-quarter to one-half of patients who had requested a drug sample ultimately filled a prescription of the sampled drug.
- ⁶⁹ “An Ample Sample?” *American Medical News*, October 16, 2000.
- ⁷⁰ Many clinics and university teaching hospitals no longer use free samples. They claim that, in the long run it is cheaper to prescribe (and purchase) generic medications than offer patients free samples of expensive medications that often must be refilled at significant cost. See Leigh Page, “More Clinics Ban Drug Samples, Citing Cost, Safety Concerns,” *American Medical News*, October 16, 2000. Another reason many clinics have stopped distributing free samples is because of the effort required to comply with federal regulation. See Fred Gebhart, “Pharmacists Welcome Vouchers in Place of Drug Samples,” *Drug Topics*, January 21, 2002.
- ⁷¹ For a list of discount programs for specific medications, see “Drug List,” Needymeds.com, March 30, 2003, accessible at www.needymeds.com/drugs.html. To see if you might qualify for various programs, see www.helpingpatients.org.
- ⁷² For a list of discount programs for specific medications, see “Drug List,” Needymeds.com, March 30, 2003, accessible at <http://www.needymeds.com/drugs.html>.
- ⁷³ Richard Cauchi, “State Pharmaceutical Assistance Programs,” National Conference of State Legislators, June 9, 2003, accessible at <http://www.ncsl.org/programs/health/drugaid.htm>.
- ⁷⁴ Eckerd.com sells Alprazolam for just over \$7.60 for a 30-day supply.

APPENDIX A

Common Doses of Sinus Allergy Medication

<u>Allegra 60mg</u>	<u>Cost of 100 doses</u>
Drugstore.com (buying 100 tablets at a time)	\$123.32
Eckerd (buying 30 tablets at a time)	\$135.27
<u>Zyrtec 10mg</u>	
Drugstore.com (buying 100 tablets at a time)	\$181.10
Eckerd (buying 100 tablets at a time)	\$192.36
Walgreens (buying 30 tablets at a time)	\$206.63
<u>Clarinet 5mg</u>	
AARP (buying 100 tablets at a time)	\$196.08
Drugstore.com (buying 100 tablets at a time)	\$205.54
Eckerd (buying 30 tablets at a time)	\$250.53
<u>Claritin (Loratadine) 10mg</u>	
Walgreens (buying 20 tablets at a time)	\$79.95
Drugstore.com (buying 20 tablets at a time)	\$99.95
<u>Loratadine (generic) 10mg</u>	
Walgreens (buying 20 tablets at a time)	\$64.95
Drugstore.com (buying 20 tablets at a time)	\$74.95
<u>Benadryl (Diphenhydramine) 25mg</u>	
Drugstore.com (buying 100 tablets at a time)	\$11.99
Walgreens (buying 24 tablets at a time)	\$24.96
<u>Diphenhydramine (generic) 25mg</u>	
Walgreens (buying 48 tablets at a time)	\$10.40
Drugstore.com (buying 100 capsules at a time)	\$12.53

Source: Author's Web site surveys conducted May 2003.

Note: Dose represents standard doses commonly prescribed daily. 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.

For instance, Allegra is available in 30mg, 60mg and 180mg tablets. Zyrtec is available in 5mg and 10mg tablets. Clarinet and Claritin (and the generic equivalent Loratadine) are available in 5mg and 10mg doses, respectively. Diphenhydramine, an OTC drug, is available in numerous dosages.

Second-generation 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.

APPENDIX B

Ulcer Medication

<u>Prilosec (Omeprazole) 20mg</u>	<u>Cost of 100 doses</u>
Drugstore.com (buying 90 capsules at a time)	\$335.99
Walgreens (buying 30 capsules at a time)	\$409.97
<u>Omeprazole (generic) 20mg</u>	
Drugstore.com (buying 90 capsules at a time)	\$319.99
Walgreens (buying 30 capsules at a time)	\$426.63
<u>Prevacid 30mg capsule</u>	
Drugstore.com (buying 90 capsules at a time)	\$374.43
Walgreens (buying 30 capsules at a time)	\$426.63
<u>Zantac (Ranitidine) 150mg</u>	
Walgreens (buying 80 75mg tablets at a time)	\$54.98
AARP (buying 20 75mg tablets at a time)	\$89.90
<u>Ranitidine (generic) 150mg</u>	
AARP (buying 60 75mg tablets at a time)	\$26.63
Walgreens (buying 60 75mg tablets at a time)	\$39.97
<u>Tagamet (Cimetidine) 300mg</u>	
Eckerd (buying 100 tablets at a time)	\$94.54
AARP (buying 100 tablets at a time)	\$96.62
Drugstore.com (buying 100 tablets at a time)	\$99.98
<u>Cimetidine (generic) 300mg</u>	
AARP (buying 100 tablets at a time)	\$20.44
Eckerd (buying 100 tablets at a time)	\$21.50
Drugstore.com (buying 100 tablets at a time)	\$29.99

Source: Author's Web site surveys conducted May 2003.

Note: Dose represents standard doses commonly prescribed daily. Some ulcer medications may be available in multiple doses, while others may be available only in a standard dosage. Many come in time-release formulations or might be taken more than once a day. For instance, Prilosec is available as a 10mg, 20mg and 40mg delayed-release capsule. Generic Prilosec (Omeprazole) is available as a 20mg delayed-release capsule. Prevacid is available as 15mg and 30mg delayed-release capsules. Zantac and its generic (Ranitidine) are available as 75mg, 150mg and 300mg tablets and capsules. Tagamet and its generic (Cimetidine) are commonly available in 200mg, 300mg, 400mg and even 800mg configurations.

