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Inflated Claims about Drug Prices

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Rising pharmaceutical prices have been the subject of much debate in Congress. Reports from AARP and Families USA have heightened concerns among policymakers and the public about the affordability of prescription drugs. Those reports are misleading. A growing number of people are becoming informed consumers, purchasing their medicines at a discount, and turning to lower-cost generics and over-the-counter versions of brand-name drugs. The new Medicare drug benefit will also result in sharply lower drug costs for seniors.

Recent articles by AARP and Families USA have suggested that the prices of prescription drugs are rising rapidly, at rates well above general inflation.[1] AARP, for example, reported that the price of brand-name drugs rose 7.1 percent in 2004, compared to a 2.7 percent increase in the overall price level for consumer goods. Such reports raise concerns about whether consumers—particularly seniors—can afford their medicines.

The price trends reported by the two organizations are provocative. The increases are higher than those reported by the Bureau of Labor Statistics, the federal agency that publishes the official measure of consumer prices. Did the private groups measure trends in drug prices accurately? What do such trends, even accurately measured, tell us about the cost of pharmaceuticals paid by seniors?

The methods used by AARP and Families USA to measure trends in drug prices have serious limitations. The organizations use wholesale prices rather than the actual prices paid by seniors at their local pharmacy. Wholesale prices do not incorporate the discounts that are commonly offered by prescription drug manufacturers, and they do not reflect the savings that consumers can realize by careful shopping.

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Lower prescription prices are available through discount retail pharmacies and mail order. Consumers can save even more by switching to lower-cost generics when available. Several blockbuster drugs have moved over the counter in recent years, making greater savings available to millions of people. The AARP and Families USA reports do not reflect the shift that consumers have made to lower-cost retail outlets and less expensive pharmaceuticals.

Moreover, a focus on prices alone ignores the important role of health insurance in reducing the cost of prescription drugs. Insurance typically limits the cost paid by consumers to an amount that is well below the retail price of the prescription. Most seniors have such coverage today, and all seniors will have access to the Medicare prescription drug benefit beginning in January 2006. With the new Medicare benefit, no senior will have to pay the full retail price for prescription drugs.

Measuring Pharmaceutical Prices

Like other health services, the price that a consumer pays for prescription drugs depends on a variety of factors. Which drugs are prescribed? Are there lower-priced alternatives that will work as well? Where is the drug purchased? Does insurance cover part of the cost of the drug? Different

consumers with the same illness could face greatly different prices for their medications depending on the answers to such questions.

At least in part because of diversity in retail sources of pharmaceuticals and payment arrangements, available data on pharmaceutical prices have serious limitations. Actual retail prices on specific drugs are generally unavailable, but several sources report wholesale price information.

Families USA uses average wholesale prices (AWPs) obtained from Medi-Span's MDDB Select data base.[2] AWP is a suggested list price for the wholesaler's charge to pharmacies. AARP relies on wholesale acquisition cost (WAC) data published in Medi-Span's Price-Chek PC database. WAC is the price charged by drug manufacturers to wholesalers, but it is not the final transaction price. Neither AWP nor WAC incorporates any manufacturers' discounts and rebates, which are often substantial and vary from product to product. They also do not include dispensing fees or other markups that the pharmacist might charge the consumer as part of the retail price.

None of the published reports offers empirical evidence that either AWP or WAC is a good proxy for retail prices paid by consumers for their medications. AARP indicates that WAC price *levels* do not accurately reflect retail prices, but they assert without proof that WAC price *trends* mirror trends in retail prices with reasonable accuracy for brand drugs. The AARP reports on generic drugs are more circumspect, stating that WAC overstates retail price trends for generics.[3]

This is a case of looking under the lamppost for a key lost in the dark. Wholesale prices are available in part because they are easier to collect than retail prices, which can be obtained practically only through a survey of pharmacies (as done in the Consumer Price Index; see Box). Availability does not mean validity, however. If we are to track trends in consumer prices, we must measure those prices directly or show hard evidence that another data series is a reasonable substitute.

AARP might be in a unique position to validate its wholesale price analysis, but it has not done so. About 2 million members age fifty and over use the AARP Pharmacy Service to fill both retail and mail-order prescriptions.[4] AARP presumably could use its own data on drug prices to test the accuracy of price trends derived from Medi-Span data. Sales data from the AARP pharmacy subsidiary were used in the reports, but price information was not used.

