

PBM Explained: Role in Drug Pricing & Healthcare System

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pharmacy benefit manager

pbm

drug pricing

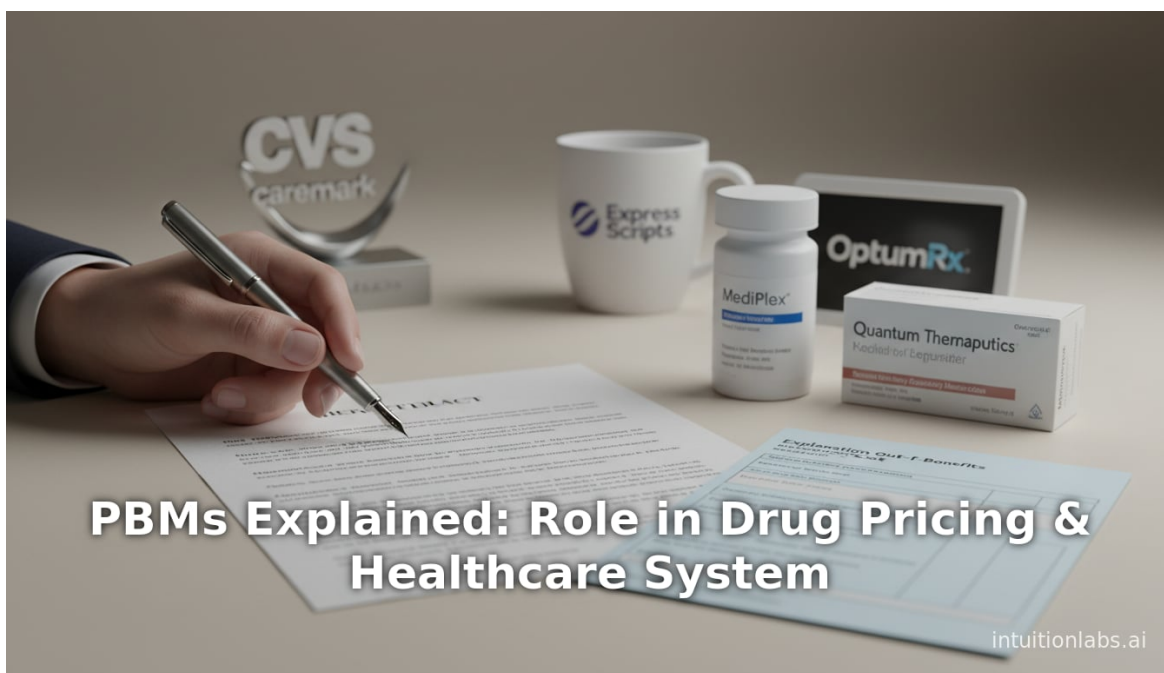
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pbm regulation



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Executive Summary

Pharmacy Benefit Managers (PBMs) are specialized intermediaries in the U.S. healthcare system that administer prescription drug benefits for insurers, employers, and government programs. In recent years, PBMs have grown into powerful entities controlling a vast share of the [drug supply chain](#). The three largest PBMs – CVS Caremark (CVS Health), Express Scripts (Cigna), and OptumRx (UnitedHealth Group) – together process roughly 80–85% of all U.S. prescription claims (^[1] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)) (^[2] www.drugchannels.net). Their role encompasses negotiating drug prices with manufacturers, designing formularies (coverage lists), [managing pharmacy networks](#), processing claims, and operating mail-order and specialty pharmacies. By leveraging scale, PBMs negotiate rebates and discounts from manufacturers and pharmacies, which they claim to pass on as savings to payers and patients, while also earning revenues through administrative fees and the “spread” between what they charge plan sponsors and reimburse pharmacies (^[3] www.pharmaceuticalcommerce.com) (^[4] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)).

Despite the intended cost-containment purpose, PBMs have become controversial. Critics argue that PBMs’ complex, largely opaque business model can [drive up drug prices](#) and patient costs. Independent reviews and government audits have uncovered practices such as **spread pricing** (charging insurers more than reimbursing pharmacies) and formulary steering toward higher-priced drugs that maximize rebates and PBM profits (^[3] www.pharmaceuticalcommerce.com) (^[5] repository.uclawsf.edu). For example, a 2025 Federal Trade Commission (FTC) report found that the three big PBMs inflated drug prices at their own pharmacies, accruing an estimated **\$7.3 billion** in excess revenue from 2017–2022 and raising out-of-pocket patient costs by \$279 million in 2021 alone (^[6] www.reuters.com). State regulators have similarly identified millions in excess Medicaid spending due to spread pricing (^[7] www.paauditor.gov) (^[8] www.wvia.org). Advocates for independent pharmacies point to cases of under-reimbursement (paying pharmacies less than acquisition cost) and anti-competitive vertical integration that disadvantages small pharmacies (^[9] www.reuters.com) (^[10] www.axios.com).

On the policy front, PBMs are under intense scrutiny by federal and state regulators. The FTC has sued leading PBMs, alleging anticompetitive practices – notably in Pursuant to insulin pricing schemes – and has probed their broader influence on drug costs (^[11] www.reuters.com) (^[12] www.reuters.com). Congress and multiple state legislatures have introduced laws targeting PBM practices. Recent federal proposals would ban PBM compensation based on a drug’s list price and increase transparency on rebates (^[13] www.reuters.com) (^[14] www.reuters.com). Several states (Arkansas, Iowa, Pennsylvania, etc.) have passed measures curbing PBMs’ steering and ownership of pharmacies; some of these laws are now being challenged in court (^[10] www.axios.com) (^[15] www.reuters.com). Meanwhile, PBMs and industry groups point to analyses that claim PBMs generate substantial savings through negotiated discounts, generic substitution, and mail-order efficiencies (^[16] www.cato.org) (^[4] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)). For example, one study found that proactive PBM management of Hepatitis C therapies saved a Medicaid program tens of millions of dollars (^[17] www.cato.org).

This report provides an exhaustive analysis of modern PBMs, covering their historical evolution, business models, market structure, and the data on their impact. It presents multiple perspectives – from regulatory reports and academic studies to industry and independent advocacy positions – and includes case studies (legislative and legal examples) to illustrate PBM effects in practice. Through detailed data and citations, the report examines how PBMs function in the drug supply chain, how they influence pricing and access, and what the future may hold under ongoing reforms. All arguments are backed by authoritative sources, including peer-reviewed studies, government reports, and reputable news coverage, to provide a balanced, evidence-based picture.

Introduction and Background



Definition and Role of PBMs: Pharmacy Benefit Managers (PBMs) are *third-party administrators* of prescription drug programs for insurance plans, self-insured employers, and government payers. They emerged in the 1960s as insurers began offering prescription benefits. Originally conceived to *contain drug costs* and streamline pharmacy benefits, PBMs today perform a wide array of functions: they negotiate discounts and rebates with drug manufacturers, develop and manage formularies (the list of covered drugs) for health plans, establish networks of retail and mail-order pharmacies, process prescription drug claims, and administer patient cost-sharing and utilization controls (e.g., prior authorizations and step therapy) ([18] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)) ([4] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)). PBMs also often operate their own pharmacies (especially mail-order and specialty pharmacies) and service pharmacy networks, which is a form of vertical integration ([19] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)). In short, PBMs sit at the intersection of insurers, pharmacies, and drug makers, wielding huge influence over what medications patients receive and at what cost.

Historical Evolution: The idea of outsourcing pharmacy benefits dates to the 1960s and 1970s. As new medications emerged and health plans sought to cover drugs, they turned to external managers. In 1967, a federal task force noted the rapid growth of drug spending ([20] jamanetwork.com), but only about 4% of prescriptions were covered by third parties in the 1960s (rising to 32% by 1980) ([20] jamanetwork.com). The first PBMs were essentially pharmacists who formed cooperatives or prepayment plans. For example, Prescription Services, Inc. (founded 1958 in Canada) and PAID Prescriptions (founded 1965 in the U.S.) started as pharmacy benefit plans where pharmacies were reimbursed at usual-and-customary (the pharmacy's own) prices ([21] jamanetwork.com). PBMs initially handled claim processing and provided simple tools like drug ID cards and basic formulary lists ([4] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)) ([21] jamanetwork.com). Over time, especially by the late 1990s and 2000s, PBMs transformed into *complex negotiators* in the pharmaceutical market.

