Medicare Rights Center

Public Citizen

National Legislative Association on Prescription Drug Prices

Truth is the Best Medicine.

Get the facts on prescription drug costs.

In 2003, Congress passed the law that added a drug benefit to Medicare, but prohibited the government from negotiating for lower prices with drug manufacturers. The Medicare drug benefit (Part D) is only available through private insurers, which individually negotiate drug prices for their members. Many in Congress now want to eliminate that prohibition and allow Medicare to use its substantial market power—43 million people with Medicare—to lower drug prices under Part D.

In response, the drug manufacturer's trade association, PhARMA, is spending millions on lobbyists and advertisements to convince Congress and the public that Medicare cannot save more than the private plans and that Medicare negotiating drug prices will limit people's access to medicines. A study released by the Institute for America's Future in April 2007 dispels that argument, finding that allowing Medicare to negotiate lower prices could save $30 billion a year.

To shed further light on PhARMA's misinformation campaign, three consumer advocate groups, the Medicare Rights Center, Public Citizen and the National Legislative Association on Prescription Drug Prices, joined forces on a joint campaign. "Truth is the Best Medicine" answers the pharmaceutical industry's mythmaking in opposition to drug price negotiations under Medicare.

Myth 1: Requiring Medicare to negotiate drug prices will cut off funding for the research and development (R&D) of new lifesaving drugs.

Myth 2: Part D is working well and there is no need to change it.

Myth 3: Formulary management and limitations on drug prices in other countries discourage research into new treatments and restrict access to necessary medicines.

Myth 4: Direct-to-consumer (DTC) drug advertising educates patients and improves their knowledge of available medicines.

Myth 5: The newest, most expensive drug is the best one for me.

Myth 6: I can rely on my doctors always to prescribe the best drug.

Myth 7: Prescription coverage from the Department of Veterans Affairs (VA) is overly restrictive, demonstrating that a drug benefit option under Original Medicare would hinder access to medically necessary drugs.

Myth 8: Pharmaceutical industry research drives innovation in new medicines.

Myth 9: The private sector does a better job than the government in negotiating drug prices.

The National Legislative Association on Prescription Drug Prices (NLARx) is a nonpartisan, nonprofit organization of state legislators from across the country who advocate for lowering prescription drug costs and increasing access to affordable medicines (www.nlarx.com).

The Medicare Rights Center (MRC) is the largest independent source of health care information and assistance in the United States for people with Medicare. Founded in 1989, MRC helps older adults and people with disabilities get good, affordable health care (www.medicarerights.org).

Public Citizen is a national, nonprofit consumer advocacy organization founded in 1971 to represent consumer interests in Congress, the executive branch and the courts (www.citizen.org).

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Myth 1: Requiring Medicare to negotiate drug prices will cut off funding for the research and development (R&D) of new lifesaving drugs.

Fact 1: Drug companies are already spending more than twice as much on marketing and advertising as on R&D.

In 2004, pharmaceutical companies spent, on average, nearly one-third (32 percent) of revenues on marketing, administration and advertising, compared with 14 percent on R&D.[1]

Fact 2: The drug industry is one of the most profitable industries in the country.

In 2005, the pharmaceutical industry kept 15.7 percent of revenue as profit, making it the fifth most profitable industry in the country.[2] The industry's high rates of return leave enough room for a significant reduction of drug prices without harming R&D.[3]

Fact 3: New 'breakthrough' drugs, the costliest to develop, actually account for only a small proportion of medicines produced by drug companies.

The majority of drugs that the pharmaceutical industry develops each year are so-called "me too" drugs—modified forms or new uses of existing drugs, which incur lower R&D costs,[4] such as the development of similar drugs following Gleevec, a breakthrough cancer drug.

Fact 4: The industry exaggerates the role of private drug companies in the R&D of 'breakthrough' drugs.

Taxpayer-funded research, particularly by the National Institutes of Health (NIH), forms a significant foundation for R&D by private drug companies. Most of the important new drugs introduced by the drug industry in the past 40 years were developed with some contribution from the public sector. Only 5 out of the 21 most influential drugs introduced between 1965 and 1992 were developed entirely by the private sector.[5]

Fact 5: Lowered drug prices would likely spur demand.

Public Citizen cites a study indicating that cutting drug prices by 40 percent for people with Medicare would have a minimal effect on profits due to increased demand. Furthermore, lowered drug prices would induce companies to boost R&D for new drugs to sustain themselves, since the industry depends on research to come out with new and "potentially lucrative" medicines.[6]

Myth 2: Part D is working well and there is no need to change it.

Fact 1: The majority of people with Medicare believe Part D should be improved.

Part D boosters love to cite the 80 percent satisfaction rate found by recent polls about the benefit, but they ignore other key findings. Seventy-three percent of older adults say that the current benefit is "too complicated" and 81 percent favor lifting the prohibition on Medicare drug price negotiations. Two-thirds of older adults support providing a drug benefit directly through Medicare.[7]

Fact 2: Part D plans have failed to lower drug costs.