Measuring Pharmaceutical Prices in the Consumer Price Index

Medical care is one of the major components of the Consumer Price Index (CPI), published by the Bureau of Labor Statistics (BLS). The prices of prescription drugs, nonprescription drugs, and medical supplies are tracked on a monthly basis in the medical care commodities subcomponent of the CPI.[a] Data are collected from a rotating sample of retail outlets and products to assure that the index is nationally representative of the prices paid by consumers for their prescriptions and other medical products.

Six months after a generic version of a prescription drug becomes available, the BLS determines whether to substitute the generic price for that of the brand-name product at the surveyed stores. The chance of selecting a version of the drug is proportional to the sales of each version. If a generic has greater sales than the brand-name drug, it has a better chance of being selected for the CPI sample in place of the original product. The six-month lag allows the new version to establish itself in the market.

The price that is collected by BLS represents the total payment received by the retail outlet for the drug, regardless of the source of payment. That includes payments directly from consumers plus any payment from a third party (including private insurers, Medicaid, and other federal and state programs).

The CPI provides information on the final transaction price at the retail outlet, and thus captures the full retail price of each pharmaceutical. In contrast, the measures used by Families USA and AARP represent prices at the manufacturer or wholesaler level without taking into account manufacturers' discounts and retailing costs.

a. For more information, see BLS, *Measuring Price Change for Medical Care in the CPI,* Summary, 97–9 (revised), available at www.bls.gov/cpi.

Consumers Have Choices

Consumers can lower the price they pay for their medications by being careful shoppers. That can mean seeking out lower-cost distributors, such as legitimate Internet pharmacies or mail-order services associated with their

local retail pharmacies. Even greater savings are possible if lower-priced generics or over-the-counter formulations can be substituted for branded prescription drugs.

Where to Purchase

Retail prices for prescription drugs vary widely depending on where the consumer makes the purchase. Storefront pharmacies that have a low volume of sales are likely to have the highest prices, while large mail-order operations tend to have the lowest prices. The convenience of the local retail pharmacy typically comes at a price because of higher overhead costs and a lower ability to negotiate discounts with manufacturers.

The savings from careful shopping can be substantial. Consumers could save 10 to 40 percent by shopping for the best price for brand-name prescriptions, based on an analysis of ten top-selling products.[5] Prevacid, a popular anti-ulcer drug, is a typical example. Prices were collected from five well-known sales outlets accessible through the Internet.[6] The best deal was priced at $120.10 for a month's supply, but the price was more than 20 percent higher at one of the retailers we checked (see figure 1). That translates into an annual saving of nearly $300 a year for a consumer who needs the prescription on a daily basis.

FIGURE 1: Prevacid, Thirty-Day Supply

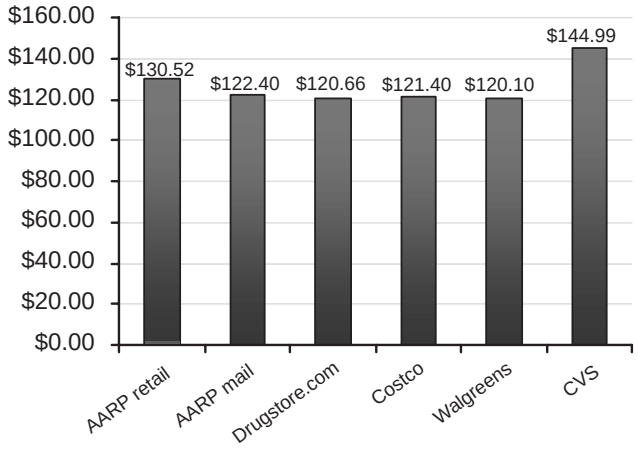
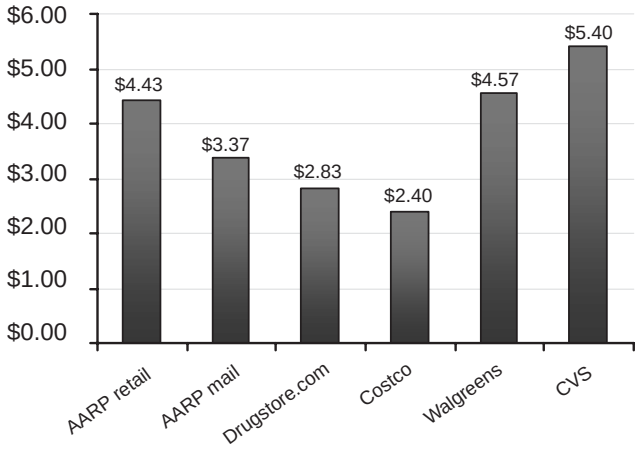


