

# *THE HIGH COST OF PRESCRIPTION DRUGS*



## *Can Rebate Reform Help Consumers?*

America has been in a growing public health crisis for the past decade, long before the coronavirus disrupted our daily lives. COVID has only exacerbated this crisis: the crisis of unaffordable health care.

Despite being the richest nation in the world, America finds itself with one in seven uninsured in 2021. (Urban Institute, 2021). According to a December 2021 poll by Kaiser Family Foundation, almost half of U.S. adults delayed or skipped some sort of health care in the past year because of cost, and 29% don't take their medicines as prescribed because of cost. (Audrey Kearney, 2021 for the Kaiser Family Foundation)

“ 29% [of adults] don't take their medicines as prescribed because of cost ”

(Audrey Kearney, KFF, 2021)

The healthcare system is also shrouded in secret calculations and mysterious pricing formulas. So it's not surprise that few people know why they pay what they pay at the pharmacy; also referred to as an opaque pricing formula.

Dr. David Belk, MD, a healthcare consumer advocate and author of the book "The Great American Healthcare Scam", aptly describes the overriding state of how consumers fare in American healthcare:

"Any time you go to a store (say, a grocery store) you expect to see all of the products being sold with their prices plainly displayed. When you go to the checkout, that's the price you expect to be charged. You also expect to be able to check the price of the same or a comparable product in competing stores so you can shop around. That's how the free market works.

Imagine what it would be like if a grocery store never displayed the price of anything. And the price you're charged might be totally different from the price the next customer is charged for the same product. In fact, suppose you couldn't even pick your own groceries. A grocery list would be handed to you by a food expert and you'd be billed based on your particular grocery plan. Eggs might cost you \$5, the next person \$10 and some poor guy who doesn't have a grocery plan would have to pay \$50 for the same carton. Don't even think about shopping around. Your grocery plan follows you everywhere and determines the price you pay and, since you're only allowed to buy what's on the list, you can't even price compare similar items (like brown eggs vs. white eggs)." (Belk, n.d.)

Dr. Belk's assessment is just one of hundreds demonstrating that the true cost of health care is hidden in America's complex health system, a system that consumes nearly 20% of the U.S. GDP and costs more than twice the average of other developed countries. The United States spends a staggering \$3.8 trillion a year, or \$11,582 per person (Centers for Medicaid & Medicare Services, n.d.) on health care and all indications are that these mind-boggling numbers will only continue to rise.

**"Imagine what it would be like if a grocery store never displayed the price of anything."**



Opaque pricing fuels the skyrocketing cost of prescription drugs as it does the other parts of our American healthcare system. Pricing practices for prescription medicines have evolved over the last decade into an incomprehensible, if not perverse, state. Consumers, as Dr. Belk points out, simply cannot understand nor gain the upper hand in purchasing their much-needed prescriptions. A very recent study by the respected Berkeley Research Group (BRG) highlighted the warped state of the prescription drug marketplace. (Berkeley Research Group, 2022)

The analysis (by BRG) makes it possible to measure prescription drug spending by consumers, health plans, government payers, and employers, and the portion thereof realized by manufacturer and nonmanufacturer stakeholders. Key findings include:

- ***Brand manufacturers retain just 37 percent of total spending on all prescription medicines (brand and generic medicines)***
- ***For brand medicines, manufacturers retain just half (49.5 percent) of total spending***
- ***The share of total brand spending retained by manufacturers fell by more than 17 percentage points from 2013 to 2020; in other words, substantially fewer dollars flow to the companies that research and manufacture prescription drugs***
- ***2020 marks the first year on record where nonmanufacturer stakeholders—including Pharmacy Benefit Managers (PBMs), health plans, hospitals, government, pharmacies, and others—received the majority of total spending on brand medicines***
- ***Payers—including insurers/plan sponsors, the government, and PBMs—received the largest portion (35 percent) of new spending on brand medicines between 2019 and 2020***

The trillion-dollar question is how can we start to get a handle on stemming and even lowering the cost of health care? This report examines the marketplace and pricing practices for prescription drugs and looks at possible answers to this critical question, particularly the practice of drug rebates.