Proponents point to average savings of $1,200 on drug costs under Part D as proof that plans have been able to keep prices low.[8] But the savings are almost entirely due to government subsidy: taxpayers fund 75 percent of the cost of Part D coverage. Prices for medications have actually increased under Part D[9] and only a little over half of the older adults enrolled in Part D plans say they are saving money with the benefit. Thirty-one percent are "paying about the same amount" as before, and 14 percent are actually paying *more* under Part D.[10]

Fact 3: The lower Part D costs touted by the Bush administration are simply revised projections.

Just because the initial cost projections were incorrect doesn't mean that Part D isn't overpriced. The actual costs of the program didn't match up with the projections because of lower than expected enrollment, slower increases in drug prices immediately before the program started, and premiums that were artificially low in order to attract enrollment—not because of successful market competition as the Centers for Medicare and Medicaid Services (CMS) claim.[11] In fact, $20 billion of the savings are due to lower than expected enrollment in Part D, while another $13 billion is due to slower increases in drug prices before the start of the Part D benefit.[12] And a full accounting of Part D costs for 2006 has not yet been done. For the people with Medicare enrolled in the program, premium costs are up, not down. In fact, average plan premiums for 2007 are up 13.2 percent from 2006, over three times the rate of inflation.[13]

Fact 4: Fewer Part D plans are offering comprehensive "doughnut hole" coverage.

Options for coverage in the "doughnut hole," the gap in coverage when individuals must pay the full cost of their medicines while continuing to pay premiums, are more limited in 2007. Although the administration touts an increase in plans that cover generic drugs in the doughnut hole, these offer little help to people who take the highly priced brand name drugs that put them in the doughnut hole in the first place. Humana Complete PDP received the highest enrollment in 2006 among plans offering gap coverage by covering both brand-name and generic drugs. Starting in 2007, however, it will switch to covering only generics in the doughnut hole.[14] In 11 states, people with Medicare have no access to stand-alone drug plans with gap coverage for brand-name medicines.[15]

Myth 3: Formulary management and limitations on drug prices in other countries discourage research into new treatments and restrict access to necessary medicines.

Fact 1: Other countries base formularies on clinical outcomes and the comparative effectiveness of drugs.

Australia's Pharmaceutical Benefits Scheme (PBS), which sets a comprehensive national drug formulary, subsidizes new drugs based on evidence of improved health outcomes and cost-effectiveness over existing drug treatments.[16] In Canada, provincial drug benefit plans that provide coverage for most elderly, disabled, and low-income individuals utilize cost management approaches based on clinical evaluations to negotiate with manufacturers to get the best price among similar medicines. Other insurers are then able to also get those lower prices because the provincial plans publish the prices in their formulary.[17]

Fact 2: National health programs in other countries use formularies and prices to reward innovation.

While average drug prices in European countries and Japan are generally substantially lower than American prices, prices for innovative biologics are actually as much as 20 percent higher. "The key here is that European and Japanese authorities are willing to approve high prices for therapies that represent innovation and clinical superiority relative to older therapies."[18]

Fact 3: Part D plans base formularies on secret rebates from drug manufacturers.

Unlike the health programs in many countries, Part D plans are not bound by independent, clinical assessments of drugs when making coverage and pricing decisions. Part D plans negotiate drug manufacturers to cover their drugs in exchange for rebates. Those rebates are kept secret and are not reflected in the prices people with Medicare pay at the pharmacy counter. Though Medicare is moving toward a system of tying doctor and hospital payments to quality measures, payments for drugs and to the private Part D plans are not linked to measures of clinical effectiveness.

Myth 4: Direct-to-consumer (DTC) drug advertising educates patients and improves their knowledge of available medicines.

Fact 1: Consumer advertising promotes unnecessary prescriptions.

Patients have increasingly begun to demand prescriptions for specific brand-name drugs they see advertised in magazines, on television and on the Internet. These ads often appear soon after a new drug is approved, before doctors have the time to learn about the drug's benefits and risks. About half of doctors—and primary care doctors in particular—report they feel "pressured" to prescribe specific brand-name drugs to patients who request them after seeing advertisements.[19]

Fact 2: Advertisements create patients.

Drug ads sell diseases and illnesses to consumers, convincing them that they have, or are at risk for, a certain disease and need the advertised drug. One recent example of such "disease mongering" is the multimillion dollar advertising and media campaign GlaxoSmithKline launched to "increase awareness" of restless legs syndrome in order to promote its newly approved drug to treat the condition. The ads overstate the condition's actual prevalence by a factor of about four, as well as the benefits of the drug.[20]

Fact 3: Advertisements do not provide good information.