FIGURE 2: Atenolol, Thirty-Day Supply



Since generic drugs are already priced below the brand-name equivalent, the potential savings from shopping for the lowest price is much smaller. The percentage savings are larger—in many cases, well over 100 percent—but the dollar savings are smaller than what we found for brand-name products.[7] For example, the beta blocker atenolol could be purchased for as little as $2.40 for a month's supply at the lowest-priced outlet or as much as $5.40 at the highest-priced outlet in our sample (see figure 2). The 125-percent savings translates into an annual cost reduction of only $36.

These examples clearly demonstrate that where you purchase your medications can have a tangible bottom line effect on the amount you pay, particularly for brand-name pharmaceuticals. By ignoring such savings, the Families USA and AARP reports exaggerate the impact of prescription price increases on the consumer.

What to Purchase

Consumers can save by purchasing lower-priced drugs when they are available. Lower cost for consumers also translates into lower health insurance costs for employers who sponsor health coverage for their workers and retirees. Insurers have turned to specialized pharmacy benefits managers (PBMs) to limit the growth of prescription drug costs. That has meant increased use of generics and over-the-counter (OTC) versions of branded drugs.

The response to financial incentives has been strong. Drugs dispensed in generic form increased from 19 percent of all prescriptions in 1984 to 47 percent in 2001.[8] Because the average generic price is considerably below the price of branded drugs, that represents only 18 percent of total prescription sales. The increased use of step-therapy programs that promote generics as the first line in treating illness and the release of several high-profile generics in recent years have contributed to that increase.

The introduction of a new generic drug means substantial savings for consumers, which can result in a large and rapid swing in market share to the new product. A recent study by Professor Benjamin Druss and colleagues published in *Health Affairs* examined the impact of generic Prozac on prescriptions filled by AdvancePCS, one of the largest PBMs in the United States.[9]

The generic form of Prozac, a selective serotonin reuptake inhibitor (SSRI), was introduced in August 2001. Prior to that release, Prozac had been the top-selling antidepressant medication and the fifth most commonly prescribed drug in the United States, with annual sales of $2.7 billion. Within two weeks of the generic's release, prescriptions for it exceeded those of the branded product. Twenty weeks after the release, generic fluoxetine (the chemical name of the drug) represented nearly 70 percent of all fluoxetine prescriptions.[10]

Price to the consumer was an important factor in the shift to the generic formulation. The study found that plan enrollees who had to pay a sizeable portion of the cost of the drug were more likely to switch to the generic. People who had to pay $20 or more were 1.4 times more likely to shift to generic fluoxetine than those whose out-of-pocket costs were less than $10. Efforts by the PBM to promote the lower-priced product directly with physicians also contributed to the shift in sales.[11]

The use of generics is likely to grow over the next several years. According to Express Scripts, the pharmaceutical industry is in the largest patent expiration cycle it has ever seen.[12] Products that account for $38 billion in sales are expected to have generic competition by the end of 2008.

In addition to generic competition, a number of blockbuster drugs have gone to over-the-counter status, with prices dropping accordingly. OTC Claritin was launched in December 2002, and OTC Prilosec was launched in September 2003. Those products helped reduce the costs per prescription for antihistamines and gastrointestinal drugs, respectively.

