# Drug Rebates do not Increase Costs to Consumers

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There is considerable angst in policy circles--not to mention the populace--regarding the rate of growth in drug prices. Blame is being leveled in all directions, from drug companies to the FDA, consumers, and insurers. Lately, however, politicians and various activists have have directed the bulk of their vitriol emanating from high drug prices towards Pharmacy Benefit Managers, or PBMs, and in particular their practice of building "rebates" into the contracts they form with pharmaceutical manufacturers.

In the last seven years or so, there has been a flurry of legislative activity, mostly at the state level, to reform PBMs.[1] Recently, FDA Commissioner Scott Gottlieb raised questions about the role of rebates, and suggested that Congress also consider taking action to curtail them.[2]

However, the diagnosis that drug rebates are a major reason for high drug prices completely misconstrues their purpose and ultimate impact, and prescribes a solution that runs the risk of ultimately increasing costs and reducing timely access to cutting-edge drugs.

[1] See: https://nashp.org/wp-content/uploads/2018/01/Statetracker-Week-of-5_18_2018.pdf, (accessed 5/23/18).
[2] "Keynote address by Commissioner Gottlieb to the 2018 FDLI annual conference," May 3rd, 2018.

In a nutshell, drug rebates are simply discounts for brand and generic drugs negotiated between PBMs and drug companies. While the current system of rebates might appear somewhat convoluted, it represents a robust system of price negotiation and bargaining that, ultimately, maximizes social welfare by effectively expanding the scope of customers that can be profitably accommodated. Prohibiting rebates would either result in higher health-insurance premiums and drug costs, or drug companies devising a similar program to accomplish approximately the same thing as drug rebates--if we're lucky.

**The Evolution of Managed Care and Its Parallels to Drug Rebates**

The antecedents for the present-day system of drug rebates can be found in the early days of the managed-care industry. At that time, it was common practice for physicians to be reimbursed by an insurer for whatever amount they had charged patients without insurance, or--in some places--an amount related to what was usually charged in the geographic area for the service. MIT economist Amy Finkelstein estimated that roughly half of the sixfold increase in health care spending between 1950 and 1990 was attributable to increases in insurance coverage[3].

We expect spending to increase when demand increases via the precipitous growth in insurance coverage rates. The problem was that as coverage rates increased, fewer people were exposed to the prices charged by providers as the third-party payers, the insurers, picked up the tab. With many more insured consumers not bearing the marginal cost of health care services, and absent a mechanism for insurers to negotiate, charges were effectively unbounded, because they were disconnected from market forces. The provider could simply set its prices wherever it desired and expect to be paid at that rate. Michael Chernew and Joseph Newhouse also observed in

[3] Amy Finkelstein; The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare, *The Quarterly Journal of Economics*, Volume 122, Issue 1, 1 February 2007, Pages 1–37, https://doi.org/10.1162/qjec.122.1.1

their research that how prices were set greatly impacts prices, and for much of that period, including the initial decades of the Medicare and Medicaid programs, charge-based reimbursement systems were used[4].

This problem does not occur with apples at the supermarket--to make an elementary analogy--because grocery shoppers pay the full cost for everything in their cart. If the grocer doubles the cost of apples, many shoppers will forego purchasing apples and buy pears instead. However, if a third party were paying the grocery bill (a fictitious grocery insurer, for instance) then shoppers would be less concerned about the cost of their apples and would buy more apples. Grocery insurers would lose money and be forced to raise the cost of their policies, and consumers would be worse off.

In response to this conundrum, insurers came up with a radical idea to bargain with providers and have a modicum of say over which providers were in or out of a network based on the provider's willingness to accept a lower, negotiated rate for various services. The benefit to the provider of being "in-network" came from obtaining access to the insurer's enrollees; the benefit to the consumer to choosing an "in-network" doctor or hospital was lower health insurance premiums or reduced out of pocket costs. For anyone with an inclination to see the benefits of selective contracting, the "explanation of benefits" forms sent to enrollees indicate the difference between what the provider charges and what the insurer pays, typically described as a "contractual allowance." The patient and insurer's responsibility is based on this lower, contracted rate. Figure 1 shows the relationship between managed care penetration and insurance premiums in the early years of managed care. It is worth noting that as managed care rapidly expanded between 1992 and 1998, health care costs not only slowed, but actually declined for a time--a feat never seen before or again.