The modern PBM industry largely took shape in the 1990s and 2000s. Major independent PBM companies emerged and grew through consolidation. Landmark events include:

- **Express Scripts** (founded 1989) quickly grew via acquisitions and by the early 2000s was a leading PBM.
- **CVS Caremark** was formed by the 2007 merger of CVS Pharmacy and Caremark Rx (then Caremark Rx itself an early PBM founded 1993), creating one of the largest PBMs inside a retail pharmacy chain.
- **OptumRx** is UnitedHealth Group's PBM arm, built through the acquisitions of Medco Health Solutions (completed 2012) and other assets. After UnitedHealth acquired pharmacy benefit manager Medco for \$28 billion in 2012, the combined company was renamed OptumRx, instantly dominating the market.
- **Cigna/Express Scripts** (Cigna's merger with Express Scripts piggybacked on Express Scripts' 2020 partnership with the insurer). In 2022, Express Scripts (PBM) fully merged with Cigna.
- **Prime Therapeutics**, jointly owned by Blue Cross/Blue Shield plans, focuses on serving those plans and associated employer plans.
- **Humana Pharmacy Solutions**, owned by Humana, serves Humana Medicare and employer clients.
- **Magellan Rx, MedImpact, and Xavier Health (EnvisionRx)** are smaller PBMs.

By 2024, these firms became highly concentrated: the *three giants* (CVS Caremark, Express Scripts, OptumRx) together handled roughly **80–85%** of U.S. prescription claims ([1] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)) ([22] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)). (Some estimates differ: for example, a Reuters report notes the top three at 80% and the next three at 16% ([23] www.reuters.com), totaling 96% in the top six.) Drug Channels Institute data for 2024 confirms that about 80% of *equivalent* pharmacy claims were processed by only these three PBMs ([2] www.drugchannels.net). A Drug Channels analysis notes that market share can shift year-to-year (recently, Express Scripts overtook CVS Caremark after gaining a large Centene contract ([24] www.drugchannels.net)), but the overall dominance of the “Big Three” remains steady. Minor PBMs and regional players have struggled to compete at scale, underscoring the oligopolistic nature of the PBM market.



The three large PBMs are now fully owned by (or affiliated with) health insurers: CVS Caremark is part of CVS Health (which also owns Aetna insurance), Express Scripts is part of Cigna, and OptumRx is part of UnitedHealth Group. In fact, five of the six largest PBMs (also including Humana and Elevance Health/Anthem-owned Carelon) are insurer-owned (^[25] www.drugchannels.net). This vertical integration (insurers owning PBMs that may own pharmacies) has raised conflict-of-interest concerns. For instance, critics note that such PBMs might steer patients to affiliated pharmacies even if cheaper alternatives exist, thus raising concerns about anticompetitive behavior (discussed below).

PBMs Today: In 2024, PBMs administer prescription benefits for hundreds of millions of Americans. According to industry data and association statements, PBMs administer plans covering **over 266 million people** – roughly 80% of the U.S. population (^[1] pmc.ncbi.nlm.nih.gov) (^[26] www.cato.org). These plans span private employer plans, Medicare Part D, Medicaid managed programs, federal plans, and other groups (^[27] www.congress.gov) (^[26] www.cato.org). The PCMA (trade group) emphasizes PBMs' national reach, noting they serve diverse payers from employers to Medicaid. The scale gives PBMs enormous negotiating power with manufacturers and pharmacies.

Key Functions Recap: The core PBM services include:

- **Formulary Management:** PBMs design tiered drug formularies in collaboration with insurers. A formulary specifies which drugs are covered and at what copay or tier. PBMs decide which medications are "preferred" (lower cost-sharing) versus non-preferred. This influences patient access. To get a favorable formulary position, manufacturers pay rebates to PBMs (or insurers). The high-level flow: Manufacturer gives rebates for coverage; PBM may pass some or none to plan sponsor.
- **Rebate Negotiation:** PBMs negotiate rebates and discounts with drug manufacturers. When a drug is covered on an advantageous formulary tier, the manufacturer typically pays the PBM/plan a rebate. Rebates are usually a percentage of the drug's list price; they accumulate to the PBM or plan. The exact amount and use of rebates are typically secret.
- **Network Pharmacy Administration:** PBMs create and manage networks of pharmacies (retail chains, independents, mail-order, specialty). They contract reimbursement rates with pharmacies. Network pharmacies agree to accept a pre-negotiated payment schedule for drugs dispensed to plan members. PBMs may reimburse at what is called average wholesale cost (AWP) minus a percentage, or wholesale acquisition cost (WAC) minus %, or use defined terms like Average Manufacturer Price (AMP) plus percentage. The network may exclude or "lock out" pharmacies that don't meet terms.
- **Claims Processing:** PBMs process prescription claims electronically. When a patient fills a prescription, the pharmacy submits a claim to the PBM to verify eligibility and payment. The PBM adjudicates, calculates patient copay, pays the pharmacy, and bills the plan sponsor accordingly.
- **Utilization Management:** PBMs apply tools like prior authorization (requiring approval before dispensing), step therapy (requiring cheaper drugs tried first), quantity limits, and generic substitution policies to control costs and use appropriate therapies (^[28] www.cato.org) (^[29] www.cato.org).
- **Mail-Order & Specialty Pharmacies:** Many PBMs operate large mail-order and specialty pharmacy operations. Mail-order (e.g., 90-day supplies by post) often offers lower prices for chronic meds. Specialty pharmacy (handling complex, high-cost drugs, often for cancer, autoimmune, etc.) is a growth area; PBMs may dispense or network these drugs.

PBM Industry Structure and Market Dynamics

Market Concentration: As noted, PBM market share is highly concentrated. Various sources report similar figures: one 2024 FTC report said the top three PBMs control ~79–80% of U.S. drug claims (^[30] www.reuters.com) (^[23] www.reuters.com). A peer-reviewed Urology Care Foundation article states the three largest "process 85% of all prescription claims" and serve *over 266 million Americans* (^[22] pmc.ncbi.nlm.nih.gov). Drug Channels (an industry analytics blog) concurs, estimating ~80% of claims for 2024 by the Big 3 (^[2] www.drugchannels.net). The Senate Finance Committee in 2022 similarly cited that the top three "dominate 85% of their market" (^[31] www.congress.gov). Such concentration is striking: it means only a few corporate entities



stand between most patients and drug manufacturers. It also suggests they wield significant market power over both drug prices and pharmacy reimbursements.

Consolidation and Vertical Integration: Over the past 30 years, PBMs have consolidated through mergers and acquisitions. Meanwhile, insurers have acquired PBMs: e.g., UnitedHealth's OptumRx (Medco buy), Cigna's Express Scripts, CVS's Caremark (CVS-Aetna merger), and Elevance/Anthem's integration with Caredel (formerly ESI Northeast). Many PBMs also acquired specialty pharmacies (e.g., CVS/Caremark's purchase of Coram, Accredo) and mail-order networks to capture more of the distribution. The result is vertical integration at multiple levels (insurer – PBM – pharmacy) which, according to critics, creates conflicts of interest. For instance, one Cato economist notes that 5 of the 6 largest PBMs are now insurer-owned (^[25] www.drugchannels.net).

Associated Entities: A related layer in the market is Pharmacy Services Administrative Organizations (PSAOs), which represent independent pharmacies in contracting with PBMs. Also, Group Purchasing Organizations (GPOs) sometimes negotiate drug prices (especially for hospitals) and can resemble PBMs in function. The FTC report in July 2024 highlighted "PBM-affiliated GPOs" that negotiate drug prices (^[32] www.reuters.com). This points to a web of intermediaries.

Pharmacy Independence Pressure: Independent, community pharmacies face particular pressure in the PBM-dominated system. Many regulations and audits (see "Independent Pharmacies" section below) have accused PBMs of underpaying small pharmacies (through low reimbursements and clawbacks) and favoring large retail chains. For example, Oklahoma's AG sued CVS Caremark for under-reimbursing 15 independent pharmacies for certain drugs (^[9] www.reuters.com). Several states have passed anti-steering or fair pay laws to protect independents (^[15] www.reuters.com). Conversely, PBMs counter that they reimburse independent pharmacies at higher rates than chains, citing some studies (though those studies are often industry-funded detective reports).

PBM Business Models and Revenue Mechanisms

PBMs generate revenue through multiple channels. Unlike traditional service businesses, PBMs' revenues often depend less on transparent fees and more on hidden spreads and rebates. Key revenue sources include:

- Negotiated Rebates:** The largest PBM revenue stream typically comes from **manufacturer rebates**. When a drug manufacturer offers a rebate for formulary placement, the PBM negotiates that rebate (often as a percentage of list price). The PBM may keep all or a portion of that rebate. Publicly, many PBMs claim that rebates are passed on (in full or part) to plan sponsors. However, critics argue that the opaque nature of contracts allows PBMs to retain large rebate portions as profit (^[33] repository.uclawsf.edu) (^[34] www.cato.org). For example, economist Robin Feldman notes that the PBM drug contracting system "ensures that lower-priced substitutes cannot gain a foothold" because PBMs favor drugs with larger rebates (^[5] repository.uclawsf.edu). Overall, the lack of transparency means it's difficult to know exactly how much of the total rebate pool remains with PBMs.
- Spread Pricing:** Another revenue source is the **spread** between what a payer is charged and what a pharmacy is reimbursed. As detailed in media investigations, PBMs may charge insurers (or state Medicaid programs) one amount for a drug (based on the contractual claim price) but reimburse the dispensing pharmacy a lower amount. The PBM pockets the difference. This is called *spread pricing*. The FTC defines it as billing "plan sponsors more than what they reimburse pharmacies" (^[35] www.reuters.com). Spread pricing has attracted scrutiny: e.g., Pennsylvania found \$7 million in excess Medicaid spending due to spread pricing (^[7] www.paauditor.gov). A pharma trade press article explains: "Spread pricing is a practice where PBMs charge payers ... a higher price for medications than what they pay to pharmacies, keeping the difference or 'spread' as profit" (^[3] www.pharmaceuticalcommerce.com). While PBMs claim spread pricing aligns incentives for risk-sharing, audits and lawsuits (including by state AGs) indicate widespread claims of underpayment to pharmacies and overcharges to payers (^[7] www.paauditor.gov) (^[8] www.wvia.org).

