PIONEER HEALTH

How PBMs Work: A Primer

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Table of Contents

One of the most opaque aspects of the American healthcare system is the role played by pharmacy benefit managers. PBMs are often described as "middlemen" who negotiate discounts on drugs that theoretically should save money for their clients. PBMs are hired by the government, employers, or occasionally by consumers directly to administer pharmaceutical benefits through insurance coverage, facilitating patients' access to medicines best suited to treat their conditions. They negotiate with drug companies and extract billions of dollars in concessions, ostensibly to save money for their clients.[1] However, due to a lack of transparency, it remains unclear whether PBMs are effectively passing these savings on to their clients or primarily boosting their profits at the expense of patients, employers, and government entities.[2, 3]

Evolution of PBMs and Their Practices

PBMs emerged when employers decided to offer insurance coverage for biopharmaceuticals. At that time, an intermediary was needed to process prescriptions at pharmacies, ensuring that insurance reimbursements and patient out-of-pocket costs were allocated appropriately.[2] PBMs filled this role. Over time, PBMs expanded their services to include benefit design, which introduced drug formularies. Initially, formularies were intended to promote cost-effective medicines, such as generics, over more expensive brand-name drugs.[4, 5, 6] However, formularies eventually became a tool for PBMs to leverage contracting tactics like rebate arrangements. Through rebate contracting, PBMs negotiated substantial concessions from biopharmaceutical companies in exchange for preferential coverage of their medications.[5, 7, 8]

As part of these rebate contracts, PBMs introduced a range of fees charged to biopharmaceutical manufacturers, employers, governments, pharmacies, and patients, often in exchange for services like data sharing or implementing administrative barriers, such as step therapy or prior authorization.[2] More recently, PBMs began acquiring specialty pharmacies to control the distribution of high-cost brand medications that generate significant revenue through rebates, fees, and other concessions.[9]

The underlying premise of these ever-expanding strategies was that such actions would eventually lower health insurance costs for employers, governments, and patients. However, despite the exponential growth in concessions paid by biopharmaceutical companies, the cost of insurance coverage for medications in the U.S. has risen, while access to innovative treatments has declined.[10, 11] Worst of all, patients needing life-saving treatments are increasingly burdened by high out-of-pocket costs.[12] PBMs are prosecutors, judges and juries that, as they decide what medicines are covered, determine the out-of-pocket expenses and force patients to acquire medications from their privately owned pharmacies.

Understanding Drug Formularies

One of the primary tasks of a PBM once a client hires them is to establish a drug "formulary." Simply put, a drug formulary is a list of drugs available to patients enrolled in that health plan, including information on the patient's out-of-pocket costs. Additionally, PBMs use formulary positioning to determine whether a patient must "fail first" on a cheaper medication before accessing the one prescribed by their provider or if the provider must submit "prior authorization" forms for approval.[13, 14] Formularies also exclude drugs from coverage, meaning the health plan will cover none of the cost if the provider prescribes them, leaving patients to bear 100 percent of the medication cost.[15, 16, 17, 18]

Policymakers are now questioning whether drug formularies are being designed to maximize patient access and cost-effectiveness or simply as profit-maximizing schemes for PBMs and their vertically integrated insurance companies.[19]

Since the business practices of PBMs are highly obscure, answering this question is complicated. However, examining how formularies are devised—and the money involved—suggests that profit-making on the backs of employers, patients, and government may drive formulary design.

How Formularies Are Constructed

PBMs typically construct formularies by therapeutic categories, such as diabetes medications. They request bids from pharmaceutical companies manufacturing drugs in these categories, asking what rebates, fees, and concessions they're willing to pay for preferred placement on the formulary, often with low out-of-pocket costs and minimal paperwork for providers.[5]

PBM contracts with manufacturers go beyond simple rebate offers. Sometimes, a manufacturer requires that PBMs cover their drugs at specific tiers with minimal administrative burdens. The manufacturer then agrees to pay the PBM a rebate based on the retail price of the medicine, plus additional fees and other concessions.[2]

Since the structure and amount of these concessions are hidden from patients, employers, and government entities, it's unclear how much of the concessions are shared with those who actually bear the costs of medicines in the U.S.[2, 3] Furthermore, studies have shown that these complex formularies create billions of dollars in administrative costs for providers and employers.[13, 19]

The Impact of Rebate Contracting on Drug Prices

The incentives of rebate contracting drive ever-increasing concessions, forcing drug companies to raise the retail prices of their medicines since PBMs favor higher-priced medicines that yield larger rebates, fees, and concessions over lower-priced

alternatives. This price increase directly affects patients who must pay deductibles and coinsurance based on the rising retail prices.