[4] Chernew, M.E. and Newhouse, J.P., 2011. Health care spending growth. In *Handbook of health economics* (Vol. 2, pp. 1-43). Elsevier.

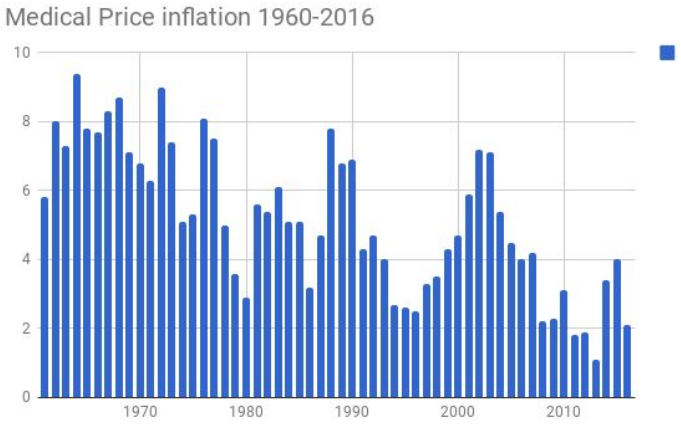


**Table 1**

The transition to managed care and provider networks was anything but a simple, straightforward process: It was fraught with lawsuits and all manner of demagoguery stating in one way or another that it amounted end of medicine as we know it, and that medical progress and our society's robust access to treatment would soon disappear. Of course, we now know that nothing of the sort occurred: More people obtained insurance and the system helped to arrest the rapid growth of health care costs.

But over time, the initial reductions in health care inflation dissipated as networks for the preferred provider organization (PPO), the dominant form of managed care, gradually came to be far less selective. While some of the backlash against managed care was driven by enrollee preferences, some of it certainly came from provider responses in the form of consolidation of the hospital industry and physician practice, as well as AMA-backed "any willing provider" laws that aimed to force insurers to accept more physicians into networks.

However, these days we are witnessing a resurgence of the selective contracting idea in the form of "narrow network" plans and the documented savings that are accruing to enrollees in the form of lower premiums. Jonathan Gruber and Robin McKnight find that the introduction of such an option, with its promise of cost savings of as much

as 40 percent, can induce a tremendous amount of new enrollees and putting lie to the notion that inertia governs enrollment decisions.[5]

**Where Drug Rebates Enter the Picture**

But how are drugs handled in this environment? For years drug spending was too small a proportion of health care costs to meaningfully affect premiums—and indeed it still pales in comparison to hospital expenditures, from just under ten percent in 1960 to 10.6% in 2015.

Nevertheless, the share of total health care spending attributable to drugs has been among the fastest growing components in recent years, hence the increased attention being paid to drug pricing. Despite the increased spending, it is important not to lose sight of the fact that pharmaceuticals have been on balance a highly cost-effective driver of mortality gains over a very long period of time.[6]

Pricing in pharmaceutical markets is complex, but at bottom there is a list price for drugs commonly known as the "wholesale acquisition cost" (WAC). Still more confusingly a confluence of historical accident, convenience in a pre-computer era, and government involvement has resulted in the average wholesale price (AWP) being treated as a de facto trade price with a 20-25% mark-up over WAC.[7] The policy decisions made with the onset of the Medicare and Medicaid programs served to imbue AWP with outsized status as a benchmark for reimbursement decisions.

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[5] (Jonathan Gruber and Robin McKnight, Controlling Health Care Costs through Limited Network Insurance Plans: Evidence from Massachusetts State Employees, *American Economic Journal: Economic Policy*, 2016).
[6] See for example, Frank R. Lichtenberg, "Sources of U.S. Longevity Increase, 1960-2001," *Quarterly Review of Economics and Finance* 44(3), pp. 369-389 (July 2004).
[7] The sordid history can be found in Berndt, Ernst R. and Joseph P. Newhouse, "Pricing and Reimbursement in U.S. Pharmaceutical Markets", Chapter 8 in Patricia M. Danzon and Sean N. Nicholson, eds., The Oxford Handbook on the Economics of the Biopharmaceutical Industry , New York: Oxford University Press, pp. 201 - 265, 2012.