- **Administrative Fees:** PBMs usually charge plan sponsors (insurers, employers, etc.) fees for their services. These can be per-member-per-month (PMPM) fees for managing a pharmacy benefit, or fees for specific services (formulary design, clinical management programs, etc.). However, these fees are often not sufficient on their own given the complexity of services, which is why PBMs rely on rebates and spreads.
- **Specialty Pharmacy Profits:** Many PBMs own specialty pharmacies or have exclusive relationships with them. Specialty drugs (e.g. oncology, biologics) represent a small percentage of volume but a large share of cost. By dispensing specialty drugs, PBM-owned pharmacies capture profits from dispensing and any attached reimbursements. They also often charge separate handling fees or have unique pricing for these high-cost drugs.
- **Other Fees and Network Contracts:** Some PBMs earn revenue from network "administration" fees (charging a flat fee regardless of drug cost) or from transaction fees on data/reporting. They may also levy 'performance guarantees' on pharmacies or adjust payments retroactively (e.g., "clawback" or "DIR" fees).

A concise overview (Table 1) of PBM revenue streams is as follows:

Revenue Source	Description	Implications
Manufacturer Rebates	PBM negotiates rebates from drug manufacturers for formulary placement. Rebates often undisclosed.	Can be huge sums (retrospective payments tied to list price). Lack of transparency raises questions. PBMs may retain large rebates; unclear how much is passed to plan or patients. The presence of rebates incentivizes PBMs to favor higher list-price drugs. Studies note PBMs keep a small share of rebates in Medicare (~0.4%) but larger shares (9–22%) in commercial plans (^[36] jamanetwork.com) (^[29] www.cato.org).
Spread Pricing	Difference between price charged to plan and pharmacy reimbursement (PBM keeps "spread").	Scrutinized by regulators. For example, PA audit found \$7M extra Medicaid cost due to spread (^[7] www.paauditor.gov). Spread is often undefined in contracts and can be broad. It can raise payer costs and depress pharmacy reimbursements. Some argue it incentivizes PBMs to seek additional profit; others say it can act as a risk-sharing hedge.
Administrative Fees	Flat or PMPM fees charged to plan sponsors for PBM services (claims processing, formulary).	Transparent but generally smaller component. Industry claims these keep PBM afloat, while rebates/spreads generate most profit.
Specialty Pharmacies	PBM-owned specialty pharmacies dispense high-cost meds, earning revenue on markup, handling fees.	High-profit margin. Vertical integration means PBMs profit at multiple levels (i.e., buying manufacturer, dispensing patient). Regulators worry PBM-owned specialty pharmacies may restrict or steer patients.
Pharmacy Network Fees (Clawbacks/DIR)	Various retroactive fees clawed back from pharmacies (averaging hundreds of millions in aggregate across industry).	These can come as direct and indirect remuneration (DIR) fees. For example, Medicare Part D DIR fees shot up in recent years, often paid by pharmacies. DIR fees are opaque and sometimes called "DIR clawbacks".
Other Services	Disease management programs, data analytics, etc., often bundled with admin fees or priced separately.	Secondary; aimed at adding value (or justifying fees).

Overall, **PBM**s argue that their combined actions – negotiating rebates, managing formularies, promoting generics, and operating efficient mail-order services – yield net savings for health plans and patients. Industry experts contend PBMs **reduce overall drug spending** by maximizing discounts and steering patients to lower-cost alternatives (^[16] www.cato.org) (^[17] www.cato.org). For example, one simulation of Medicaid programs found that a PBM-managed approach saved states tens of millions (by switching to generics quickly) compared to direct purchasing (^[17] www.cato.org). A widely cited statistic (from a 2016 PCMA report) claimed PBMs would save \$654 billion in drug costs over 2016–2025 due to their interventions (^[37] www.cato.org).



However, **detractors** note that PBMs' incentive to collect more rebates may paradoxically support higher list prices. If manufacturers believe they must offer large rebates to secure formulary placement, they may set even higher list prices, of which only a fraction is eventually paid. Critics highlight insulins and EpiPens as examples where list prices soared despite large rebates, since out-of-pocket costs (often tied to list price in older plans) also surged (^[11] www.reuters.com) (^[5] repository.uclawsf.edu). Studies have shown correlations between list price increases and rebate growth, suggesting PBMs' rebate-driven model can fuel overall price inflation, even if net plan costs purportedly fall (^[5] repository.uclawsf.edu) (^[29] www.cato.org).

Thus, the core controversy is whether PBMs truly lower net costs vs. whether they capture much of the value (and obscure their margin). Government accounts have tried to shed light. For Medicare Part D, regulators now require PBMs to pass *all* rebates to the government; meanwhile, outside Medicare, PBM rebate retention in commercial plans has been estimated at 9–22% (^[38] jamanetwork.com). Notably, a GAO reported in 2019 that 99% of rebates were returned to plan-sponsors (not patients) in the form of lower premiums (^[34] www.cato.org); however, that analysis did not examine whether plans fully lowered patient cost-sharing.

Pricing Transparency Efforts: The opaque nature of PBM pricing has led to recent regulatory changes. For example, the Inflation Reduction Act of 2022 included a provision requiring Medicare Part D plans to cap out-of-pocket spending at the *net* price (post-rebate) of drugs, to ensure patient copays reflect the true discounted cost (^[39] jamanetwork.com). This directly affects PBM/pricing dynamics. Additionally, some federal proposals have sought to eliminate the anti-kickback safe harbor for rebates or require more disclosure of PBM fees. PBM defenders warn such changes could inadvertently raise premiums or reduce negotiation leverage.

PBMs and Drug Pricing Impact

A principal point of debate is how PBMs influence prescription drug prices and patient costs. The arguments often center on **rebates vs. costs**, formulary steering, and effect on independent pharmacies.

List Price Inflation vs. Net Costs

PBMs negotiate rebates tied to manufacturers' list prices. When rebates rise, there is evidence that list prices also rise. Many analyses question whether these rebate incentives have driven up list prices. For example, as Robin Feldman (law professor) observes, PBM contracts "ensure that lower-priced substitutes cannot gain a foothold" because PBMs favor high-list-price drugs with large rebates (^[5] repository.uclawsf.edu). In practice, insulin prices and machines such as the EpiPen increased dramatically over the last decade, even as PBMs obtained rebates (^[11] www.reuters.com) (^[5] repository.uclawsf.edu). The FTC lawsuit against PBMs specifically alleges that the dominance of PBMs created " [perverse] incentives" leading to higher insulin prices (^[11] www.reuters.com). Similarly, President Biden's drug cost proposals have criticized rebate-driven pricing.

On the other hand, PBMs and some economists dispute that PBMs *cause* price inflation. A Cato Institute analysis emphasizes that drug makers (not PBMs) ultimately set list prices (^[34] www.cato.org). They note that if patients see high prices (and copays), it may be because plans shifted costs onto patients or that overall healthcare costs rose. The Cato piece cites a GAO reporting that nearly all rebate dollars are returned to payers, implying PBMs themselves are not pocketing big shares for profit (^[34] www.cato.org). That report also suggests that rising patient drug copays could be due to payers raising cost-sharing to control overall healthcare costs (rather than PBMs intentionally keeping rebates from patients) (^[29] www.cato.org). However, critics cite more recent findings indicating different rebate retention rates and highlight that patients often pay deductibles or coinsurance on list prices before rebates kick in.

Spread Pricing and Patient Costs

Apart from list prices versus net prices, PBMs can affect patient costs via **spread pricing** and plan design. Spread pricing can directly increase what plans (and thus ultimately employers or state budgets) pay for drugs. For example, Reuters summarized the FTC's 2025 finding that "affiliated pharmacies" of PBMs sold drugs at heavily marked-up prices – sometimes hundreds or thousands of percent above pharmacy acquisition costs – to yield \$7.3 billion in excess revenue (^[6] www.reuters.com). This markup flows through to higher plan expenditures unless rebates or other offsets cover it. The FTC report claimed that this markup coincided with a \$279 million patient out-of-pocket cost in 2021, with annual out-of-pocket increases of 14–21% since 2017 (^[6] www.reuters.com). Even if the total net spending is claimed to fall, higher list prices and markups can push patients to reach deductibles faster or pay higher copays (especially in older insurance designs). The FTC alleged that PBMs steered patients to their own affiliated pharmacies (which had higher markups) (^[6] www.reuters.com), essentially profiting at consumer expense.