Drug makers often overstate the benefits of advertised medicines, falsely claim superiority over competing products and downplay the risks of advertised drugs.[21] Ads also employ non-informational tactics to convince consumers that they need the drug. A new study finds that 95 percent of television drug ads use "positive emotional appeals," such as depicting a person who is happy after taking the advertised drug; 69 percent use "negative emotional appeals," showing people "in a fearful state" before using the product.[22] The Food and Drug Administration (FDA) sent 15 warning letters to drug companies in 2005 regarding misleading or false claims in ads, and 22 complaints last year.[23] However, the FDA is limited in how effectively it monitors the increasing number of drug advertising materials: the agency issues regulatory letters an average of 8 months *after* the problem drug ads first appear.[24]

Fact 4: Drug companies concentrate DTC spending on a small number of high-selling drugs.

Drug manufacturers focus their advertising on a small number of drugs, mainly the newest and most expensive drugs, and often those used to treat chronic conditions.[25] Such drugs may be taken for years at a time by millions of Americans with conditions such as high cholesterol, heart disease and diabetes. About 40 percent of DTC spending is on only 10 drugs, mainly new, expensive medicines for long-term use.[26] The rapid increase in spending on drug advertising over the past decade (from $1.1 billion in 1997 to $4.2 billion in 2005)[27] is a factor in the concurrent rise in expenditures for prescription drugs (the U.S. spent $188.5 billion on prescription drugs in 2004, up from $40.3 billion in 1990), as advertising influences both prescription use and shifts to more expensive drugs.[28] DTC spending pays off for drug companies: in 2000, every dollar spent on DTC advertising yielded $4.20 in additional drug sales.[29] As two advertising executives have stated, "The ultimate goal of DTC advertising is to stimulate consumers to ask their doctors about the advertised drug and then, hopefully, get the prescription."[30]

Myth 5: The newest, most expensive drug is the best one for me.

Fact 1: With newer drugs, there is less information available about long-term safety effects.

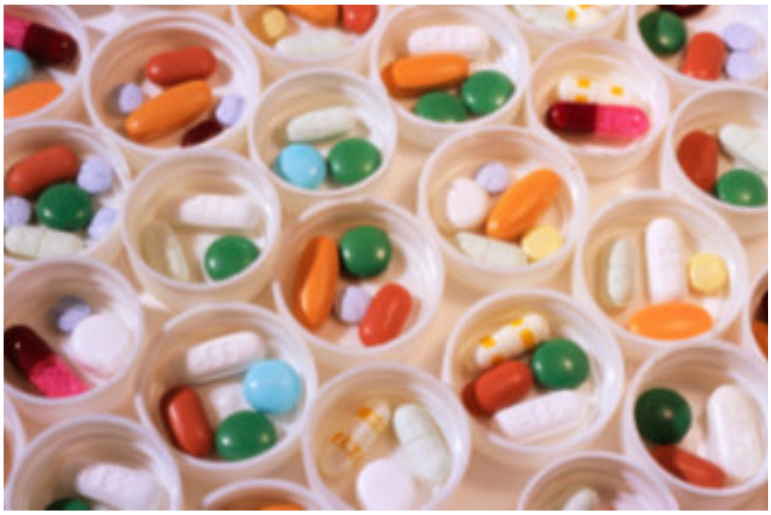
Safety problems with new drugs often do not emerge until after the drug is already available and has been marketed to consumers for a few years. Merck spent $160.8 million in 2000 promoting its blockbuster painkiller Vioxx, approved in 1999, making it the most heavily advertised drug that year. Subsequently, retail sales of the drug quadrupled from $329.5 million in 1999 to $1.5 billion in 2000,[31] reaching $2.3 billion in 2003.[32] Then in 2004, Vioxx was pulled off the market after another long-term study showed it posed serious risks for heart attack and stroke.[33] By the time the drug was withdrawn, it had been taken by an estimated 80 million people.[34] The drug is estimated to have caused 27,785 heart attacks and deaths between 1999 and 2003.[35]

Fact 2: FDA approval of a drug does not indicate that it is better than existing drugs.

FDA approval often merely means that a new drug has been proven to be more effective for treatment than a placebo—a sugar pill.[36] Frequently, the drug is not compared to similar medicines already on the market. Most new brand-name drugs that come out are "me too" drugs—modified forms or new uses of older, less expensive drugs.[37]

Fact 3: Evidence-based formularies limit the use of drugs to when they are medically necessary and decrease exposure to dangerous side effects.

Using research from the Oregon-based Drug Effectiveness Review Project, Medicaid programs in Oregon and Washington removed Vioxx from their formularies before Merck pulled the drug from its market.[38] Similarly, the Department of Veterans Affairs strictly limited the use of Vioxx and other drugs in its class to those with medical conditions warranting a prescription, limiting exposure to drugs that still lacked adequate safety data.[39] A similar formulary under Medicare that is, like the VA's, based on clinical efficacy and necessity would help protect the health of patients—and as the case of Vioxx shows, save lives.



Myth 6: I can rely on my doctors always to prescribe the best drug.

Fact 1: Drug marketing and promotions influence prescribing behavior.