# *Coloradans Struggle to Afford the Drugs They Need*

Nearly 1 in 3 Coloradans have skipped filling a prescription, skipped doses, or cut pills because of cost. (Colorado Consumer Health Initiative (CCHI), 2021) The authoritative Centers for Medicare & Medicaid Service's reported statistic is that spending on prescription medicines totaled \$772.1 billion in 2019 nationwide (Centers for Medicaid & Medicare Services, n.d.). There are currently 285 state bills that have been introduced in 2021 nationwide to attempt to lower the price of drugs (National Academy for State Health Policy, 2021).

A report released in January 2021 sheds light on the high cost of prescription medicines for Coloradans. The report, issued by the Center for Improving Value in Health Care and titled "Colorado Prescription Drug Spending and the Impact of Drug Rebates" provides Colorado specific data on how much rebates are costing Colorado consumers. CIVHC reports that 1 in 3 Coloradoans cannot afford their medication, and that in 2018, "Colorado spent nearly \$4 billion, or 13% of total health care spending (\$23 billion), on prescription drugs alone (Center for Improving Value in Health Care, 2021)."

The results raise the question that many Colorado consumers and patients ask: "why do we pay so much for prescription medicines"?

The answer goes back to the complex and convoluted nature of our healthcare system. The prices patients pay for all aspects of care, including prescription drugs, involve a matrixed supply-chain. Behind-the-scenes players and market manipulations that aren't obvious to the average consumer, substantially affect the price consumers pay for drugs at their local pharmacy. Much happens before that pill bottle gets picked up at the counter. To better understand how this unseen and sometimes unscrupulous system works, let's look at the prescription drug supply chain.

**"Nearly 1 in 3 Coloradans  
have skipped filling a  
prescription, skipped doses  
or cut pills because of cost."**

*Colorado Consumer Health Initiative (CCHI), 2021*





## Six Stakeholders in the Drug Supply Chain

The prescription drug supply chain is complex with six key stakeholders that starts with the drug manufacturer and ends with the consumer (not including the hundreds of companies and organizations conducting the basic research behind the chemistry of new drugs). The other four primary stakeholders involved are the health insurance plans, the Pharmacy Benefit Manager (PBM), wholesalers and retail pharmacies. Let's take a closer look at those players.

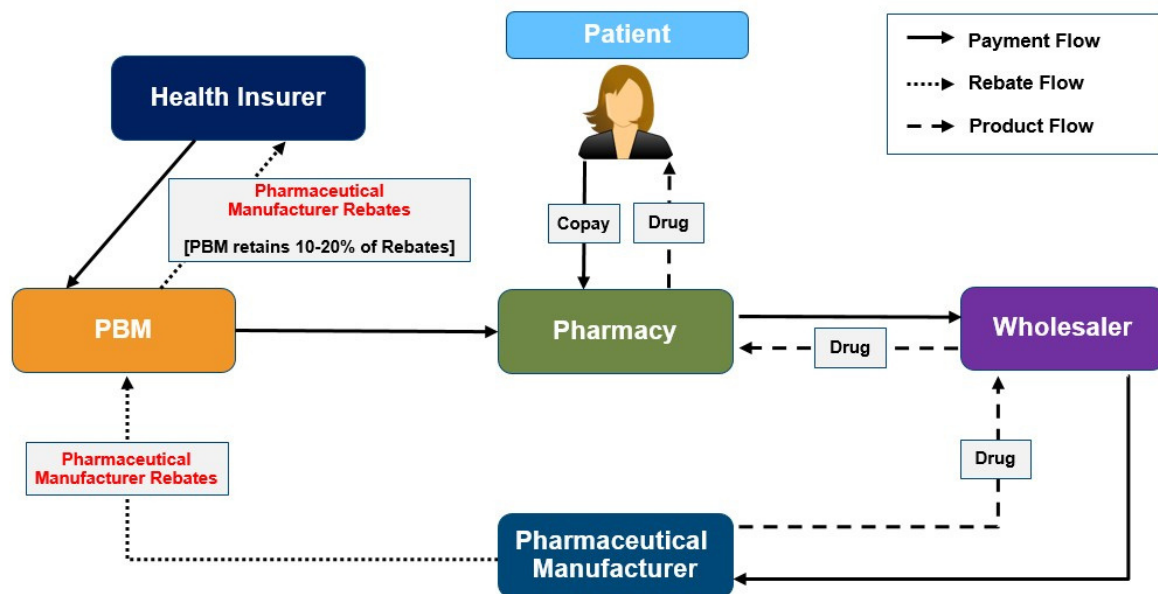


Figure 1. The above chart is published by Milliman, an international actuarial and consulting firm.