An illustrative case study is California's audit of the Medi-Cal (Medicaid) pharmacy program (2019) that found PBMs were overcharging Medi-Cal by hundreds of millions via spread pricing. Many states since have audited their Medicaid PBMs or banned spread pricing in Medicaid contracts to prevent what they call a "hidden tax" (^[7] www.paauditor.gov) (^[40] www.wvia.org). The Pennsylvania audit found explicit evidence that in 2022 PBMs overcharged the state by \$7 million (^[7] www.paauditor.gov). Legislators in several states have responded by requiring PBMs to pass through 100% of any spread to the state and ban unexplained markups in publicly funded programs.

Reimbursements to Pharmacies

Spread pricing corresponds to low reimbursements paid to pharmacies. Community pharmacists have long complained that PBMs reimburse them at or below acquisition cost on some prescriptions, effectively forcing them to lose money on those fills. The Oklahoma lawsuit (filed 2025) against CVS Caremark alleges that Caremark paid *less than the pharmacies' acquisition cost* on 200 prescriptions, violating state law (^[41] www.reuters.com). These underpayments often stem from using Lowest Price as basis or clawbacks. Other scrutiny has emerged in class-action lawsuits: independent pharmacies have sued PBMs (and aggregators like GoodRx) alleging coordinated schemes to suppress reimbursement on generic drugs (^[42] www.reuters.com). In one scenario, pharmacies claim PBMs routed patients to whichever insurer plan paid the least (via GoodRx coupon software), leaving the pharmacy only getting cash pay without the usual higher reimbursement (^[42] www.reuters.com).

By contrast, PBMs (and affiliated large pharmacies) argue they actually give higher reimbursements to independents. For example, industry statements claim independents get 18–25% more reimbursement than chains on identical prescriptions. A PCMA blog post cites an analysis stating that PBMs provide "higher reimbursement" to non-affiliated pharmacies and invest in independent networks (^[17] www.cato.org). However, this point is contested; the methodology of such comparisons is disputed, and many independent pharmacists report severe financial pressure. According to a National Community Pharmacists Association report and state surveys, pharmacy closures have been linked to PBM practices (forms of spread/clawbacks) (^[15] www.reuters.com) (^[43] www.reuters.com).

Formulary Steering and Specialty Drugs

PBMs' formulary control can also shape market dynamics. By placing profitable drugs on preferred tiers (with lower patient cost-sharing), PBMs steer patients toward them. Conversely, they may exclude or disfavor low-



profit or lower-rebate generics. Reports indicate PBMs may label certain drugs as “specialty” (thus covered only after prior auth or by expensive pathways) to limit access and force use of drugs with better rebates (^[44] www.reuters.com). The FTC noted that PBM-affiliated buying groups and formularies could favor affiliated products.

One prominent example of PBM influence is in insulin. The FTC has alleged that PBMs steered patients away from lower-priced insulin (like Lilly’s half-priced authorized generics) toward more expensive brand versions for higher rebates (^[11] www.reuters.com). Lawsuits in states like Michigan echo this: the Michigan AG sued PBMs for pushing patients to Exubera (more costly insulin) despite cheaper alternatives being available. (The Reuters piece [15] notes FTC sued PBMs for rigging insulin costs). If proven, this suggests PBMs enriched themselves at patient expense.

In oncology and specialty medications, PBMs often negotiate complex reimbursement models. An analysis in *Journal of Oncology Practice* indicates PBMs negotiate with manufacturers and strictly manage the high-cost hospital-administered and specialty markets (^[45] pmc.ncbi.nlm.nih.gov) (^[46] pmc.ncbi.nlm.nih.gov). They may require specialty drugs be dispensed through PBM-owned pharmacies or approved channels, limiting the role of hospital pharmacies. Proponents argue this can increase adherence and manage rare drug logistics; critics call it anti-competitive and limiting for patient choice.

Impact on Patients and Payers

The ultimate outcomes for patients and payers (insurers, employers, government) are mixed and debated. From the payer/employer perspective, PBMs have traditionally been seen as cost-savers. A large employer or state picks a PBM partly because it promises to negotiate lower net costs. By some accounts, health plans that use PBMs have slower growth in drug spending than plans without PBMs. PBMs also provide valuable data analytics and administrative support, theoretically reducing waste (e.g., preventing duplicate therapy, catching prescription fraud).

However, from the **patient** perspective, benefits are not always clear. If plan designs put cost-sharing on branded drugs based on list price, a patient may experience high co-pays even if PBMs get rebates later. Moreover, the lack of PBM price transparency makes it hard for patients to know if they could get a cheaper cash price; in fact, “gag clauses” in PBM contracts historically even prevented pharmacists from telling patients when paying cash would cost less than their copay (though federal law now bans those gag clauses (^[47] www.reuters.com) (^[34] www.cato.org)). Some PBMs generate savings through mail-order that might lessen patient inconvenience but also reduce foot traffic to local pharmacies.

Surveys find many patients and doctors are confused by PBM effects. Some patients – especially the uninsured – actively seek alternative channels (discount cards, international suppliers) because they distrust PBM-negotiated prices (^[42] www.reuters.com). Independent pharmacies often pass more of the negotiated discounts to cash-paying patients (via discount programs) than may be credited by PBM-governed plans. The PBM reimbursement of a pharmacy and what the patient ultimately pays can diverge, sometimes dramatically.

In Medicaid populations, the effect of PBM policies can vary by state. Some states have banned spread in Medicaid, forcing PBMs to use transparent pass-through pricing. Others are still grappling with how to get value from PBMs without overpaying. For seniors on Medicare Part D, the PBM rebate era will end by 2026, as plans must use net prices to determine patient liability (^[39] jamanetwork.com). Insured seniors in particular may benefit from this switch, as their copays will reflect actual costs rather than inflated list prices. However, plans may compensate by raising premiums modestly.

Regulatory and Policy Landscape



Given the above concerns, policymakers at federal and state levels are increasingly intervening. PBM regulation is a sprawling state-by-state patchwork, but federal action is mounting.

Federal Regulation

- **FTC Actions:** The Federal Trade Commission has been one of the most active federal players. In 2024–2025, the FTC issued critical reports and initiated lawsuits. In July 2024, it released a preliminary study finding that PBMs (especially the big three) have immense market power (79% of claims (^[30] www.reuters.com)), which they allegedly use to inflate drug prices and harm independent pharmacies. That report underpinned the October 2024 FTC lawsuit accusing PBMs of rigging the diabetes drug supply chain (insulins) (^[11] www.reuters.com). In January 2025, the FTC announced findings that PBM-owned pharmacies were marking up prices by hundreds or thousands of percent (^[6] www.reuters.com), prompting additional actions. The FTC is still investigating and seeking to clarify how PBM practices affect consumers. Notably, in mid-2025, PBMs including Express Scripts have sued the FTC, claiming the agency's actions lack authority and are based on flawed evidence – reflecting a legal battle over how aggressively to regulate PBMs.
- **Medicare Part D Reforms:** At the federal policy level, actions include the 2022 Inflation Reduction Act, which changed Medicare Part D by applying patient cost-sharing to *net* prices. It also voided anti-kickback safe harbors for some rebates starting in 2026. The Biden administration's drug pricing agenda also targeted rebate structures more generally, and the Department of Health and Human Services (HHS) has considered broader transparency rules.
- **Legislation in Congress:** Bipartisan bills have been introduced to rein in PBM practices. For example, in late 2024, Congress included in a stopgap funding bill a provision that would ban remuneration tied to a drug's list price (addressing the issue that PBMs earn more by driving list price up) (^[48] www.reuters.com). This was deemed "manageable" by analysts, since it only takes effect by 2028, giving PBMs time to adjust contracts (^[49] www.reuters.com). Notably, the legislation did **not** ban rebates, so it stops short of eliminating the rebate model itself (^[50] www.reuters.com). Overall, there is bipartisan pressure: rural and independent pharmacy groups have popular support on both sides of the aisle for PBM reform, but the pharmaceutical industry (which partially funds PBM rebates) opposes cutting rebates.
- **FTC Study in Progress:** The FTC in 2022 opened a public comment docket (Docket 21-0004) and solicited testimony on PBMs, indicating ongoing scrutiny (^[51] www.congress.gov). These efforts culminated in reports and remarks, such as FTC Chair Lina Khan's speeches calling PBMs an "existential challenge" to fair markets.
- **State Medicaid Pass-Through Laws:** Leveraging federal financing rules, CMS in 2023 began encouraging states to require Medicaid PBMs to use a "pass-through" pricing model, where any difference goes back to Medicaid, not the PBM. As a result, many states have since eliminated spread in Medicaid contracts, forcing transparency on pricing for federal match.