The drug industry spends $12 billion a year marketing its prescription medications to doctors, with the expectation that its investment will pay off in increased prescriptions and sales.[40] Drug makers send sales representatives to doctors' offices and hospitals to "educate" doctors about their products, providing free meals, drug samples and gifts.[41] Companies provide free samples of the newest and most expensive drugs with the expectation that doctors will start patients on a treatment regimen with the samples and continue prescribing these expensive brand-name medicines rather than cheaper generics.[42] Studies have demonstrated that such marketing strategies influence which drugs doctors prescribe, often choosing an expensive brand-name drug over a generic competitor.[43] Companies frequently begin promoting new drugs to doctors before they are even approved, sponsoring continuing-education courses and ghostwriting medical journal articles, to fuel prescriptions—and thus profits—when the drugs arrive on the market.[44] Kaiser Permanente, a managed care organization, bans gift-taking from drug companies; its doctors prescribe heavily marketed drugs far less frequently than most other doctors.[45]

Fact 2: Marketing to doctors promotes expensive and often unnecessary prescriptions.

Doctors with frequent contact with the drug industry (such as accepting free samples and gifts, attending conferences and courses sponsored by drug companies, or meeting with sales representatives) are more likely to write higher numbers of prescriptions and to prescribe brand-name drugs rather than generic equivalents.[46] They are also less likely to prescribe based on clinical evidence.[47] Additionally, about a third of doctors who write guidelines and recommendations for drug treatments have ties to the pharmaceutical industry.[48] The National Kidney Foundation issued guidelines for anemia treatment that encourage dosages of the drug Epogen exceeding FDA-recommended levels, posing serious risks for heart attack and stroke in patients. Amgen, the drug's manufacturer, sponsored the guidelines and contributed $4 million to the foundation in 2005.[49]

Fact 3: Formulary management encourages prescriptions based on necessity, not promotions.

A comprehensive, evidence-based formulary provides sound guidance for doctors in prescribing effective drug regimens. A good model can be found in the national formulary under the Department of Veterans Affairs (VA), which keeps doctors up-to-date on available drug treatments—a better source than biased materials provided by drug companies—and helps relieve some of the pressures advertising puts on doctors to prescribe certain medicines.[50] The VA system has been able to achieve high rates of formulary compliance among doctors and significantly reduced drug prices.[51] State Medicaid programs' Preferred Drug Lists (PDLs) similarly guide prescribers toward effective treatments at low costs. When a particular drug on the formulary is not right for a patient, doctors are able to easily and efficiently obtain prior authorization, giving patients access to prescribed medicines.[52]

Myth 7: Prescription coverage from the Department of Veterans Affairs (VA) is overly restrictive, demonstrating that a drug benefit option under Original Medicare would hinder access to medically necessary drugs.

Fact 1: VA drug coverage is more comprehensive than Part D.

The VA actually has more drugs (4,778) on its formulary than are potentially covered under Medicare Part D (4,300—not all plans cover all these drugs).[53] In addition, the VA covers nonformulary drugs prescribed according to evidence-based guidelines, bringing the total number of drugs dispensed by the VA to 6,194.[54] By contrast, people with Medicare must navigate a complex appeals process to obtain coverage of nonformulary drugs.[55] Part D plans deny 95 percent of appeals.[56] The Institute of Medicine concluded in 2000 that the VA formulary is "not overly restrictive."[57] This finding is supported by statistics that show the VA does a better in using prescription drugs to control their patients' diabetes, high cholesterol and hypertension than private Medicare plans.[58]

Fact 2: Satisfaction with VA drug coverage is high.

Veterans are overwhelmingly satisfied with the care they receive from the VA and there is no evidence of a decline in use of the VA drug benefit since the inception of Part D.[59] Of the 2.5 million VA pharmacy users who were eligible for Part D, 400,000 were automatically enrolled in a Part D plan either by their employer or because they have Medicaid.[60] Only 250,000—ten percent of those eligible—voluntarily joined a Part D plan and there is no evidence that they have started using Part D coverage instead of the VA pharmacy benefit.[61]

Fact 3: The VA drug formulary keeps prices low.

The VA's use of an evidence-driven formulary has held down drug prices. The average price per prescription has actually declined over the last two years,[62] a time period when the prices of brand name drugs most used by older adults rose 12 percent.[63] For many commonly prescribed drugs, VA prices have cost half as much or less than the prices available under Part D plans.[64]

Myth 8: Pharmaceutical industry research drives innovation in new medicines.

Fact 1: Research federally funded by the National Institutes of Health (NIH) leads drug innovation.

Taxpayer-funded research, not research done by private drug companies, produces most innovative new drugs. The NIH does most of the basic research into understanding the mechanisms of disease in developing new drugs, which is the riskiest and most costly research.[65] [66] The drug industry's research activities build upon that basic research. For example, 80 percent of the research that led to the development of Zantac, a best-selling ulcer drug, was sponsored by U.S. taxpayer or foreign academic institutions, as well as 77 percent of research in developing the antidepressant Prozac.[67] Forty-five of the 50 top-selling drugs from 1992 to 1997 received government funding for some phase of development, according to an investigation by the *Boston Globe*. In all, taxpayers spent at least $175 million helping to develop these 50 drugs.[68]

Fact 2: Private sector research is driven by profits, not potential for innovation.