In its report, "A primer on prescription drug rebates: Insights into why rebates are a target for reducing prices," the international actuarial and consulting company, Milliman, attempted to boil down the supply chain into a simple chart (above). But even that worthwhile effort proves the challenges of simply explaining the drug supply chain. (Milliman, 2018).

The bottom starts with the **pharmaceutical manufacturer**, well-known names like Pfizer, Eli Lilly, or Johnson & Johnson. These companies spend billions to research, develop and market prescription drugs that help to either improve quality of life, reduce the unpleasant symptoms of chronic illness, or actually cure diseases. Once a medicine has gone through research, clinical trials and regulatory approval processes, the developer of that drug prepares to take it to market. But as we are learning, that process is not as simple as selling the drug to a pharmacy who then sells it to the consumer.

Drug manufacturers, like many industries, use distributors (also called wholesalers) to help them get their products into pharmacies. Wholesalers, not surprisingly, charge the drug manufacturers a fee for loading, handling and transporting medications to retail pharmacies across the country. That part of the supply chain is easy to understand. The actual physical product gets distributed by the wholesalers and pharmacies pay the wholesaler for the drugs. Then pharmacies sell the drugs to the consumers. This process is illustrated in the Milliman chart with the dashed line referred to as Product Flow.

On the other side of the chart, however, is a dotted line to the **Pharmaceutical Benefit Manager**, usually referred to as a PBM. PBMs are the much lesser-known hidden players in the supply chain, companies like, CVS/Caremark and OptumRx (owned by UnitedHealth Care). PBMs never take physical possession of the prescription drug. Instead, they are responsible for negotiations and reimbursements in the supply chain.

## *Growth of PBMs*

PBMs were created in the 1970s and 1980s to pay prescription drug claims for health insurance companies. At that time, drug reimbursement plans were a small add on to overall health insurance plans, so insurers turned to PBMS to help administer claims and payments. PBMs would ensure that a medication prescribed by a physician was covered by the patient's plan and then collect payment from the plan and reimburse the pharmacy for dispensing the medication. (Shepherd, 2020)

Over the years, PBMs have taken over negotiations for the prices that health plans will pay for drugs, the creation of drug formularies (the drugs health plans will cover), and management of the way drugs are used, such as requiring prior authorizations for certain medications, or step-therapy where a patient must try certain drugs before approval for a newer (often, more expensive) one. Today, there are 66 PBMs – **with the three largest - Express Scripts, CVS/Caremark and OptumRx - controlling approximately 89% of the prescription drug market!** (NCPA National Community Pharmacists Association, 2019)

PBMs also pay pharmacies on behalf of the health plan for dispensing the drug (they charge the health plan a fee for paying the pharmacy). Going back to Milliman, this entire process of PBMs controlling the drug supply chain ends at the top of the supply chart, where it shows the pharmacy giving the drug to the patient and the patient paying for the drug.

While the Milliman illustration makes the process appear to be simple, the underlying economics and dominant role of the PBMs make the drug supply chain anything but.

The health plans need to negotiate the best price from all the retail pharmacies where their members can purchase their medications. The plans rely on PBMs to do that negotiating on their behalf. Therefore, the PBM negotiates with the pharmacy, but also the drug maker which is where rebates come in. To ensure a certain drug appears on the approved list that an insurance company will cover, the PBMs and insurance companies demand that drug manufacturers pay a rebate – basically a discount – to the PBM and the insurance company.

This demand is supposedly in the interest of lowering the cost to the consumer. In reality, this system of payoffs serves to increase the cost for consumers at the pharmacy since the wholesalers are increasing the cost of the drug when they sell it to the pharmacy and the pharmacy increases the cost of the drug they dispense to the consumer.