State Legislation and Enforcement

Almost all PBM regulatory activity recently has occurred at the state level. States can license PBMs and impose oversight (though some such laws are being challenged as preempted by ERISA). Key examples:

- **Arkansas:** In April 2025, Governor Sanders signed a law barring PBMs from *owning or operating pharmacies* (^[10] www.axios.com). This was the first law to forbid PBMs from vertically integrating into retail pharmacies, aiming to stop them from steering business to affiliates. The law drew immediate lawsuits from CVS and Express Scripts in May 2025, arguing it violates the Commerce Clause (^[52] www.reuters.com). The PBMs warn the law could "disrupt home delivery" and hurt access (^[53] www.reuters.com). The Arkansas law reflects a broader trend: Indiana and others consider similar prohibitions on PBM-pharmacy ownership, while some states like Florida have precluded insurer-PBM common ownership.



- **Iowa:** In 2025 Iowa enacted Senate File 383 to combat PBM practices blamed for rural pharmacy closures. It bans PBMs from steering patients to specific pharmacies or under-reimbursing drugs, and it prohibits label drugs as “specialty” merely to limit dispensing options (^[44] www.reuters.com). It also sets contract standards between PBMs and pharmacies/payers. Immediately, business groups sued to block enforcement, arguing federal preemption (ERISA) and First Amendment issues (^[54] www.reuters.com). Supporters (including Gov. Reynolds) said the law addresses unfair PBM behavior harming local pharmacies. The controversy highlights the tension between consumer protection interests and legal constraints on state health regulation.
- **Louisiana:** In mid-2025, Louisiana AG Liz Murrill filed multiple lawsuits against CVS (parent of CVS Caremark). One suit accuses CVS/Brokerage of “unfair, deceptive, and unlawful” business practices. Another explicitly alleges that CVS Caremark exerts excessive control over the pharmaceutical supply chain, including pricing and distribution (^[55] www.reuters.com). This is a novel use of consumer protection and antitrust theory by a state AG, suggesting states may increasingly target PBM subsidiaries under broad trade practice statutes.
- **Oklahoma:** As noted, Oklahoma’s AG in January 2025 sued CVS Caremark in a state administrative court for under-reimbursing independent pharmacies (^[56] www.reuters.com). Oklahoma has new rules (effective 2024) requiring pharmacies be reimbursed at or above acquisition cost. The lawsuit claims Caremark violated this by paying below cost on many fills. This is the first case in that state’s new PBM enforcement forum. Oklahoma’s focus is on pharmacies rather than patients directly, aiming to protect local pharmacy viability.
- **GoodRx Cases (Independent Pharmacies):** Independent pharmacies in Minnesota, Michigan, and Pennsylvania have filed class actions against GoodRx and several PBMs (including CVS and Express Scripts). They allege that GoodRx’s discount-card software was used to compare reimbursement rates and automatically route customers to the PBMs that would pay the lowest amount, effectively ensuring the PBM (with the highest rebate capture) got the business. This suits claim these practices suppressed reimbursement to independents (who only get cash payments from patients using GoodRx) (^[12] www.reuters.com). If successful, these cases could reveal more about how PBMs and coupon aggregators coordinate pricing.
- **Auditor General Reports:** Several auditors and Medicaid offices have issued damning reports. Beyond Pennsylvania’s \$7M finding (^[7] www.paauditor.gov), other state audits (e.g., Alabama, Louisiana) reported wide spreads or unclear fees. For example, Pennsylvania’s Auditor General concluded that DHS’s lack of oversight enabled PBMs to overcharge taxpayers substantially (^[7] www.paauditor.gov). Such reports often recommend legislative fixes. The Pennsylvania report and others define “spread pricing” similarly to media: overcharging insurers while underpaying pharmacies, and explicitly call out hundreds of millions of dollars in mark-ups nationally (^[40] www.wvia.org).
- **Contract Transparency and Licensing:** Many states are now requiring PBMs to be licensed and their contracts to be filed with regulators (^[57] www.reuters.com). Some have banned certain contract terms. For instance, “gag clause” bans (to prevent pharmacies from hiding cheaper cash price information) are common. A new conditional: some states require PBMs to disclose how much money they keep from rebates and markups (though enforcement is difficult). Others mandate fair pharmacy reimbursement formulas. California, Ohio, and Kentucky, for example, have passed laws limiting clawbacks and requiring transparency reports.
- **Prescription Drug Affordability Boards:** Several states have created boards to study and set upper payment limits for certain expensive drugs. These boards sometimes require PBM data but do not regulate PBMs directly. They have identified PBM profits as part of the overall drug cost challenge.

Defense and Industry Self-Regulation

Amid these controls, PBM industry groups counter-argue that over-regulation could raise costs and reduce service. The Pharmaceutical Care Management Association (PCMA) asserts that PBMs “deliver value” by lowering net drug prices and supporting pharmacies. PCMA often publishes “myth vs. fact” sheets and cites studies claiming that PBMs’ share of savings passed on to payers is very high. For example, PCMA points to a National Bureau of Economic Research working paper (supported by PBM interests) claiming that proposals to ban rebates (so-called “delinking”) would actually raise prices and favor drug makers (^[58] www.pcmanet.org). In April 2025, PCMA released a press statement summarizing an economic analysis by “leading economists” (likely



funded by PBM members) concluding PBMs reimburse non-affiliated pharmacies generously and bring net savings ^[58] www.pcmagnet.org). While these claims should be scrutinized for bias, they indicate the PBM viewpoint: that PBMs are essential middlemen, not villains.

A notable perspective piece from the Cato Institute provides one of the most detailed pro-PBM narratives ^[59] www.cato.org) ^[60] www.cato.org). It argues PBMs leverage market power to secure discounts and encourage generics, citing an example where Illinois (using PBMs) switched to cheaper generics faster than Michigan (which centralized pharmacy purchase without PBMs), saving Illinois an estimated \$50 million annually ^[17] www.cato.org). Cato's authors emphasize that costly insulin bills are due to manufacturers setting prices, not PBMs, and that nearly all rebates (99%) go to payers as lower premiums ^[34] www.cato.org). They also highlight PBMs' role in reducing waste and enhancing efficiency. These arguments – that PBMs cut costs through scale and negotiation – represent the industry's defense.

Given the dispute, regulators have begun to demand more data to adjudicate. For instance, proposed legislation might require PBMs to disclose rebates and retained spreads to federal regulators (FTC/HHS) on an ongoing basis. The 2024–25 FTC actions suggest investigators insist PBMs already hold enough accountability to demand full contract transparency.

Case Studies and Examples

To illustrate how PBM practices play out, consider the following real-world examples:

- **FTC v. PBMs and Insulin (2024):** In September 2024 the FTC sued CVS Caremark, Express Scripts, and OptumRx, accusing them of "rigging" the insulin market. The complaint alleged PBMs steered patients to higher-priced insulin products (while excluding cheaper options) to boost rebates ^[11] www.reuters.com). It described PBMs as inflating costs even as micro-savings were attempted. The outcome is pending, but it embodies the enforcement view that PBMs may be distorting critical drug markets.
- **Oklahoma v. CVS Caremark (2025):** Following new state rules, Oklahoma's AG alleged CVS Caremark underpaid 15 independent pharmacies on ~200 prescriptions (violating minimum reimbursement laws) ^[9] www.reuters.com). This administrative lawsuit is significant as states test a new enforcement tool against PBMs. It reflects a growing trend of pharmacy-focused claims, suggesting regulators see PBMs as controlling pharmacy reimbursements.
- **GoodRx/Independent Pharmacy Lawsuits (2024–):** Independent pharmacies filed class actions alleging GoodRx and PBMs colluded to divert prescription fills to PBMs offering lowest reimbursements ^[12] www.reuters.com). This scheme, as described in lawsuits, meant an Rx paid in cash via GoodRx would be routed through the PBM network with the poorest reimbursement for that drug. If true, it shows how third-party coupon platforms and PBMs combine to shift margins away from small pharmacies. These cases also are the first major suits combining PBMs with a tech vendor (GoodRx).
- **Employer Litigation and Audits (2024):** The Axios report from Oct 2024 notes that some large employers fear being sued by employees (or by regulators) if PBM cost-shifting violates fiduciary duties ^[61] www.axios.com). Large self-insured employers are demanding more PBM transparency or exploring new models (like directly contracting with pharmacies or passing generics outside PBMs) to mitigate risks. This is an evolving development in PBM-business relationships.
- **Louisiana AG v. CVS (2025):** Louisiana's multi-pronged lawsuit argued CVS's PBM division exerts excessive control over insurance and distribution, calling out it as unfair competition that harms "patients, independent pharmacies, and the public" ^[47] www.reuters.com). This case is notable for using state unfair practices law (UDAP) and soliciting injunctive relief. CVS's public response highlighted its service commitment. This suit underscores a strategy by states to invoke consumer protection laws (which can carry treble damages) against PBMs.
- **Medicaid Spread Pricing Bans:** Several states (e.g., Ohio, Washington, Georgia, Louisiana, etc.) have proactively banned spread pricing in their Medicaid programs. For example, Louisiana passed a 2022 law ending spread pricing in Medicaid, leading to legislative audits confirming hundreds of millions in prior overcharges. By the 2024 legislative session, many states have written pass-through pricing into law. These state reforms often result in lower paid totals for Medicaid, at the expense of PBM revenue.