Drug companies invest most heavily in drugs—particularly "me-too" drugs—that profitably treat conditions prevalent in wealthy countries, rather than in research and development of innovative but unprofitable drugs for less common diseases or diseases that mainly affect poor populations.[69] Despite added incentives, such as tax credits, in the 1983 Orphan Drug Act, funding remains inadequate for research into "orphan drugs" that treat rare diseases and conditions affecting less than 200,000 people in America.[70]

It has been difficult to attract private funds for research into potential breakthrough treatments if there is no potential for large profits from patent monopolies.[71] For example, scientists recently discovered that a drug called dichloroacetate (DCA) may effectively halt the spread of cancer. However, drug companies have been uninterested in investing in further research because the drug is not patented and therefore could be produced as an inexpensive generic drug by multiple companies.

Fact 3: Drug studies sponsored by pharmaceutical companies are more likely to report positive outcomes.

Clinical trials to study the safety and efficacy of new drugs that are funded by drug companies are more likely to show favorable results than similar studies conducted by independent, non-profit entities. Recently, researchers found that 84 percent of breast cancer treatment studies funded by drug companies were positive, compared to only 54 percent of studies with other funding sources.[72] Industry-sponsored studies were also less likely to test the drug's effectiveness against a comparison group.

Myth 9: The private sector does a better job than the government in negotiating drug prices.

Fact 1: The switch from Medicaid to private Part D coverage has raised drug prices.

Private insurance companies offering the Part D drug benefit pay pharmaceutical manufacturers more for medicines than the government-operated Medicaid program did when it covered people with Medicare and Medicaid, say financial analysts who monitor drug companies. According to a recent *New York Times* article, Eli Lilly "is able to charge significantly more to Medicare than Medicaid" for its best-selling drug, Zyprexa, used to treat schizophrenia.[73] Profits for Pfizer, the world's largest drug company, have more than doubled in 2006—since the drug program began—compared to the year before.[74] The company pocketed almost $1.8 billion because of the switch of over six million people from Medicaid to Medicare drug coverage.[75]

The transition in drug coverage from Medicaid to Medicare reversed a trend toward slower growth in drug spending brought about by effective cost-control measures used by state Medicaid programs, according to researchers for the Centers for Medicare & Medicaid Services. By banding together to negotiate with manufacturers, states sharply curtailed drug spending in 2005, the year before the switch from Medicare to Medicaid.[76] In 2006, the first year of the privately run Part D benefit, drug spending increased as Part D plans failed to secure the price concessions that states had been able to negotiate.[77] The Centers for Medicare & Medicaid Services does not project Part D plans will be able to increase the discounts Part D plans receive from manufacturers over the next ten years.[78]

Fact 2: Both retail prices and net costs are lower under government programs than under Part D.

Retail prices of the top 20 drugs most prescribed for seniors are as much as 12 times higher under Part D than the prices paid by the Department of Veterans Affairs for the same prescriptions, according to a recent report by Families USA. The consumer group looked at what the five insurance companies with the most Medicare members charged for a year's supply of the drugs in 2006.[79] The VA gets better prices through a combination of direct negotiations and regulations that set ceilings on the prices manufacturers can charge the program.

Even factoring in the secret rebates Part D plans receive from drug manufacturers, the net costs of drugs under Part D are 22 percent higher than the rates paid by Medicaid and 31 percent higher than the prices paid by the Department of Veterans Affairs.[80]

End Notes

Myth 1:

[1] Families USA, "The Choice: Health Care for People or Drug Industry Profits," September 2005.

[2] *Fortune* 500, April 17, 2006.

[3] Public Citizen, "Would Lower Prescription Drug Prices Curb Drug Company Research & Development?" June 26, 2002

[4] Congressional Budget Office, "Research and Development in the Pharmaceutical Industry," October 2006.

[5] Congressional Budget Office, "Research and Development in the Pharmaceutical Industry," October 2006.