**"Today, there are  
66 PBMs - with the  
three largest -  
Express Scripts,  
CVS/Caremark and  
OptumRx -  
controlling 89% of  
the prescription  
drug market"**

*NCPA National Community  
Pharmacists Association, 2019*

## *Paying the Middleman*

PBMs make money several ways. They charge an administrative fee to process prescription drug claims, next PBMS often own their own specialty and/or mail-order pharmacy (like CVS), so they actually get to double-dip by charging a fee to process the claim in addition to getting reimbursed as a pharmacy. Also, PBMs also make money by charging the health plans more than they pay the pharmacy to fill the prescription. Lastly, these middlemen receive rebates from drug manufacturers in exchange for placing drugs on the PBM's formularies. PBMs have their hands in almost every part of the supply chain.

In a Pacific Research Institute report titled, "Improving Market Efficiencies Will Promote Greater Drug Affordability", they state,

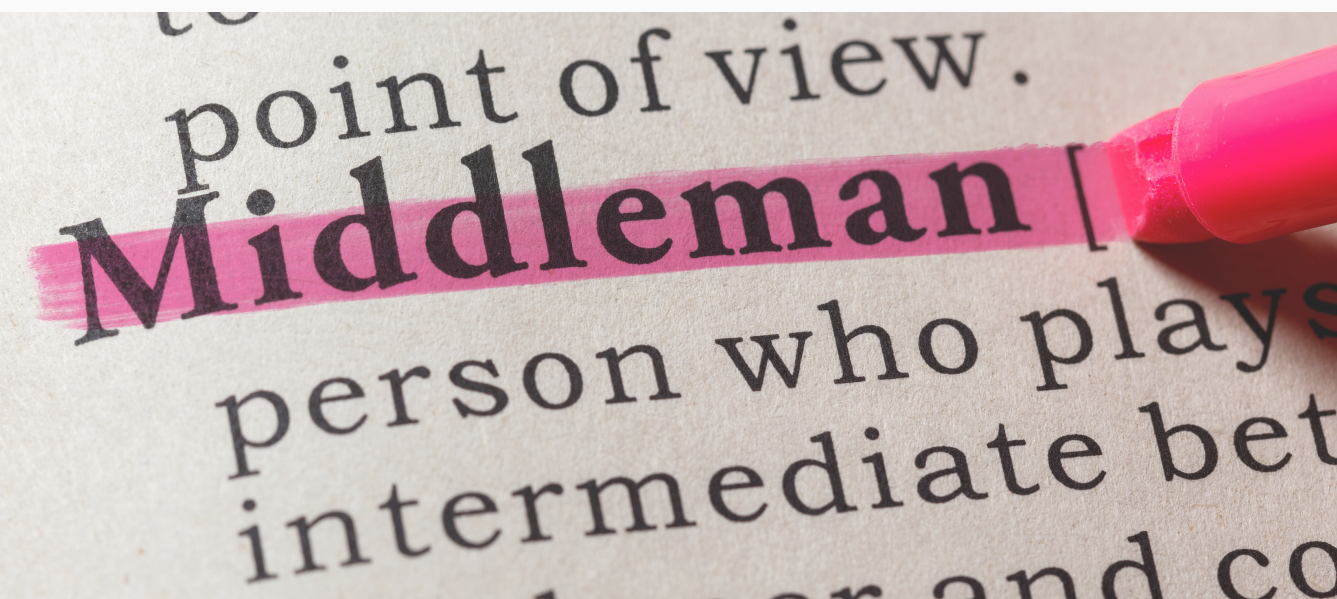
***"In an efficient market, prices are transparent, which incents suppliers to compete with one another to provide their customers with the price and quality attributes that fulfill consumers' needs. This beneficial market process is missing in the pharmaceutical supply chain. Leveraging their power over the formularies, PBMs negotiate...with manufacturers to determine the discounts and rebates off of the list prices. Through these negotiations PBMs are supposed to help control the cost of drugs, but in practice PBMs create a more complicated, less transparent, supply chain that fosters cryptic prices."***

(Winegarden, Improving Market Efficiencies Will Promote Greater Drug Affordability, 2020)

The researchers go on to assert that,

***"Effectively, PBMs have become the medication gatekeepers between doctors and patients."***

(Winegarden, Improving Market Efficiencies Will Promote Greater Drug Affordability, 2020)