Figures for Zantac and Ranitidine assume taking two 75mg OTC tablets either together or at different times during the day. Taking a different dose or changing the number of times taken per day would change the calculations.

Rantax (Ranitidine) and Tagamet (Cimetidine) are available OTC. Proton Pump Inhibitors are usually taken once per day. But H₂ antagonists might occasionally be prescribed for multiple doses per day. Doses used for analysis are commonly recommended or average doses. Taking a medication multiple times per day would alter these figures.

APPENDIX C

Cardiovascular Medication

<u>Tenormin (brand) 50mg</u>	<u>Cost of 100 doses¹</u>
Drugstore.com (buying 30 tablets at a time)	\$121.90
Eckerd (buying 30 tablets at a time)	\$114.87
Drugstore.com (buying 90 tablets at a time)	\$111.64
Eckerd (buying 100 tablets at a time)	\$109.02
Walgreens (buying 60 tablets at a time)	\$104.98
AARP (buying 100 tablets at a time)	\$100.77
<u>Tenormin (brand) 100mg split in half</u>	
Eckerd (buying 90 tablets at a time)	\$96.59
Walgreens (buying 60 tablets at a time)	\$81.66
AARP	\$81.83
Drugstore.com (buying 90 tablets at a time)	\$80.32
<u>Atenolol (generic) 50mg</u>	
Eckerd (buying 30 tablets at a time)	\$25.33
Eckerd (buying 100 tablets at a time)	\$19.50
CVS.com (buying 90 tablets at a time)	\$17.21
Walgreens (buying 60 tablets at a time)	\$16.65
Drugstore.com (buying 100 tablets at a time)	\$9.60
<u>Atenolol (generic) 100mg split in half</u>	
Eckerd (buying 30 tablets at a time)	\$12.67
Eckerd (buying 100 tablets at a time)	\$9.75
CVS.com (buying 90 tablets at a time)	\$8.61
Walgreens (buying 60 tablets at a time)	\$8.33
Drugstore.com (buying 100 tablets at a time)	\$6.75

Source: Author's Web site surveys conducted winter 2003.

¹ One dose = 50mg

APPENDIX D

Antianxiety Medication

<u>Xanax (brand) 0.5mg</u>	<u>Cost of 100 doses¹</u>
AARP (buying 30 tablets at a time)	\$121.30
Eckerd (buying 30 tablets at a time)	\$117.60
Walgreens (buying 60 tablets at a time)	\$116.65
Drugstore.com (buying 30 tablets at a time)	\$116.33
AARP (buying 100 tablets at a time)	\$113.29
Eckerd (buying 100 tablets at a time)	\$111.76
Drugstore.com (buying 90 tablets at a time)	\$109.92
<u>Xanax (brand) 1mg split in half</u>	
Eckerd (buying 30 tablets at a time)	\$83.28
Eckerd (buying 100 tablets at a time)	\$80.36
AARP (buying 30 tablets at a time)	\$79.57
Drugstore.com (buying 30 tablets at a time)	\$76.00
Walgreens (buying 60 tablets at a time)	\$75.83
AARP (buying 100 tablets at a time)	\$75.58
Drugstore.com (buying 90 tablets at a time)	\$72.44
<u>Alprazolam (generic) 0.5mg</u>	
Eckerd (buying 30 tablets at a time)	\$25.33
Eckerd (buying 100 tablets at a time)	\$19.50
Walgreens (buying 60 tablets at a time)	\$18.32
CVS.com (buying 90 tablets at a time)	\$17.32
Drugstore.com (buying 90 tablets at a time)	\$12.00
<u>Alprazolam (generic) 1mg split in half</u>	
AARP (buying 30 tablets at a time)	\$13.95
Drugstore.com (buying 30 tablets at a time)	\$13.32
Eckerd (buying 30 tablets at a time)	\$12.67
CVS (buying 90 tablets at a time)	\$11.61
AARP (buying 100 tablets at a time)	\$10.20
Eckerd (buying 100 tablets at a time)	\$9.75
Drugstore.com (buying 100 tablets at a time)	\$6.00

Source: Author's Web site surveys conducted winter 2003.

¹ One dose = 0.5mg

About the Author

Devon M. Herrick is the Research Manager for the National Center for Policy Analysis, focusing on such health care issues as Internet-based medicine, the uninsured and drug development. Other areas in which Mr. Herrick works include managed care, medical privacy and technology-related issues.

Prior to joining the NCPA, he was a research assistant at the University of Texas at Dallas where he worked for the Bruton Center for Development Studies. In addition, Mr. Herrick has worked in health care accounting and financial management for a Dallas-area health care system.

Mr. Herrick has training in financial analysis and health economics. He received his Bachelor of Science degree in accounting from the University of Central Oklahoma in 1984 and a Master of Business Administration degree from Oklahoma City University in 1985.

He also holds a Master's in Business Administration from Amber University and a Master's in Public Affairs from the University of Texas at Dallas. He is a candidate for a Ph.D. in political economy from the University of Texas at Dallas with a concentration in economic development, to be conferred in August 2003. Mr. Herrick's dissertation research field is an empirical analysis of the Internet and disease advocacy.

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) 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) 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) links visitors to the best available information, including studies produced by think tanks all over the world. Britannica.com named the 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

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- SEN. PHIL GRAMM

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

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