The savings that are possible with OTC drugs are substantial. For example, loratadine, the active ingredient in Claritin, is available in prescription and over-the-counter forms, and the generic product is available in branded and unbranded forms. The Claritin-branded version of OTC loratadine is three times the cost of unbranded OTC loratadine—$23.97 compared to $7.50 for a month's supply.[13] The price of prescription Claritin was substantially higher prior to the introduction of the OTC version—$96.90 for a month's supply in 2002.[14]

According to Express Scripts, this may only be the tip of the OTC iceberg. "In 2003, the [Food and Drug Administration] showed a new willingness to discuss possible OTC approval for drugs in some categories previously regarded as off-limits. With the approvals of Claritin and Prilosec, it is likely that additional antihistamines and proton pump inhibitors will eventually be sold as OTC products."[15]

Overstated Trends

With the wide range of sales and product options that can reduce the price of prescriptions, a narrow focus on drug price trends can overstate the trend in costs actually paid by consumers. AARP published separate reports on prices for brands and generics, which ignores shifts in the patterns of prescription purchases that reduce the cost of treating illness. Families USA published estimates of price trends for brand drugs only.[16]

A simple example illustrates the bias caused by examining only brand prices (see table 1). The 7-percent increase in brand drug costs assumed in the example is balanced by the lower cost and slower price growth of generics. That yields 5-percent growth in total drug spending by consumers. (The values used here are illustrative, but were chosen to be representative of the prices and spending patterns typical for Medicare-eligible retirees with fairly generous employer-sponsored coverage and a relatively modest level of utilization-management.) This example shows that relatively low prices and modest price increases of generic drugs help to hold down the overall cost of drug treatment and moderate the effect of price inflation.

A meaningful measure of price trends affecting seniors would account for spending on both brand-name and generic drugs, and would reflect the increasing use of generics by seniors that we have observed. Because Families USA reports information only on brand-name drugs, its analysis overstates the impact of drug price increases on seniors, but the extent of that bias cannot be determined.

AARP reports separate trends for brand-name and generic drugs, but fails to produce a single summary measure that accounts for all drug purchases. The resulting bias could be estimated since the requisite price and sales information for each of the drugs was available to AARP's analysts in developing their reports, but AARP has not made such information publicly available.

Lower prices have caused sales to shift toward generic drugs, a trend that has been promoted by PBMs. Express Scripts reports that the use of generic medications among its enrollees increased from 2001 through 2003, reaching 48 percent of prescriptions filled at the end of the period. This shift had the effect of reducing annual cost increases by 1.4 percent in 2001, 2.3 percent in 2002, and 2.5 percent in 2003.[17] This phenomenon is not unique to Express Scripts. Caremark reports that just those generics introduced since 2001 reduced Caremark's drug spending in 2003 by 3.1 percent. Caremark's total generic dispensing rate increased from 40.8 percent in 2002 to 43.7 percent in 2003.[18]

Increased use of mail-order pharmacies has a similar cost-lowering effect. While the price differential is not as large, mail-order pharmacies generally offer lower prices than do retail pharmacies, and deeper discounts to health plans. One study found that in 2001 the difference between the retail and mail-order price for drugs averaged $7.98 ($48.75 retail versus $40.77 mail-order).[19] Sales through mail-order pharmacies doubled between 1998 and 2001, growing from $10.7 billion to $20.7 billion.[20] Currently, the number of prescriptions filled through mail-order pharmacies is growing three times faster than the number of all prescriptions.[21] As individuals on maintenance medications continue to buy more of those drugs through mail-order pharmacies, the shift toward this lower-cost source of supply helps to moderate increases in drug spending.

How significant are the differences in manufacturer discounts between generic and brand-name drugs, and between retail and mail-order pharmacies? One rule of thumb is suggested by Express Scripts, which reports discounts of AWP minus 12 percent for brand-name drugs, and AWP minus 35 percent for generic drugs.[22] (Express Scripts' actual discounts are proprietary, but these estimates are intended to provide a realistic indication of changes in drug prices.)

A recent study performed for the Society of Actuaries suggests that actual market discounts are deeper than this, particularly for generic drugs (see table 2). It also confirms that mail-order discounts are larger than retail discounts.[23] Note that generics, which offer the greatest discount from AWP, also have the lowest average price prior to the discount.

TABLE 1: Effect of Increasing Use of Generics on Cost Increases

	Cost per Script[a]	% of Scripts	Cost Increase
2003			
Generic	$30.00	48%	
Brand	$129.00	52%	
Average[b]	$81.48	100%	
2004			
Generic	$30.90	49%	3%
Brand	$138.03	51%	7%
Average[b]	$85.54	100%	5%

SOURCE: Authors' calculations.
NOTES: a. Cost per prescription net of discounts. b. Weighted by the percentage of generics and branded drugs purchased

TABLE 2: Typical Discounts and Dispensing Fees

	Discount from AWP		Dispensing Fee	
	Retail	Mail	Retail	Mail
Generic	45%	50%	$2.00	$0.00
Brand	14%	18%	$2.00	$0.00

SOURCE: Trygstad, Feeser, and Berger, *Projected Cost Analysis of Potential Medicare Pharmacy Plan Designs*.