## *How Do Rebates Work?*

PBMs put together drug formularies with tiers of approved and preferred drugs that health plans will cover and negotiate rebates with drug makers so that their drugs can appear on those formularies. Drug manufacturers pay rebates AFTER the drugs are dispensed to consumers because otherwise the manufacturer wouldn't know if the drug they are rebating was purchased by the patient. The manufacturer negotiates rebates drug by drug with PBMs and the rebate is usually a percentage of the list price of the drug. Rebates, then, aren't paid out until after the dispensed drugs are tallied up and the PBM reports the aggregated data back to the drug maker. The drug maker then sends rebate dollars to the PBM.

**Despite the flow of billions of dollars back to the PBMs from the manufacturer there is little transparency into how drug rebates are being used by PBMs and health plans.**

In a Yale Law & Policy Review publication from 2020, "Pharmacy Benefit Managers, Rebates and Drug Prices: Conflicts of Interest in the Market for Prescription Drugs", the researchers make the case that PBMs and, specifically, the rebate system, is to blame for the rising price of prescription drugs in this country. The report illustrates that those looking at the rebate system are saying that, in essence, drug manufacturers are being held hostage by the PBMs to have their products appear on health plan formularies (because without that they can't sell their drugs). The only way to do that is to increase the cost of the drug, so that the percentage of rebate to the PBM increases. The Yale publication goes on to state that, **"...although drug list prices are increasing, drug makers are keeping a decreasing share of the revenue while PBMs are keeping an increasing share."** (Shepherd, 2020)

In Colorado, rebates increased to \$1.12 billion from \$850 million, in just 2 years, an increase of 32% (Center for Improving Value in Health Care, 2021), but where is that money going? Certainly not into the pockets of pharmaceutical manufacturers since they are the ones writing those rebate checks. Again, the Yale Law research shows telling data that **"...in 2018, the companies owning the three largest PBMs – Express Scripts, CVS Health's Caremark and UnitedHealth's OptumRx – ranked in the top twenty-five companies on the Fortune 500 list with annual revenues over \$100 billion. In contrast, most of the largest drug manufacturers earn less than \$50 billion."** (Shepherd, 2020)

**"Rebates increased  
to \$1.12 billion  
from \$850 million  
in just two years"**

*Center for Improving Value in  
Health Care (CIVHC), 2021*



# Why Reforming Rebates Matters to Colorado Consumers?

Rebates shouldn't be the deciding factor in what medication is available on a health plan for a patient to take and what a doctor is able to prescribe. Formularies should be based on the effectiveness of medications, not how the big price tag satisfies the promise of a higher rebate. Profit over quality of clinical outcomes is a perverse incentive. High-cost drugs are replacing lower cost drugs or generics due to the money generated by rebates that ends up as revenue for PBMs. (Shepherd, 2020)

A Pacific Research Institute Issue Brief from September 2020 illustrates the situation quite simply, **"The purpose of insurance is to spread the financial costs associated with a risk across a wide population, with those people who did not experience the adverse event subsidizing the costs of those people who did. Since the current rebate system increases costs on patients who are prescribed expensive medicines in order to lower the premiums for everyone else, it is the antithesis of actual insurance."**

(Winegarden & Popovian, Reforming Rebates Will Improve Drug Affordability, 2020)

Given the unassailable data on the cost of the drug rebates, reforming the system seems a no-brainer. In fact, rebate reform is not a new idea.

In the Colorado 2019 Legislative session, legislation was introduced (House Bill 19-1296) that would have required insurers, PBM's and drug manufacturers to report information about the cost of drugs to the Commissioner of Insurance, who would then analyze the data and determine how drug costs and associated rebates were impacting premiums.

It also included a requirement for rebates on prescription drugs to reduce what a consumer paid at the point-of-sale at the pharmacy counter. The bill failed to pass due to concerns that proprietary and confidential information from insurers, manufacturers, and PBMs would not be protected.

In a Health Cabinet Summit in 2021, hosted by the Health Care Policy & Finance (HCPF) branch of the Colorado state government, attendees were asked if rebates should go back to consumers at the point-of-sale. Ninety-six percent of the respondents said "yes."