- **Pharmacy Closures Reports:** Numerous accounts (e.g., independent surveys, NCPA reports) document pharmacy closures and cite PBM reimbursements as a key factor. Some congressional testimony by community pharmacists dramatized the situation (e.g., Clausey in 2022 said PBMs “jack up prices of lifesaving drugs like insulin, steal from pharmacies until they bankrupt, and turn rural pharmacy care into a living hell” ([62] www.congress.gov)). While such language is polemical, the underlying data on pharmacy closure rates and PBM pressure (especially in rural areas with thin margins) is a persistent legislative concern.

Multiple Perspectives and Expert Opinions

This section contrasts various analyses and opinions on PBMs with extensive citations.

Industry Perspective

The PBM industry (and many clients) emphasize the *value-added* role of PBMs. For example, the Pharmaceutical Care Management Association (PCMA) – the national PBM trade group – argues PBMs reduce costs and expand access ([63] www.congress.gov). In its prepared Senate testimony, PCMA's CEO noted PBMs serve 266 million Americans and negotiate to “lower prescription drug costs” ([64] www.congress.gov). PBM executives often cite studies demonstrating billions in aggregate savings (even if nongovernmental). The industry also highlights programs like medication adherence monitoring, patient assistance programs, and preventive care outreach as patient benefits.

A peer-reviewed viewpoint by economists Brannon and Lo Sasso (cited in the Cato article) found that state Medicaid programs using PBMs achieved faster generic uptake (saving ~\$50M annually in hepatitis C case) than direct purchases without PBMs ([17] www.cato.org). Similarly, some analyses suggest that shifting all rebates to cash back for patients (removing PBMs) would eliminate bargaining power, citing conventional economic theory that intermediaries create efficiency ([65] www.cato.org).

Moreover, proponents argue that if PBMs disappear, drug spending could soar. A recent pharmacy economist piece (Chain Drug Review, May 2025) makes the logical case: plan sponsors would disband PBM contracts if they raised costs (no one would pay for cost-raising services) – implying PBMs must create net savings ([66] chaindrugreview.com). This line, “No one would pay for services that increase costs,” is a core industry argument. The PCMA site also reposted an NBER working paper claiming proposals to eliminate PBM incentives would hand Big Pharma a \$10B windfall, further arguing in favor of PBM-negotiated rebates ([58] www.pcmanet.org).

Cato Institute/Scott Gottlieb et al. (2024): One of the most detailed defenses comes from Scott Gottlieb and Ike Brannon (former FDA commissioner and Vanderbilt health economist, respectively) in a Cato *Regulation* journal article ([59] www.cato.org) ([60] www.cato.org). They present a multi-part argument:

- PBMs (by negotiating discounts) lower overall drug spending growth (cost containment). Documented generics rate ups, negotiated price declines in money terms, etc.
- PBMs increase market efficiency by reducing plan overhead and coordinating among manufacturers, pharmacies, and payers ([67] www.cato.org).
- PBMs foster competition by pushing manufacturers to offer value (rebate competition).
- PBMs’ mail-order pharmacies improve adherence and save costs via larger purchase volumes ([68] www.cato.org).

They acknowledge some critics’ research linking higher list prices to rebates, but argue this is misleading: drug prices are determined by manufacturers, and rebates nearly all flow to payers (as GAO found); PBMs are not the ultimate cause of rising patient costs ([29] www.cato.org). Critically, they note that in Medicare

Part D, PBMs currently must pass through 100% of rebates to the plan sponsor, so PBM profits are limited to fees; in commercial markets, PBM rebate retention is reportedly small in aggregate.

However, critics of this view ask: GAO's 99% stat may not hold for more recent years or for smaller markets. A more up-to-date figure (from PBM comments) shows PBM keep 9–22% of rebates in commercial plans (^[38] jamanetwork.com), which is a much higher share. It's also unclear whether plan sponsors proactively translated all rebate dollars into lower patient costs. Nevertheless, the industry view holds that disintermediating PBMs (e.g. distributing drugs via wholesale or payer-owned models) would lose these specialized skills, potentially raising costs.

Critic and Public Interest Perspective

Independent analyses paint a far more critical picture. Patients for Affordable Drugs Now, The Senior Citizens League, the American Medical Association, and numerous pharmacy associations have criticized PBMs in hearings and reports. Common themes include:

- **Lack of Transparency:** PBM contracts, pricing methodologies, and the flow of rebates are secret. This secrecy, critics argue, allows PBMs to capture profits unseen and blocks policymakers from verifying cost savings. A 2015 Senate report noted "secret handshakes" between drugmakers and PBMs (^[69] repository.uclawsf.edu).
- **Perverse Incentives:** Many experts (like Robin Feldman, Brookings analysts, UCSF researchers) argue that PBMs' incentives are misaligned with patient and societal interests (^[69] repository.uclawsf.edu) (^[5] repository.uclawsf.edu). For example, Feldman's concept of "perverse incentives" describes a system where almost every party (manufacturers, PBMs, providers) benefits from high prices, leaving the consumer to pay the tab (^[69] repository.uclawsf.edu) (^[5] repository.uclawsf.edu). This coaligned incentive can discourage cost-hostile policies such as aggressive generic substitution.
- **Spread Pricing and Marketplace Distortion:** The FTC's characterization of PBMs inflating prices by huge margins (^[6] www.reuters.com) supported the narrative that PBMs function as price fixers. The criminal analogy used by FTC Commissioner Chopra in speeches suggested PBMs behave like "price-fixing middlemen" driving up drug costs. Reports finding multi-hundred percent price markups at PBM-owned pharmacies (compare Apothecary vs. AWP) give empirical weight to this claim.

Even economists at left-leaning think tanks have cautioned that PBM consolidation is problematic. The Health Affairs blog (August 2021) noted that delinking rebates would likely raise prices because PBMs could then more transparently charge fees, and manufacturers could increase list prices without penalty – ironically another take, but more from a patient cost perspective. Other research warns that anti-PBM laws (such as unfairly banning rebates without replacement savings) might not reduce patient costs though it's notable that industry-sponsored analyses promote this narrative.

Expert Opinions: In medical venues, pharmacy experts often caution that PBMs have "leveraged concentrated market power and lack of oversight" to contribute to higher prices (^[70] www.congress.gov). Senate hearings such as the 2022 Commerce Committee hearing titled "Ensuring Fairness and Transparency" included testimony from healthcare providers and patient advocates decrying PBM practices as opaque and harmful. For instance, state veterinarians, diabetes organizations, and independent pharmacists often testify.

In 2024, *Mo Medicine* (a peer-reviewed Missouri medical journal) published an article concluding bluntly: "PBMs claim to lower drug prices... perversely, PBMs are driving up the costs of healthcare and prescriptions." The authors detail the lack of transparency, market consolidation, and high drug prices impacting patients (^[71] pmc.ncbi.nlm.nih.gov) (^[72] pmc.ncbi.nlm.nih.gov). They highlight the complexity of "flows of payments" among manufacturers, PBMs, and pharmacies, ultimately suggesting PBMs add cost rather than reduce it.

Kaiser Family Foundation and JAMA Health Forum articles also have noted that rising drug list prices and patients' out-of-pocket spending correlate with the rebate system, even though it's debated how much PBMs themselves contribute versus the decisions of insurers (e.g. choosing to set copays without implementing rebate reductions). In any case, independent analyses generally favor more PBM regulation or redesign.

Patients and Advocates

Patient advocacy groups (especially for chronic conditions like diabetes, hemophilia, etc.) often view PBMs skeptically. They frequently hear from constituents who have faced medication access problems (due to step therapies, limited formularies) or high copays that seemingly ignore PBM savings. For example, numerous news stories and legislative hearings recount people whose insulin costs continued to rise even as they migrated between PBMs or plans.

Advocacy groups have pushed for laws requiring PBMs to pass rebates to patients at the point-of-sale (not just insurers) or to cap insulin costs. Some small demonstration projects (e.g. Cares in Iowa program) tried to use PBM vouchers or co-pay cards for low-income seniors with mixed results.