[6] Public Citizen, "Would Lower Prescription Drug Prices Curb Drug Company Research & Development?" June 26, 2002

Myth 2:

[7] "Seniors and the Medicare Prescription Drug Benefit," Kaiser Family Foundation/Harvard School of Public Health, December 2006. (http://www.kff.org/kaiserpolls/upload/7604.pdf)

[8] "Medicare Part D and Prescription Drug Prices," American Enterprise Institute, January 5, 2007. (http://www.aei.org/publications/pubID.25420,filter.all/pub_detail.asp)

[9] "Big Dollars, Little Sense: Rising Medicare Prescription Drug Prices," Families USA, June 2006. (http://www.familiesusa.org/assets/pdfs/Big-Dollars-Little-Sense.pdf)

[10] "Seniors and the Medicare Prescription Drug Benefit," Kaiser Family Foundation/Harvard School of Public Health, December 2006. (http://www.kff.org/kaiserpolls/upload/7604.pdf)

[11] "Projected Medicare Part D Costs Drop By 30 Percent," CMS press release, January 8, 2007. (http://www.hhs.gov/news/press/2007pres/20070108.html)

[12] "Projected Medicare Part D Costs Drop By 30 Percent," CMS press release, January 8, 2007. (http://www.hhs.gov/news/press/2007pres/20070108.html)

[13] Letter to Health and Human Services Secretary Michael Leavitt, U.S. House of Representatives Committee on Government Reform, October 12, 2006. (http://oversight.house.gov/Documents/20061012124517-46697.pdf)

[14]"Status Report on Medicare Part D Enrollment In 2006: Analysis Of Plan-Specific Market Share and Coverage," *Health Affairs*, November 21, 2006. (http://content.healthaffairs.org/cgi/content/full/26/1/w1)

[15] Medicare Prescription Drug Benefit Fact Sheet, Kaiser Family Foundation, November 2006. (http://www.kff.org/medicare/upload/7044-05.pdf)

Myth 3:

[16] Personal communication with Dr. Ruth Lopert, Australian Government Department of Health and Ageing

[17] "Prescription Drug Prices in Canada: What Are the Lessons for the U.S.?" AARP, July 2003. (http://www.aarp.org/research/international/perspectives/jul_03_rxprices_canada.html)

[18] 2005 Chartbook of International Pharmaceutical Prices, Research and Markets, December 2005. (http://www.researchandmarkets.com/reports/c32018/)

Myth 4:

[19] "Patient and Physician Attitudes and Behaviors Associated With DTC Promotion of Prescription Drugs," U.S. Food and Drug Administration, November 2004. (http://www.fda.gov/cder/ddmac/Final%20Report/FRfinal111904.pdf)

[20] "Giving Legs to Restless Legs: A Case Study of How the Media Helps Make People Sick," *Public Library of Science: Medicine*, April 2006. (http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371%2Fjournal.pmed.0030170)

[21] "Creating Demand for Prescription Drugs: A Content Analysis of Television Direct-to-Consumer Advertising," *Annals of Family Medicine*, January 2007. (http://www.annfammed.org/cgi/content/full/5/1/6)

[22] "Creating Demand for Prescription Drugs: A Content Analysis of Television Direct-to-Consumer Advertising," *Annals of Family Medicine*, January 2007. (http://www.annfammed.org/cgi/content/full/5/1/6)

[23] "Showdown Looms in Congress Over Drug Advertising on TV," *New York Times*, January 22, 2007.

[24] "Improvements Needed in FDA's Oversight of Direct-to-Consumer Advertising," Government Accountability Office, November 2006. (http://www.gao.gov/new.items/d0754.pdf)

[25] "FDA Oversight of Direct-to-Consumer Advertising Has Limitations," Government Accountability Office, October 2002. (http://www.gao.gov/new.items/d03177.pdf)

[26] "Direct to consumer advertising is medicalising normal human experience," *British Medical Journal*, April 2002. (http://www.bmj.com/cgi/content/full/324/7342/908?ijkey=b3d5b44f5fff7408ecc45c438da68ab004177284&keytype2=tf_ipsecsha)

[27] "Improvements Needed in FDA's Oversight of Direct-to-Consumer Advertising," Government Accountability Office, November 2006. (http://www.gao.gov/new.items/d0754.pdf)

[28] "Prescription Drug Trends," Kaiser Family Foundation, June 2006. (http://www.kff.org/rxdrugs/upload/3057-05.pdf)

[29] "Impact of Direct-to-Consumer Advertising on Prescription Drug Spending," Kaiser Family Foundation, June 2003. (http://www.kff.org/rxdrugs/upload/Impact-of-Direct-to-Consumer-Advertising-on-Prescription-Drug-Spending-Summary-of-Findings.pdf)

[30] "How to make DTC advertising work harder," *Medical Marketing and Media*, April 1998.

Myth 5:

[31] "Prescription Drugs and Mass Media Advertising, 2000," National Institute for Health Care Management Research and Educational Foundation, November 2001. (http://www.nihcm.org/DTCbrief2001.pdf)

[32] "Risk of cardiovascular events and rofecoxib: cumulative meta-analysis," *The Lancet*, December 2004.

[33] "Merck Withdraws Vioxx; FDA Issues Public Health Advisory," Food and Drug Administration, 2004. (http://www.fda.gov/fdac/features/2004/604_vioxx.html)

[34] "Risk of cardiovascular events and rofecoxib: cumulative meta-analysis," *The Lancet*, December 2004.