With so much to gain, is it unreasonable to ask when will Colorado see rebate reform? For consumer's sake the answer should be 'now', and policymakers in Colorado can look to at least one other state for a model.

A West Virginia bill significantly reforming the practice of drug rebates passed in 2021, marking a significant shift in who is being held accountable for inflating drug prices within the supply chain. Passing with full bipartisan support, HB 2263 will be implemented in 2022. The bill requires rebates to be paid to the consumer when the prescription is picked up, rather than going to the insurer and the PBMs.



## Why Widespread Reform Hasn't Happened

The question then becomes why is there vocal opposition to policies that are a clear win for consumers at the pharmacy counter? The answer is “follow the dollar”.

Rebates are generally paid to a combination of the health plan, the PBM and self-funded employers who are footing the bill for healthcare for their employees. The argument made by health insurers and PBMs is that the rebates are going back to payers to lessen premiums for their covered populations. But those with private commercial insurance certainly don't see their premiums decreasing at the same rate as rebates are increasing.

A recent Milliman study shows that premiums in Colorado would increase between 0.0% (\$0.20 per member per month for a PPO copay plan) and 0.5% (\$2.49 per member per month for a coinsurance high deductible plan) when rebates are passed through to the consumer at the pharmacy counter. The savings, however, at the counter could save some patients in Colorado nearly \$1,000 a year. (Milliman, 2022) Thus, the math on the benefits of rebate reform is clear.

The reality is there is no transparency into how insurers and PBMs use these rebates. Not only are premiums increasing year-over-year, with the average premium for family coverage increasing by 22% over the last 5 years and 47% over the last 10, but deductibles are skyrocketing as well, with an increase of 13% in the last 5 years and up 68% over the last 10. (Kaiser Family Foundation, 2021) Cost-sharing is shifting more and more to the consumer. This is why rebates have become a hot topic.

If rebates increased by 32% in Colorado in two years, why didn't consumers pay less at the pharmacy? Since rebates are based on list price of a drug, consumers are paying that list price at the pharmacy counter without the price reflecting the rebate or discounted amount, so they are bearing the brunt of high drug costs.

Rebates lead to drug manufacturers increasing list prices to meet the demands of higher rebates from PBMs and PBM's profit margins are growing exponentially by that inflation. (Shepherd, 2020)

The true party left out in the cold here is the consumer, who becomes marginalized by the system when merely purchasing medication to treat an illness or save their lives. Health insurance plans get to double-dip while consumers are in their deductible period. Insurers get paid the rebate amount, while the consumer pays based on the list price of the drug, not the discounted price that the insurer is paying to the PBM. A patient should never pay more for a drug than an insurer, but often does, seemingly defeating the purpose of having insurance in the first place.

Critics of rebate reform state that giving the rebate to consumers at the point-of-sale would prevent them from taking the rebate savings and using it to drive down the cost of insurance premiums. Studies show that the increase to premiums is minimal, somewhere in the range of 1-4%. (Bunger, Gomberg, Hunter, & Petroske, 2017), or an average of \$3 per month.

The question to answer then for a commercial payer is, “Do I want to save my entire employee population 1% on premiums or do I want to save my employees who are the highest utilizers of the plan an average of \$140-\$150 per prescription?”, which is what UnitedHealthcare stated would happen when they announced that they would pay patients rebates at the counter beginning in 2019. After implementation of point-of-sales rebates, United reported a 7-15% increase in compliance with picking up and taking medication as a result of the lower cost of drugs. (Policy & Medicine, 2018)



# *Why Giving Rebates to Consumers is Good Policy*

We know that in Colorado alone from 2016 to 2018, nearly \$3 billion was collected in rebates across all payers (Center for Improving Value in Health Care, 2021) and that what consumers pay at the pharmacy is based on the list price of the drug, not the discounted price negotiated by the health plan or self-funded employer, but what we don't know is how are those rebates ultimately benefiting consumers and who is helping them save money when they buy their medications at the pharmacy? If the manufacturers have to satisfy the PBMs' desire for more profit margin through higher rebates as a percentage of list price and insurance companies make more money by promoting formularies where rebates are higher and make money by charging insured members the list price over the discounted price, who is actually incentivized to change the system?