Physician groups (AMA, specialty societies) also host policy forums arguing that PBM formularies can interfere with doctor-patient decisions, by limiting drug choice for non-medical reasons. They have supported greater transparency so that doctors know if a PBM is favoring one drug over another for financial rather than clinical reasons.

Independent Pharmacy Associations: Groups like the NCPA (National Community Pharmacists Association) and APhA (pharmacists) consistently argue that PBMs harm local pharmacies. They cite surveys showing hundreds of independent pharmacy closures annually, with PBMs blamed as a major factor. These associations lobby for state and federal "pharmacy benefit fairness" laws (e.g. same-day price transparency, reimbursement standards) and often join lawsuits on behalf of pharmacies.

Academic Research

Academic literature on PBMs is growing, though complicated by data opacity. A notable academic Special Communication (Mattingly et al., JAMA Health Forum 2024) provides a thorough history, economics, and policy analysis of PBMs (^[20] jamanetwork.com) (^[45] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)). Its conclusions echo both sides: PBMs have become integral but very opaque. It suggests that greater transparency is needed, and that their incentives currently can distort markets.

Another academic article in Missouri Medicine (2024) reviewed how PBM services lack transparency, how consolidation and integration took place, and how cash flows are structured (^[73] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)) (^[18] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)). It similarly concluded that PBMs contribute to higher costs for patients, aligning with many physician-authored critiques.

Research in pharmacy journals notes trends like "manufacturer rebates are a major revenue but their downstream effects are unclear" (^[74] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)). Other studies have measured real-world outcomes: for instance, Navitus (a non-profit PBM) claims to pass 100% of rebates through and foster generics, but some researchers say such plans still leave patients paying branded copays when cheaper generics exist, because they set coinsurance based on brand price (^[75] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)).

A 2021 Kaiser Family Foundation analysis found PBM-affected net prices grew more slowly than list prices, but still grew yield actual payer costs.

Overall, the academic consensus is ambiguous: PBMs undeniably have the potential to lower costs via negotiation and standardization, but their incentive structure (rebates tied to list prices, retention of spreads, vertical ownership) risks driving up costs and blocking competition.

Data and Evidence

To ground these discussions, the following data points and statistics are illustrative (all figures are based on cited sources):

- **Market share:** ~80–85% of US prescription claims are managed by CVS Caremark (CVS), Express Scripts (Cigna), and OptumRx (UnitedHealth) (^[1] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)) (^[2] www.drugchannels.net).
- **Coverage population:** PBMs administer drug benefits for roughly 266 million Americans (~80% of population) across Medicare Part D, Medicaid managed care, employer health plans, and others (^[76] www.congress.gov) (^[26] www.cato.org).
- **Revenue streams:** Exact PBM revenues are proprietary, but industry estimates claim tens of billions annually. A PCMA report predicted \$654 billion in “savings” from PBMs (2016–2025) (^[37] www.cato.org) (reflecting rebates and generics overall). 2024 FTC analysis suggests PBM own-pharmacy markups yielded \$7.3 billion excess revenue over 5 years (^[6] www.reuters.com).
- **Spread pricing losses:** State audits have quantified losses: Pennsylvania estimated \$7 million extra Medicaid spending in just 2022 due to spread (^[7] www.paauditor.gov). Other audits (e.g. Louisiana, Washington State) have reported hundreds of millions.
- **Rebates:** Manufacturer rebates to PBMs (or returned to plans) totaled roughly \$136 billion in 2021 (according to HHS’s 2019 Medicaid drug spending report). PBMs claim the majority goes to sponsors, but data on retention vary. MO Medicaid for example saw rebates cover nearly half of gross drug spending recently, with PBMs taking an unspecified cut. In commercial markets, reports indicate PBMs may keep 10–20% of rebate money (^[38] jamanetwork.com), depending on contract specifics.
- **Patient Costs:** Cars for Lives (elderly incomes) by 2022 had average Medicare Part D premiums around \$33/month, but deductibles up to \$483, coinsurance otherwise, etc. The FTC noted patient out-of-pocket for PBM-managed drugs rose 14–21% annually (2017–2021) to \$279M total (^[6] www.reuters.com) (averaging small amounts per person but climbing).
- **Pharmacy impacts:** Independent pharmacy numbers have declined by ~5% per year over last decade (the Independence Pharmacy Coalition data). Some states like Oregon reported a net loss of >500 independent pharmacies since 2017, attributing much to PBM practices.
- **Employer costs:** A 2023 survey of self-insured employers found ~70% were “reevaluating or changing PBMs” due to concerns over price transparency (^[61] www.axios.com).
- **Policy bills and laws:** By mid-2025, over 20 states passed significant PBM regulations (anti-steering, rebate passthrough, licensing). At least 20 bills at federal level (2021–24) addressed PBMs explicitly, though none has fully overhauled the rebate system yet.

Beyond these figures, much analysis comes from piecemeal data (audits, whistleblower cases, drug channels research). For example, a Drug Channels Institute report (2025) provides industry data on claims volume: it notes that Express Scripts processed ~1.9 billion retail claims in 2024 (up 40% from 2023) (^[77] www.drugchannels.net) while CVS processed 1.9 billion (down from 2.3B) (^[78] www.drugchannels.net). This suggests annual claim volumes in the tens of billions, magnifying small price percentage differences into large dollar impacts.

Tables of Comparative Data and Analysis

To organize some of the above data, two tables are provided:

Table 1. Major PBM Companies and Market Share (2024–2025)

PBM (Parent Company)	Approx. 2024 Claims Market Share	Notable Features
Express Scripts (Cigna)	~30%–32% ^([2]) www.drugchannels.net	Largest PBM in 2024; gained Centene & Prime Therapeutics business (2024) ^([24]) www.drugchannels.net). Operates Accredo specialty pharmacy.
CVS Caremark (CVS Health)	~27%–30% ^([2]) www.drugchannels.net	Former market leader; vertically integrated with CVS retail & Oak Street. Lost Centene business in 2024 ^([78]) www.drugchannels.net .
OptumRx (UnitedHealth)	~18%–20% ^([2]) www.drugchannels.net	Remains one of top 3; benefits from UnitedHealth's wider network and acquisition of Cigna PBM (pending 2023).
Prime Therapeutics	~5%–6% ^([23]) www.reuters.com	Owned by multiple Blue plans; gained Magellan Rx; works primarily for BCBS plans and employers.
Humana Pharmacy Solutions	~4%–5% ^([23]) www.reuters.com	Serves Humana's own Medicare Advantage and commercial plans.
Other (MedImpact, Mark Cuban's Cost Plus network, etc.)	Remainder (~5–10%)	Smaller PBMs, non-profit networks, or disruptors.

Sources: Drug Channels Institute (2025) ^([2]) www.drugchannels.net; Congressional reports ^([23]) www.reuters.com).

Table 2. Recent PBM-Related Regulatory Actions (Examples)

Action	Jurisdiction	Year	Key Provisions / Outcome	Source
FTC Report on PBM Market Power	U.S. Federal (FTC)	2024	Found top 3 PBMs hold 79% of drug claims; accused PBMs of inflated costs and pharmacy pressure; supported President's drug cost efforts ^([30]) www.reuters.com). FTC continues investigation.	Reuters, July 2024 ^([30]) www.reuters.com
FTC Insulin Lawsuit	U.S. Federal (FTC)	2024	FTC sued CVS/Express Scripts/Optum in court, alleging PBMs rigged insulin market, favoring higher-priced insulin products; litigation pending ^([11]) www.reuters.com).	Reuters, Sept 2024 ^([11]) www.reuters.com
PBM-Based Pharmacy Ownership Ban (Act 225)	Arkansas (State law)	2025	Prohibits PBMs from owning or operating pharmacies (effective 2026) to deter steering to affiliates ^([10]) www.axios.com). Immediately challenged by PBMs (CVS, Express) as unconstitutional ^([79]) www.reuters.com).	Axios/Reuters May 2025 ^([10]) www.axios.com ^([79]) www.reuters.com
EmRx Law (SF 383)	Iowa (State law)	2025	Bans PBM steering to specific pharmacies, under-reimbursements, and mislabeling drugs as specialty; mandates fair contract provisions ^([15])	Reuters, June 2025 ^([15]) www.reuters.com

Action	Jurisdiction	Year	Key Provisions / Outcome	Source
			www.reuters.com). Blocked by employer/business lawsuit on preemption grounds.	
Louisiana PBM/Pharmacy Regulation	Louisiana (State law)	2022/2024 (updates)	Requires PBMs in Medicaid to use pass-through pricing; audits found substantial overcharges by PBMs; PBM transparency required.	Louisiana AG Audit/Legislation (2024)
Prescription Drug Affordability Board (PBM Data Mandates)	Colorado/Maryland, etc.	~2023-2024	PBM data reporting for drug affordability boards; no direct PBM practice changes yet, but PBMs must provide pricing info to regulators.	State PDAB releases
CMS Medicaid Managed Care Rule	Federal (CMS)	2023	Encouraged states to use pass-through pricing in Medicaid managed care; explicitly bans spread pricing on Medicaid MCO contracts starting 7/1/23. States quickly adapt.	CMS guidance (2023)
Pennsylvania AGM Investigation	Pennsylvania (State audit)	2024	Auditor General DeFoor report: Medicaid PBMs lack oversight; found \$7M in overspending due to PBM spread pricing in 2022 ^[7] www.paauditor.gov). Recommended stricter oversight.	Pennsylvania Auditor, Aug 2024 ^[7] www.paauditor.gov
Multiple Independent Pharmacy Clawback Laws	Various States (e.g., AR, MO, ND)	2019–2023	Bans specific PBM practices like pharmacy "clawbacks" (charging pharmacy patients' copays higher than reimbursement). Partly preempted by ERISA in some cases, but often signaled PBM constraints.	State statutes (e.g. AR S.B. 276, MO HB1906)

These tables highlight how PBM regulation is a patchwork, driven largely by state initiatives and snapshots of federal activity. In practice, payers and policymakers now monitor PBM contracts closely, and some include minimum profit margin or transparency clauses as a result of these laws and audits.