[35] "FDA Estimates Vioxx Caused 27,785 Deaths," *Consumer Affairs*, November 4, 2004. (http://www.consumeraffairs.com/news04/vioxx_estimates.html)

[36] "Recasting the Lowly Formulary," Minnesota Medical Association, April 2006. (http://www.minnesotamedicine.com/publications/MNMed2006/April/quality-smith.htm)

[37] "Research and Development in the Pharmaceutical Industry," Congressional Budget Office, October 2006. (http://www.cbo.gov/ftpdocs/76xx/doc7615/10-02-DrugR-D.pdf)

[38] "Recasting the Lowly Formulary," Minnesota Medical Association, April 2006. (http://www.minnesotamedicine.com/publications/MNMed2006/April/quality-smith.htm)

[39] "Recasting the Lowly Formulary," Minnesota Medical Association, April 2006. (http://www.minnesotamedicine.com/publications/MNMed2006/April/quality-smith.htm)

Myth 6:

[40] "Doctors and Drug Makers: A Move to End Cozy Ties," *New York Times*, February 12, 2007. (http://www.nytimes.com/2007/02/12/business/12drug.html)

[41] "Physicians and the Pharmaceutical Industry: Is a Gift Ever Just a Gift?" *Journal of the American Medical Association*, January 19, 2000. (http://jama.ama-assn.org/cgi/content/full/283/3/373?ijkey=26cce76d265c0147812cc7fcee0067bfe76bace7)

[42] "Doctors and Drug Makers: A Move to End Cozy Ties," *New York Times*, February 12, 2007. (http://www.nytimes.com/2007/02/12/business/12drug.html)

[43] "Do drug samples influence resident prescribing behavior? A randomized trial," *American Journal of Medicine*, August 2005. (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16084181&query_hl=3)

[44] "Madison Ave. Has Growing Role In the Business of Drug Research," *New York Times*, November 22, 2002. (http://query.nytimes.com/gst/fullpage.html?sec=health&res=9F0DEEDF1239F931A15752C1A9649C8B63)

[45] "Seducing the Medical Profession," *New York Times*, February 2, 2006. (http://www.nytimes.com/2006/02/02/opinion/02thu3.html?ex=1296536400&en=48b4bb73fd10a999&ei=5088&partner=rssnyt&emc=rss)

[46] "What impact does pharmaceutical promotion have on behaviour?" Drug Promotion Database, World Health Organization (WHO) Department of Essential Drugs & Medicines Policy and Health Action International Europe. (http://www.drugpromo.info/).

[47] "The Company We Keep: Why Physicians Should Refuse to See Pharmaceutical Representatives," *Annals of Family Medicine*, January 2005. (http://www.annfammed.org/cgi/content/full/3/1/82#R7)

[48] "Doctors who write guidelines often have ties to the drug industry," *British Medical Journal*, October 2005. (http://www.bmj.com/cgi/content/full/331/7523/982-a). See "Cash interests taint drug advice," *Nature*, October 2005.

[49] "Treatment of Anemia Questioned," *New York Times*, November 30, 2006. (http://www.nytimes.com/2006/11/30/health/30drug.html?ex=1171602000&en=9b2f45380388406d&ei=5070)

[50] "VA Drug Formulary: Better Oversight Is Required, but Veterans Are Getting Needed Drugs," Government Accountability Office, January 2001. (http://www.gao.gov/new.items/d01183.pdf)

[51] "The Impact of a National Prescription Drug Formulary on Prices, Market Share, and Spending: Lessons for Medicare?" *Health Affairs*, May/June 2003. (http://content.healthaffairs.org/cgi/content/full/22/3/149)

[52] "State Medicaid Programs Lead the Way on Negotiation of Drug Prices," Project on Information Just and Intellectual Property Rights, National Legislative Association on Prescription Drugs, and Forum on Democracy and Trade, January 11, 2007. (http://www.wcl.american.edu/pijip/documents/DrugPriceNegFactSheet.pdf?rd=1)

Myth 7:

[53] "Overview of the VA Pharmacy Benefits Management Strategic Health Care Group (PBM)," Michael A. Valentino, R.Ph., MHSA, U.S. Department of Veterans Affairs, January 2007. (http://www.aei.org/events/filter.all,eventID.1447/summary.asp)

[54] "Overview of the VA Pharmacy Benefits Management Strategic Health Care Group (PBM)," Michael A. Valentino, R.Ph., MHSA, U.S. Department of Veterans Affairs, January 2007. (http://www.aei.org/events/filter.all,eventID.1447/summary.asp)

[55] "Medicare Part D Appeals System Breaks Down," Medicare Rights Center, March 2006. (http://www.medicarerights.org/appealsbrief_final.pdf)

[56] "Part D Reconsideration Appeals Data," Centers for Medicare & Medicaid Services, September 21, 2006. (http://www.cms.hhs.gov/apps/media/press/factsheet.asp?Counter=1972&intNumPerPage=10&checkDate=&checkKey=&srchType=&numDays=3500&srchOpt=0&srchData=&keywordType=All&chkNewsType=6&intPage=&showAll=&pYear=&year=&desc=&cboOrder=date)