Rebate reform is a market-based solution, meaning that production and prices are mainly influenced by supply and demand rather than PBMs holding drug manufacturers hostage with regard to negotiating higher rebates in order for their drugs to appear on formularies.



## *Support for Rebate Reform is Growing...*

The PRI Brief concludes, “Rebate reforms disincentivize the use of concessions as a competitive tool and encourages competition based on the actual market price. As a result, the reforms will improve the efficiency of the market because actual market prices are now empowered to drive competitive behavior...”. (Winegarden & Popovian, Reforming Rebates Will Improve Drug Affordability, 2020) (page 4 PRI report).

Along with patient groups, the West Virginia Pharmacist’s Association also supported the bill, saying **“Drug rebates should be shared with consumers at the point of sale to reduce cost sharing and prevent premium increases in future years, NOT kept by health plans and PBMs.”** (www.wvpharmacy.org/beheard, n.d.)

***George Manahan, a business owner and coordinator for the Charleston Parkinson’s Support Group in West Virginia, supported the rebate reform bill there and stated, “As a business owner, I’ve never had a conversation with an insurance provider about getting a lower insurance premium because they negotiated significant drug rebates”***  
(Manahan, 2021)

The not-so-obvious benefit of reducing consumer’s costs to buy their medications is that medication compliance increases. Simply put, if people can better afford their medicines, they are more likely to pick them up at the pharmacy and take them as prescribed, which in turn, will increase their overall health and lower other out-of-pocket expenses to treat chronic conditions because they are following treatment recommendations.

The converse is also true, that higher costs lead to less compliance with taking medications. (Sherry A. Glied, 2020) Because the consumer saves money, allowing them to afford their medication to stay healthier, the health plan also saves money.

***The Coalition of State Rheumatology Organizations celebrated the passing of the Virginia bill stating, “Their state government enacted meaningful reform that now stands as the most comprehensive drug pricing law in the nation, and will directly lower prescription drug costs for patients.”***

*(Coalition of State Rheumatology Organizations, 2021)*

## *Unlocking the Savings for Colorado Consumers*

The high cost of healthcare continues to be a burden for patients, particularly as the COVID-19 pandemic persists. It's time to unlock the handcuffs that hold all players in the pharmaceutical supply chain hostage to the profit margins of PBMs and address the cost barriers that prevent patients from getting the care they need. By requiring prescription drug rebates to go to patients, Colorado can lower prices at the pharmacy for consumers.





## *References*

- Audrey Kearney, L. H. (2021, December 14). Kaiser Family Foundation. Retrieved from [www.kff.org: https://www.kff.org/health-costs/issue-brief/americans-challenges-with-health-care-costs/](https://www.kff.org/health-costs/issue-brief/americans-challenges-with-health-care-costs/)
- Belk, D. D. (n.d.). Medications: What Your Pharmacist Won't Tell You. Retrieved from [truecostofhealthcare.org: https://truecostofhealthcare.org/medications/](https://truecostofhealthcare.org/medications/).
- Brownlee, Andrew, & Watson, Jordan (2022). Berkeley Research Group. The Pharmaceutical Supply Chain, 2013-2020. Retrieved from [www.thinkbrg.com/insights/publications/pharmaceutical-supply-chain-2013-2020/](https://www.thinkbrg.com/insights/publications/pharmaceutical-supply-chain-2013-2020/)
- Bunger, A., Gomberg, J., Hunter, M., & Petroske, J. (2017). Point of Sale Rebate Analysis in the Commercial Market. Milliman.
- CCHI, C. C. (2021, January 28). Colorado Prescription Drug Accountability Board (PDAB) Voter. (M. S. Research, Interviewer)
- Center for Improving Value in Health Care. (2021). Colorado Prescription Drug Spending and the Impact of Drug Rebates. CIVHC.
- Centers for Medicaid & Medicare Services. (n.d.). Retrieved from [www.cms.gov: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical)
- Centers for Medicaid & Medicare Services. (n.d.). Retrieved from [www.cms.gov: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet)
- Coalition of State Rheumatology Organizations. (2021, May 7). [www.csro.info](https://www.csro.info). Retrieved from Coalition of State Rheumatology Organizations: <https://csro.info/news/2021/west-virginia-enacts-one-of-the-most-comprehensive-drug-pricing--transparency-bills-in-the-nation>
- Kaiser Family Foundation. (2021, November 1). 2021 Employer Health Benefits Survey. Retrieved from Kaiser Family Foundation: <https://www.kff.org/report-section/ehbs-2021-summary-of-findings/>
- Manahan, G. (2021, March 31). [www.wvgazettemail.com](https://www.wvgazettemail.com). Retrieved from Charleston Gazette-Mail : [https://www.wvgazettemail.com/opinion/op\\_ed\\_commentaries/george-manahan-bill-will-lower-drug-costs-for-west-virginians-opinion/article\\_c99db1bd-c515-532c-bc03-99ff47d6acc2.html](https://www.wvgazettemail.com/opinion/op_ed_commentaries/george-manahan-bill-will-lower-drug-costs-for-west-virginians-opinion/article_c99db1bd-c515-532c-bc03-99ff47d6acc2.html)
- Milliman. (2018, May). A primer on prescription drug rebates: Insights into why rebates are a target for reducing prices. Retrieved from [www.milliman.com: https://www.milliman.com/en/insight/a-primer-on-prescription-drug-rebates-insights-into-why-rebates-are-a-target-for-reducing](https://www.milliman.com/en/insight/a-primer-on-prescription-drug-rebates-insights-into-why-rebates-are-a-target-for-reducing)