The broken system is perhaps best illustrated by reports from the U.S. Senate Finance Committee and the Federal Trade Commission (FTC), highlighting insulin pricing issues.[20, 21] Retail insulin prices kept rising annually while the net price remained stagnant. This meant patients paid more, while manufacturers saw declining net revenue per unit sold.[21] In some cases, PBMs even favored high-priced insulin over cheaper generic alternatives by excluding the generics from formularies.[17, 18]

Ultimately, these price increases disproportionately harm patients, especially those paying list prices to meet deductibles or those without insurance, who comprise approximately 8 percent of the population. PBMs, on the other hand, pay less per unit dispensed despite price hikes.[22]

Preference for Brand Drugs Over Generics

Rebate contracting also skews coverage toward expensive brand-name drugs over lower-cost generics. One study found that, in 11 instances, PBMs excluded generic medicines in favor of more costly brand medications.[18] Higher-priced drugs offer more substantial rebates, creating misaligned incentives.

This preference for high-rebate, high-cost drugs contributes to the slow adoption of biosimilars in the U.S., unlike Europe, where biosimilars have seen faster uptake. For instance, an analysis by Drug Channels concerning biosimilars for Humira—one of the world's top-selling drugs—found that, despite its high list price, brand Humira was preferred on all three major PBM formularies.[23] The FTC's recent report further confirmed that some rebate agreements block access to lower-cost generics and biosimilars: "We also confirm several troubling rebating practices and report evidence raising concerns that brand manufacturers and PBMs may be entering into rebate contracts designed to cut off access to generic and biosimilar competitors."[20]

The Practice of Spread Pricing

Another questionable PBM practice is spread pricing, where a PBM charges clients (patients, employers, or government) more than it reimburses a pharmacy for dispensing a medicine. A study by the Schaeffer Institute found that the federal government could have saved approximately $4.5 billion over two years by paying the cash prices at Costco for the top 200 generics rather than reimbursing PBMs through its Medicare Part D program.[24]

Spread pricing isn't limited to Medicare. In 2018, the Ohio Auditor's office reported that PBMs had overbilled Ohio's Medicaid program by $224 million compared to what they paid pharmacies, leading to reforms and increased regulations in Ohio's Medicaid system.[25]

Consolidation of PBM Market Power

The PBM market is also increasingly consolidated. In 2004, the top three PBMs served 190 million people and managed 52 percent of prescription drug claims. Today, the top three PBMs—CVS Caremark, Express Scripts, and OptumRx (collectively, the "Big 3")—manage 79 percent of drug claims for around 270 million people.[9, 20] The Big 3 have vertically integrated with the largest U.S. insurers and control 70 percent of the specialty brand drug market, a lucrative area in rebate contracting.[26]

In 2016, the combined revenue of the four largest healthcare conglomerates with PBM operations—UnitedHealth, CVS, Cigna, and Humana—was $456 billion, representing 14 percent of national health expenditures. Today, their revenue exceeds $1 trillion, equaling 22 percent of national health expenditures.[20] This market power has created significant challenges for the government, employers, and independent pharmacies, which face reimbursement challenges and a lack of competitive options.

Conclusion

To address the opaque and problematic practices of pharmacy benefit managers (PBMs), it's clear that action is needed from policymakers and patients alike. Here's what can be done:

1. Policymakers

- **Mandate transparency**: Require PBMs to disclose the full extent of rebates, fees, and concessions, ensuring that savings benefit patients and healthcare payers.
- **Regulate rebate structures**: Eliminate incentives for favoring higher-priced medications over affordable generics or biosimilars.
- **Prohibit spread pricing**: Ban PBMs from charging clients more than they reimburse pharmacies, preventing unnecessary cost inflation.
- **Promote competition**: Address PBM market consolidation by enforcing antitrust laws and encouraging new entrants to reduce monopolistic control.

2. Patients and Advocates

- **Demand accountability**: Advocate for transparency in PBM practices and challenge high out-of-pocket costs through petitions or engagement with lawmakers.
- **Push for access**: Call on healthcare providers and insurers to prioritize formularies that enhance access to cost-effective generics and biosimilars.

Endnotes

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Dr. William Smith is Senior Fellow & Director of Pioneer Life Sciences Initiative. Dr. Smith has 25 years of experience in government and in corporate roles. His career includes senior staff positions for the Republican House leadership on Capitol Hill, the White House Office of National Drug Control Policy, and the Massachusetts Governor's office where he served under Governors Weld and Cellucci. He spent ten years at Pfizer Inc as Vice President of Public Affairs and Policy where he was responsible for Pfizer's corporate strategies for the U.S. policy environment. He later served as a consultant to major pharmaceutical, biotechnology and medical device companies. Dr. Smith earned his PhD in political science with distinction at The Catholic University of America.

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Dr. Popovian is one of the select few researchers to study and publish clinical and policy-related economic analysis and empirical data regarding emerging payment models in the U.S. healthcare system and for biopharmaceutical reimbursement. His insight and analysis also led to one of the first inclusions of health outcomes data in a labeled indication of a biopharmaceutical.

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