[57] *Description and Analysis of the VA National Formulary*, Executive Summary, National Academy of Sciences, 2004. (http://books.nap.edu/execsumm_pdf/9879.pdf)

[58] "Overview of the VA Pharmacy Benefits Management Strategic Health Care Group (PBM)," Michael A. Valentino, R.Ph., MHSA, U.S. Department of Veterans Affairs, January 2007. (http://www.aei.org/events/filter.all,eventID.1447/summary.asp)

[59] "Overview of the VA Pharmacy Benefits Management Strategic Health Care Group (PBM)," Michael A. Valentino, R.Ph., MHSA, U.S. Department of Veterans Affairs, January 2007. (http://www.aei.org/events/filter.all,eventID.1447/summary.asp)

[60] "VA Chief Tackles Pharmacy Benefit Myths," American Society of Health-System Pharmacists, January 25, 2007. (http://www.ashp.org/s_ashp/sec_news_article.asp?CID=167&DID=2024&id=18382)

[61] "VA Chief Tackles Pharmacy Benefit Myths," American Society of Health-System Pharmacists, January 25, 2007. (http://www.ashp.org/s_ashp/sec_news_article.asp?CID=167&DID=2024&id=18382)

[62] "Overview of the VA Pharmacy Benefits Management Strategic Health Care Group (PBM)," Michael A. Valentino, R.Ph., MHSA, U.S. Department of Veterans Affairs, January 2007. (http://www.aei.org/events/filter.all,eventID.1447/summary.asp)

[63] "Trends in Manufacturer Prices of Prescription Drugs Used by Older Americans," AARP, January 2007. (http://www.aarp.org/research/health/drugs/aresearch-import-869-2004-06--IB69.html)

[64] "No Bargain: Medicare Drug Plans Deliver High Prices," Families USA, January 9, 2007. (http://www.familiesusa.org/resources/publications/reports/no-bargain-medicare-drug.html)

Myth 8:

[65] "Rx R&D Myths: The Case Against The Drug Industry's R&D 'Scare Card,'" Public Citizen, July 23, 2001. (http://www.citizen.org/documents/ACFDC.PDF)

[66] In 1999, the National Institutes of Health (NIH) provided $17.8 billion for research, and the major proportion was expended for basic research; the top 10 pharmaceutical companies spent $22.7 billion, primarily on clinical research. (DeAngelis CD, "Conflict of Interest and the Public Trust," *JAMA* 284(17), November 1, 2000).

[67] "Rx R&D Myths: The Case Against The Drug Industry's R&D 'Scare Card,'" Public Citizen, July 23, 2001. (http://www.citizen.org/documents/ACFDC.PDF)

[68] "Rx R&D Myths: The Case Against The Drug Industry's R&D 'Scare Card,'" Public Citizen, July 23, 2001. (http://www.citizen.org/documents/ACFDC.PDF)

[69] "Fatal Imbalance: The Crisis in Research and Development for Drugs for Neglected Diseases," Medecins Sans Frontieres (Doctors Without Borders), September 2001. (http://www.msf.org/msfinternational/invoke.cfm?objectid=032387D3-7D09-49E3-99FC231DBE03F7B7&component=toolkit.report&method=full_html)

[70] "An Innovative Drug Industry? Well, No," *Washington Post*, November 16, 2003. (http://www.washingtonpost.com/ac2/wp-dyn/A43257-2003Nov14)

[71] "New drug to fight cancer may get the cold shoulder," *Chicago Tribune*, February 27, 2007. (http://www.chicagotribune.com/features/health/chi-0702270303feb27,1,3452583.story)

[72] "Industry-Funded Breast Cancer Trials Show More Positive Results," *Washington Post*, February 26, 2007. (http://www.washingtonpost.com/wp-dyn/content/article/2007/02/26/AR2007022600728.html)

Myth 9:

[73] "Pfizer and Other Drug Makers Report Higher Profits," The New York Times, October 20, 2006.

[74] "As Drug Prices Climb, Democrats Find Fault With Medicare Plan," The New York Times, November 6, 2006.

[75] Testimony before the House Oversight and Government Reform, Gerard Anderson, February 9, 2007 (http://oversight.house.gov/Documents/20070209123654-09260.pdf)

[76] "National Health Spending in 2005: The Slowdown Continues," Health Affairs, January 1, 2007

[77] "Health Spending Projections Through 2016: Modest Changes Obscure Part D's Impact," Health Affairs, February 21, 2007

[78] Testimony before the House Oversight and Government Reform, Gerard Anderson, February 9, 2007

[79]"No Bargain: Medicare Drug Plans Deliver High Prices," Families USA, January 7, 2007. (http://www.familiesusa.org/assets/pdfs/no-bargain-medicare-drug.pdf)

[80] Testimony before the House Oversight and Government Reform, Gerard Anderson, February 9, 2007