## References

Milliman. (2022, January). Measuring the Impact of Point of Sale Rebates on the Commercial Health Insurance Market. Retrieved from [www.milliman.com](http://www.milliman.com):  
<https://www.milliman.com/-/media/milliman/pdfs/2022-articles/1-19-22-measuring-impact-point-of-sale-rebates-commercial-health-insurance-market.ashx>

National Academy for State Health Policy. (2021, October 14). 2021 State Legislative Action to Lower Pharmaceutical Costs. Retrieved from [www.nashp.org](http://www.nashp.org): <https://www.nashp.org/rx-legislative-tracker/>

NCPA National Community Pharmacists Association. (2019, August 29). [www.naic.org](http://www.naic.org). Retrieved from National Association of Insurance Commissioners:  
<https://content.naic.org/sites/default/files/inline-files/NCPA%208-29-19.pdf>

Policy & Medicine. (2018, May 3). UnitedHealthcare Will Share Rebates with Patients. Retrieved from Policy & Medicine: <https://www.policymed.com/2018/03/unitedhealthcare-will-share-rebates-with-patients.html>

Shepherd, J. (2020). Pharmacy Benefit Managers, Rebates, and Drug Prices: Conflicts of Interest in the Market for Prescription Drugs. *Yale Law and Policy Review*.

Sherry A. Glied, B. Z. (2020, April 17). Catastrophic Out-of-Pocket Health Care Costs: A Problem Mainly for Middle-Income Americans with Employer Coverage. Retrieved from The Commonwealth Fund: <https://www.commonwealthfund.org/publications/issue-briefs/2020/apr/catastrophic-out-of-pocket-costs-problem-middle-income>

Urban Institute. (2021, August). The Uninsurance Rate Held Steady during the Pandemic as Public Coverage Increased. Retrieved from [www.urban.org](http://www.urban.org):  
[https://www.urban.org/sites/default/files/publication/104691/uninsurance-rate-held-steady-during-the-pandemic-as-public-coverage-increased\\_final-v3\\_0.pdf](https://www.urban.org/sites/default/files/publication/104691/uninsurance-rate-held-steady-during-the-pandemic-as-public-coverage-increased_final-v3_0.pdf).

Winegarden, W. (2020). Improving Market Efficiencies Will Promote Greater Drug Affordability. San Francisco: Pacific Research Institute Center for Medical Economics and Innovation .

Winegarden, W., & Popovian, R. (2020). Reforming Rebates Will Improve Drug Affordability. San Francisco: Pacific Research Institute Center for Medical Economics and Innovation. [www.wvpharmacy.org/beheard](http://www.wvpharmacy.org/beheard). (n.d.). Retrieved from West Virginia Pharmacists Association:  
<https://wvpharmacy.org/beheard/>