TABLE 3: Discounts from AWP for PBMs Serving FEHBP

	RETAIL	MAIL
Brand	18%	27%
Generic	47%	53%

SOURCE: GAO, *Federal Employees' Health Benefits: Effects of Using Pharmacy Benefit Managers on Health Plans, Enrollees, and Pharmacies*.

Similar savings levels have been reported for the Federal Employees' Health Benefits Program (FEHBP) by the Government Accountability Office (GAO), based on a survey of prices for fourteen brand-name drugs and four generic drugs (see table 3). In addition, GAO found that pharmacy benefit managers receive rebate payments that reduced the annual cost of drugs by an estimated 3 to 9 percent.[24]

TABLE 4: Drug Inflation Compared to Other Forms of Health Care

	Annual Change in Consumer Price Index (All Urban Consumers)			
	All Medical Care	Professional Services	Hospital and Related Services	Prescription Drugs and Medical Supplies
2000	4.1%	3.7%	5.9%	4.4%
2001	4.6%	3.7%	6.6%	5.4%
2002	4.7%	3.0%	8.7%	5.2%
2003	4.0%	2.9%	7.3%	3.1%
2004	4.4%	3.9%	5.9%	3.3%

SOURCE: U.S. Bureau of Labor Statistics, available at http://www.bls.gov/cpi.

What These Choices Mean

Consumers are increasingly using generic drugs and mail-order pharmacies. When generic equivalents are available, they are generally much less expensive than the brand-name alternative. For those with prescription drug coverage, they are also more deeply discounted. For maintenance drugs, buying through a mail-order pharmacy provides an additional modest level of savings. The natural tendency of consumers and health-plan sponsors to shop for the best price on the drugs they buy is helping to moderate the growth in prescription drug spending.

Few Consumers Pay Full Price

The AARP and Families USA reports attempt to estimate the growth in prices paid by consumers who face the full retail price of their prescriptions. Those reports do not account for the opportunities consumers have to lower the prices they pay by shopping wisely and selecting medically appropriate lower-cost pharmaceuticals. Those omissions overstate the trend in costs paid by consumers for their prescriptions. The overstatement is exacerbated by the failure to include the additional savings from health insurance benefits that cover part of the cost of medications.

The overwhelming majority of health insurance programs include benefits for prescription drugs. Virtually all employer-sponsored health benefit plans offer drug coverage.[25] With the exception of high-deductible plans associated with medical savings accounts (MSAs) or health savings accounts (HSAs), most individually purchased health plans also include drug coverage. A 2003 survey of comprehensive health insurance plans purchased on the individual market found that 78 percent of indemnity plans, 77 percent of preferred provider organization (PPOs), and 100 percent of health maintenance organizations (HMOs) included drug coverage.[26] In 2004, 81 percent of individual policies purchased through the online broker eHealthInsurance included drug coverage.[27]

Even before prescription benefits become available through the Medicare program in January 2006, about three-quarters of Medicare beneficiaries already have drug coverage.[28] With the advent of the Medicare Part D program, all Medicare-eligible individuals will be guaranteed access to a basic level of assistance with drug expenses.

Because the new benefit is heavily subsidized, the vast majority of Medicare beneficiaries can be expected to participate in either the government-sponsored drug program or an employer-sponsored plan. Seniors will face an average out-of-pocket cost of $792 next year under the Medicare drug benefit—or 28 percent of the full cost of their prescriptions.[29] Millions of low-income seniors will have access to nearly free prescriptions. The relatively few seniors currently without insurance coverage or other assistance for the cost of medicines will have access to discounts and subsidies under Medicare Part D that will substantially reduce their financial burden.

Value Matters Too

Drugs offer the promise of avoiding surgery and preventing hospitalization. Focus on price alone misses the larger picture: Are we getting value for our money?

How do pharmaceutical price increases compare to those for health care in general? As reported by the Bureau of Labor Statistics, the consumer price index for prescription drugs and other medical supplies has been growing at a rate consistent with the overall increase in health care prices (see table 4). In the last two years, the

increase in the price index for drugs and supplies has been significantly lower than that for hospital care.