The PBM industry came into existence in the 1960s originally tasked with serving as a third-party administrator as pharmaceuticals began to be covered by health insurance. Later, the PBM industry helped facilitate the transition to cheaper generic drugs when available, thus saving enrollees' money. More recently, PBMs have begun actively negotiating with drug companies to extract reductions in the form of rebates from WAC in order to reduce rapidly increasing spending on drugs. Naturally, the success of this negotiation process depends on a number of market-level factors, but in general, the greater the number of drugs in a therapeutic category, the greater the savings, since more potential substitute drugs implies more room for price competition.

Indeed, so called me-too drugs--patented drugs that treat a condition for which other patented medications are already available--are often derided as lacking innovation. However, such drugs provide PBMs with another player with whom to bargain in order to lower prices for consumers. For instance, there are no fewer than a half-dozen treatments for hepatitis C treatments now available; the "me-too" drugs are unleashing vigorous price competition for patients, and prices have fallen by more than fifty percent as a result.[8] Nevertheless, the ability to achieve savings is very limited when drugs are still on-patent with few alternatives.

Drug rebates seem to evoke a visceral response in the health care debate: some patients' groups and activists aver that the rebates accrue entirely to the insurers, and that constraining rebates--or prohibiting them entirely--would result in overall lower health care costs for consumers.[9] But because of the scrutiny drug manufacturers face, drug companies are prevented from selectively charging different amounts to different payers without provoking the wrath of government antitrust lawyers. In particular, government programs use charge amounts as a component of their

[8] See for example: https://www.fiercepharma.com/pharma/abbvie-s-new-pan-genotypic-hep-c-drug-mavyret-undercuts-competition

[9] Paulina Firozi, "States are Targeting a Key Middleman in the Drug-Pricing Chain," *The Washington Post*, 21 May 2018.

reimbursement calculations. The upshot is that drug companies cannot simply or easily reduce the "list price" to specific payers. Thus rebates represent a legally vetted mechanism allowing manufacturers to negotiate with PBMs to provide discounts from WAC based on the volume of drugs used by consumers. Such discounts unambiguously translate into lower premiums for enrollees.

It may not be the rebates *per se* that are objectionable to most people but rather that lack of transparency regarding their nature and amount. Consumers do not actually observe the amount of the rebate or when it is applied, for that matter. There are legitimate business reasons for this lack of transparency--first and foremost being that the outcome of negotiations are essentially trade secrets --and it should not be assumed to be pernicious. For example, the details of a long-term contract between a restaurant and a food distributor are not relevant to consumers, yet the end result of such negotiations is lower prices and better food options for most of us. Similarly, PBMs that negotiate the hardest to strike the best deals with drug companies will be able to achieve better prices for drugs for enrollees.

**The Cause *du jour* of High Healthcare Costs**

There are plenty of reasons why health care inflation continues to plague the United States, but the drug rebate system is not the villain.

Neither political party has managed to repair the fundamental disconnect between the ultimate consumers of health care services--namely, the patients--and who actually pays for these services. We have a complex insurance system that includes both private and public insurance that, of course, is really more than mere insurance: for many people it eliminates nearly all of the out of pocket costs they might incur, which mitigates any incentive for them to approach their consumption of health care in any

cost-sensitive, utility-maximizing manner. But to be fair, it is not entirely clear that achieving such a thing is even an objective of either party.

It falls upon the insurance companies and intermediaries like PBMs, therefore, to wring some degree of savings from the system in order to compete effectively for enrollees in what remains a competitive insurance market. The irony should not be lost on the public that these byzantine efforts are often necessary in response to even more byzantine and obtuse government regulation. The key observation is that consumers benefit from this process.

While policy makers and pundits may fret about how rebates impact consumer costs, the reality is that a world without rebates is a world in which everyone pays higher premiums for health insurance and for drugs in particular, and that prohibiting them altogether would lead to drug companies making higher profits without doing anything to earn them.

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