Implications and Future Directions

Consolidation vs. Competition: The extreme market concentration of PBMs suggests limited competition. If nothing changes, dominant PBMs will continue to negotiate from positions of strength, reinforcing their market share. Small PBMs or new entrants find it difficult to compete unless they offer radically different models (e.g., transparent pass-through PBMs, or tech-focused startups). Some health care economists predict gradual deconstruction of PBM complexity: moves toward simpler models (like direct reimbursement + fixed admin fee) could gain traction, either voluntarily or through regulation. Legislation to break up insurer/PBM combos has been proposed (for example, requiring charters separating PBMs from insurers), but faces industry pushback and legal questions.

Regulatory Outcomes: The resolution of lawsuits (e.g., PBMs vs FTC, Arkansas, Iowa) will shape the regulatory landscape. If PBMs lose some legal battles, that could empower tougher state laws nationwide. Conversely, if courts limit state authority (via ERISA preemption or commerce clause limits), states may need to find alternative approaches, like targeting only Medicaid or personal licenses. Federal legislation is possible but uncertain under 2025's political environment. Nonetheless, intense scrutiny suggests incremental changes are

likely: further transparency rules (perhaps requiring all rebate information be reported to CMS/FTC), CR's require administering portion of rebates at point-of-sale, or expansions of safe harbor changes.

Impact on Drug Manufacturers: PBM pressure on drug pricing might drive pharmaceutical strategies. If rebates become less attractive (e.g., due to legal restrictions), manufacturers might pivot to different pricing models – maybe discount cards or risk-sharing agreements. Already, some PBMs and manufacturers negotiate “value-based contracts” for certain drugs (tying price to outcomes). This trend may accelerate if traditional rebate-based discounts face limits. It could also impact drug companies’ pricing decisions: if rebates no longer work behind the scenes, companies may need to advertise lower list prices or accept margin pressure.

Patient Access and Costs: In the best scenario, successful reforms would reduce the net prices patients pay (especially out-of-pocket) and sustain pharmacy access. For example, capping insulin costs at \$35 via state laws (as enacted in multiple states) bypasses PBMs and directly lowers patient burden. More broadly, shifting patient liability to net cost (as Medicare is doing by 2026) could become widespread. If PBMs respond by raising premiums, insurers argue, high-risk patients might benefit even if healthy people pay slightly more. Nonetheless, patient advocates hope for reforms that ensure PBM savings directly reach the consumer (e.g., rebate pass-through at checkout).

Pharmacy Impact: If PBM practices that harm small pharmacies are curtailed (through fair pay laws or ownership bans), there may be a resurgence of independent pharmacies, especially in underserved areas. On the other hand, PBM defense arguments are that integrated mail-order/specialty pharmacies reduce costs and improve care (especially for chronic or rural patients). The trade-off is access vs. control: states must weigh protecting community pharmacies against potential disruptions. Ongoing legal fights (like the Arkansas ban case) will be key.

Digital Disruption: The PBM business is not immune to digital disruption. Online and app-based prescription marketplaces (e.g., GoodRx, Amazon Pharmacy, Mark Cuban Cost Plus Drugs) challenge traditional PBM channels. GoodRx’s growth has already forced PBMs to work with coupon platforms (which indirectly exposes pricing differentials). Amazon is rumored to launch its own PBM-like service. If new platforms succeed in transparently offering lower prices, they could erode PBM market share or force PBMs to change tactics (e.g., by reducing spreads).

Global Perspective: PBMs as defined are mostly a U.S. phenomenon. Other countries typically have single-payer or centralized drug negotiation, so there is no comparable third-party intermediary. However, as U.S. healthcare evolves (e.g., more direct contracting, global budgets), the PBM model might become an oddity. If U.S. state Medicaid programs move to global capitation or re-import international drug prices, PBMs may lose leverage. Conversely, if other countries liberalize pharmacy benefits, PBM-like firms could potentially emerge abroad, though that remains speculative.

Finances and Stock Market: PBM parent companies are closely watched. Investors consider PBM regulation risks. For instance, CVS Health’s stock was sensitive to news about rebate reforms or PBM lawsuits. In reports, analysts often forecast slower growth if regulatory changes bite into PBM profits. Insider trading filings (e.g., two PBM CEOs selling shares before 2025 FTC report) have drawn scrutiny, though PBMs claim it’s due to routine diversification.

In Summary: Pharmacy Benefit Managers will continue to be central (and controversial) in drug pricing. The next few years will test whether current reform efforts produce meaningful change. Potential outcomes range from minor contractual adjustments (keeping PBMs intact) to structural shifts (requiring PBMs to fully pass through all pricing discounts or even splitting insurer/PBM units). Either way, the debate is far from settled. What is clear is that PBMs have become too big to ignore: policymakers, payers, and the public are demanding accountability. All sides agree on one thing – something must change if drug spending growth and patient affordability crises are to be resolved.



Conclusion

Pharmacy Benefit Managers occupy a uniquely powerful position in the U.S. prescription drug market. As intermediaries for nearly every insured patient, they negotiate prices, shape formularies, and process an enormous volume of transactions (^[18] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)) (^[45] [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/)). The industry's explosive growth and consolidation have brought both efficiencies and imbalances. On one hand, PBMs claim to have saved billions by harnessing scale, securing rebates, and managing utilization (^[16] www.cato.org) (^[17] www.cato.org). On the other hand, critics – including regulators, pharmacists, public advocates, and some economists – argue that PBMs exploit opaque practices (rebate retention and spread pricing) that inflate list prices and hinder competition (^[6] www.reuters.com) (^[5] repository.uclawsf.edu).

The evidence points to a nuanced reality: PBMs undoubtedly reduce certain costs (e.g., generic utilization often increases under PBMs), yet they also generate large revenues from practices that may not completely trickle down to patients. The notable investigations and lawsuits (FTC claims, state audits) demonstrate that PBMs have bona fide capacity to raise overall spending in pursuit of profit. Concurrently, the industry's defense is not easily dismissed; insurers and employers depend on PBMs to manage vast benefits, and broad cancellations of PBM functions could entail trade-offs in coverage or administration complexity.

Given this complexity, a consensus emerges on the need for **transparency and balance**. Many analysts suggest that fully illuminating PBM deals (through regulatory reporting and contract disclosure) would allow stakeholders to make informed judgments. If PBM margins on rebates were known, and if spread pricing were eliminated in favor of pure pass-through models, it could align incentives. Some recent reforms – Medicare's net pricing, state Medicaid pass-through mandates, and targeted bans on shady practices – aim to tilt the system toward clarity.

The future likely involves continued tussle between reformers and PBMs. Federal action may create uniform standards (which could simplify matters if enacted), but so far much momentum remains at the state level. Because the PBM model is interwoven with the U.S. health insurance architecture (especially ERISA-regulated employer plans), sweeping change is difficult. Nonetheless, pressures to reduce drug prices and protect consumers will probably force incremental changes: for example, more patients paying view net prices directly, or more independent pharmacies gaining fair compensation.

In conclusion, **modern PBMs** are major players shaping drug costs, health plan economics, and pharmacy viability. They are neither purely villains nor unalloyed saviors; rather, they represent a complicated middleman dynamic that can either leverage competition for savings or take advantage of market power. The ongoing scrutiny by courts, regulators, and legislators reflects a societal decision to keep these powerful entities accountable. Going forward, the tension between efficiency and fairness will dictate whether PBMs evolve into more transparent, consumer-friendly intermediaries or face structural reforms that redefine their role in healthcare. This report has laid out the historical context, current functioning, and diverse perspectives on PBMs, drawing on evidence and expert insights. As drug prices and patient affordability remain at the forefront of U.S. healthcare challenges, understanding PBMs is essential to crafting any meaningful solution.

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