One should not lose sight of the fact that price is only one factor affecting costs. We are using more prescriptions than ever before, which contributes to both the increase in spending on drugs and the effectiveness of medical treatment. While it is important to encourage consumers to be prudent purchasers, the availability of new ways to treat disease is of real benefit to millions of patients.

Consumerism Works

Given a choice between a product with a high price and an identical product with a low price, most people would purchase the less-costly alternative (unless someone else is paying for it). By focusing on the prices of brand-name drugs, Families USA and AARP downplay the shift toward lower-priced generics (including OTC versions) that has characterized the U.S. prescription drug market.

Americans are rapidly becoming savvy consumers, seeking out the best deals from the lowest-cost pharmaceutical retailers, secure in the knowledge that generic and brand-name versions have the same ingredients and the same potency. Information needed for comparison shopping has become more readily available through the Internet. Medicare, for example, has a year-old website for its discount card program that reports prices for hundreds of individual drugs available at retail and mail-order outlets around the country, and similar information will be available under the full drug benefit. New York recently announced that it will sponsor a website showing prices for 150 common prescription drugs sold in all pharmacies in the state, and other states are following suit.

Consumerism in the pharmaceutical market is here to stay, and the AARP can take some credit for that. AARP is one of the leaders in promoting price consciousness among seniors and negotiating lower drug costs through its discount pharmacy service. That is all the more reason for their next price trend report to show what is really happening to drug prices.

Notes

1. Families USA has published reports on price trend for prescription drugs annually since 1999. The latest report is Families USA, *Sticker Shock: Rising Prescription Drug Prices for Seniors*, Report, June 2004. The AARP Public Policy Institute recently published four reports on price trends for prescription drugs, each authored by David J. Gross, Stephen W. Schondelmeyer, and Susan O. Raetzman. Those reports are: *Trends in Manufacturer Prices of Brand Name Prescription Drugs Used by Older Americans, 2000 through 2003*, Report, May 2004; *Trends in Manufacturer Prices of Brand Name Prescription Drugs Used by Older Americans, 2004 Year-End Update*, Report, April 2005; *Trends in Manufacturer List Prices for Generic Prescription Drugs Used by Older Americans, 2001 through 2003*, Report, October 2004; and *Trends in Manufacturer List Prices of Generic Prescription Drugs Used by Older Americans, 2004 Year-End Update*, Report, April 2005.

2. Medi-Span is a private company that specializes in data from the pharmaceutical industry. Additional information on their data bases is available at www.medispan.com.

3. Generic price increases appear to be greatly overstated by AARP. For example, Express Scripts (a large pharmacy benefits manager, or PBM) reported a 3.3-percent increase in generic prices for 2003 while AARP reported a 13.3-percent increase. This comparison is limited evidence, however, since the Express Scripts estimate is based on AWP data rather than the net price to the consumer. See Express Scripts, *Drug Trend Report: 2003*, Report, June 2004, 30; and Gross et al., *Prices of Generic Prescription Drugs*, Report, April 2005, Figure 1.

4. Gross et al., *Prices of Brand Name Prescription Drugs*, Report, May 2004, A-1.

5. The list of brand-name drugs was based on AARP's ranking of the top sellers as reported in Gross et al., *Prices of Brand Name Prescription Drugs*, Report, May 2004. Those drugs are: Lipitor 10 mg, Plavix 75 mg, Fosamax 70 mg, Norvasc 5 mg, Celebrex 200 mg, Zocor 20 mg, Prevacid 30 mg, Protonix 40 mg, Lipitor 20 mg, and Norvasc 10 mg.

6. Those sales outlets offer online information on the discounted prices of many common pharmaceuticals. AARP offers discounts at retail pharmacies and through mail order. Costco, CVS, and Walgreens provide pricing information for their mail-order operations through the Internet, but each has retail operations whose prices may differ from the on-line prices reported here. Drugstore.com offers only mail-order service. All price data were current as of June 24, 2005.

7. Ten top-selling generic drugs were selected from AARP's ranking of the top sellers as reported in Gross et al., *Prices for Generic Prescription Drugs*, Report, October 2004. Those drugs are: hydrochlorothiazide 25 mg, furosemide 40 mg, gemfibrozil 600 mg, carbodopa/levodopa 25-100mg, torsemide 20 mg, atenolol 50 mg, methotrexate 2.5 mg, lisinopril 20 mg, levoxyl 100 mcg, and verapamil 240 mg. Some outlets did not list every one of these products on their websites.

8. Cynthia Smith, "Retail Prescription Drug Spending in the National Health Accounts," *Health Affairs 23*, no. 1 (January/February 2004): 160–297.

9. Benjamin G. Druss, Steven C. Marcus, Mark Olfson, and Harold Alan Pincus, "Listening to Generic Prozac: Winners, Losers, and Sideliners," *Health Affairs 23*, no. 5 (September/October 2004): 210–216.

10. Druss et al., "Listening to Generic Prozac," 211.

11. Druss et al., "Listening to Generic Prozac," 212–14.

12. Express Scripts, *Drug Trend Report: 2003*, 6.

13. Online prices for a thirty-day supply of loratadine (10 mg tablets) from CVS, current as of June 18, 2005.

14. Express Scripts, *Drug Trend Report: 2002*, Report, June 2003, 20.

15. Express Scripts, "Medicare, Generics and Over the Counter Drugs Top 2003 Pharmaceutical Developments," Press Release, January 13, 2004, available at http://phx.corporate-ir.net/phoenix.zhtml?c=69641&p=irol-newsArticle&ID=487395&highlight=.

16. The Families USA reports are limited to prescription drugs available solely under a specific brand name. That selection decision systematically excludes products that experience the greatest price competition—multiple source drugs available in brand name and generic versions, including drugs that have become available over-the-counter. This exclusion further biases the drug price trends estimated by Families USA.

17. Express Scripts, *Drug Trend Report: 2003*, 1, 27, and 35.

18. Caremark, *2004 Trend Report*, Report, 2004, 16–17.

19. Estimates based on total prescription drug claims of people age sixty-five and older in self-insured employer groups with prescription drug insurance plans administered by a national PBM. See Cindy Parks Thomas et al., "Impact of Health Plan Design and Management on Retirees' Prescription Drug Use and Spending, 2001," *Health Affairs* Web Exclusive, December 4, 2002.

20. National Institute for Health Care Management, *Prescription Drug Expenditures in 2001: Another Year of Escalating Costs*, revised version, Report, May 6, 2002, 9.

21. Marta Wosinska and Robert S. Huckman, "Generic Dispensing and Substitution in Mail and Retail Pharmacies," *Health Affairs* Web Exclusive, July 28, 2004.

22. Express Scripts, *Drug Trend Report: 2003*.

23. Lynette Trygstad, Tim Feeser, and Corey Berger, *Projected Cost Analysis of Potential Medicare Pharmacy Plan Designs*, study conducted by Reden and Anders for the Society of Actuaries, Society of Actuaries, July 9, 2003, 4–5. Assumptions were chosen for AWP discounts and dispensing fees based on a survey of the pharmacy contracts for eight managed care organizations.

24. U.S. General Accounting Office, *Federal Employees' Health Benefits: Effects of Using Pharmacy Benefit Managers on Health Plans, Enrollees and Pharmacies*, Report GAO-03-196, January 2003.

25. Jon Gabel et al., *Employer Health Benefits: 2004*, Kaiser Family Foundation Report, 2004, 106–107, Exhibits 8.2 and 8.3. Ninety-nine percent of small firms with three to 199 workers offering conventional insurance offered a drug benefit; 100 percent of all other firms and insurance types offered a drug benefit.

26. Thomas F. Wildsmith, *Individual Health Insurance: Wide Choice of Benefits Available*, Report, February 2004, available at http://www.ahipresearch.org/PDFs/20_AAHP-HIAA IndividualHI.pdf.

27. eHealthInsurance, *The Cost and Benefits of Individual Health Insurance Plans*, Fact Sheet, October 2004, available at content. ehealthinsurance.com/ehealthinsurance/expertcenterNew/FactSheets.html.

28. Dana Gelb Safran et al., "Prescription Drug Coverage and Seniors: Findings from a 2003 National Survey," *Health Affairs* Web Exclusive, April 19, 2005.

29. Congressional Budget Office, *A Detailed Description of CBO's Cost Estimate for the Medicare Prescription Drug Benefit*, Report, July 2004, 19, Table 4.