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PBMs Under Scrutiny

Spending on prescription drugs in the U.S. has tripled over the past two decades, hitting $378 billion in 2021.[1] There has been much debate about reasons behind rising drug prices and lately Pharmacy Benefit Managers (PBMs) find themselves under the microscope. This article discusses the origins of PBMs, their business models, some reasons why they are blamed for rising drug prices, and how the industry is changing.

History of PBMs

Back in the 1960s, there were—by today's standard—few prescription drugs and insurance plans generally did not offer drug benefits. Since then, drug coverage by health insurance has gradually increased. Indeed, in 1960 only 1.5 percent of drug expenditure was paid for by insurance companies. By 1990, that share has risen to 40 percent.[2] This created dauting challenges for insurance companies, who had to process millions of drug claims. But this also created a business opportunity. PBMs emerged with solutions for claims adjudication such as data standardization, information systems, and drug benefit identification cards that greatly streamlined the claims adjudication process.[3]

The introduction of online, real-time electronic drug claims processing in 1987 marked another milestone for PBMs.[4] Riding on rapid advancement in information technology, PBMs were successful in establishing links with a massive network of pharmacies for information exchange, positioning themselves as intermediaries between insurance plans and pharmacies. Over the years, PBMs also curated an extensive database of patient and prescription records, which they leveraged to offer services beyond claims adjudication and mail order fulfillment, such as benefit management, patient information systems, and physician connectivity.[5]

PBMs continued their strong growth in the 1990s. It was estimated that more than 40 PBMs provided client services in 1995 and a directory of PBMs published in 1996 listed 79 PBM firms.[6] At

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[1] "NHE Fact Sheet." *Centers for Medicare & Medicaid Services*. <https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/nhe-fact-sheet>.
[2] National Health Expenditure Data. *Centers for Medicare & Medicaid Services*. <https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical>.
[3] Robin J. Strongin. "The ABCs of PBMs." *National Health Policy Forum, Issue Brief, No. 749*(Oct. 27, 1999). <https://www.ncbi.nlm.nih.gov/books/NBK559746>.
[4] *Id.*
[5] *Id.*
[6] Lipton, Helene L., et al. "Pharmacy Benefit Management Companies: Dimensions of Performance." *Annual Review of Public Health* 20.1 (1999): 361-401.

the time, the top three PBMs in terms of lives covered were PCS Health Systems, Merck-Medco Managed Care L.L.C, and Express Scripts/Value Rx.[7] By the late 1990s, PBMs were managing over 1.8 billion prescriptions annually and employed over 9,000 pharmacists.[8]

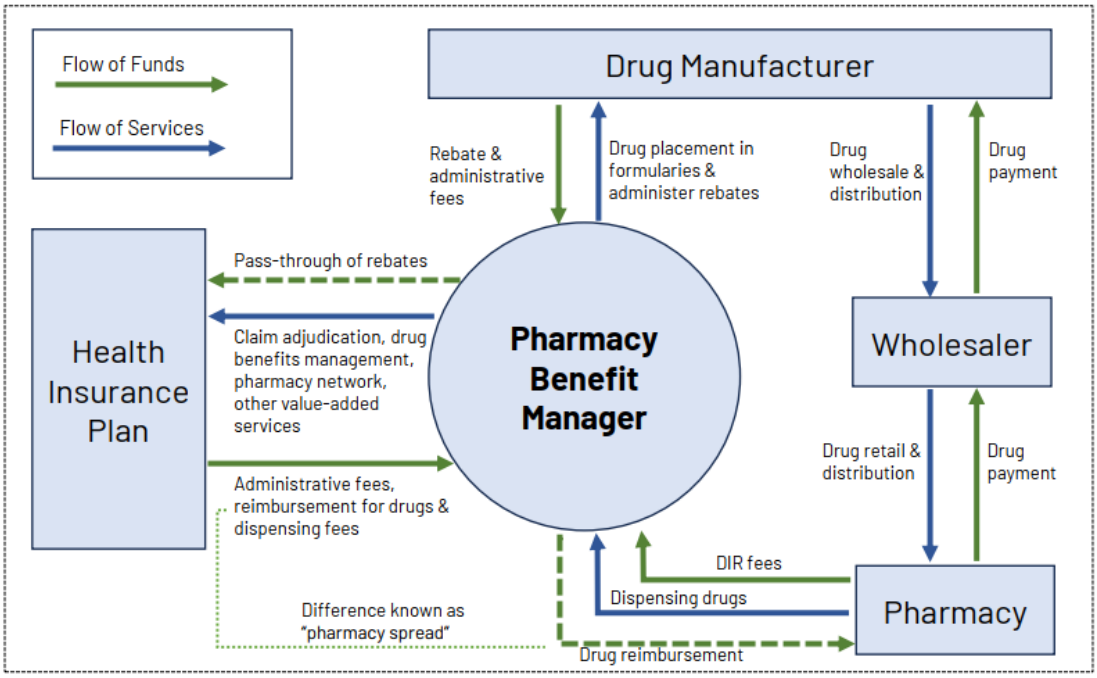
Over the last decade or so, a series of mergers and acquisitions has reshaped and consolidated the PBM industry. Notable examples include Express Scripts' acquisition of Diversified Pharmaceutical Services in 1999 and of Medco in 2012,[9] the sale of PCS Health Systems first to Rite Aid and eventually to CVS Caremark in 2007,[10] and OptumRx's acquisition of Change Healthcare in 2021.[11] Today, the industry is dominated by three large companies—Express Scripts, CVS Caremark, and OptumRx—which collectively control 80 percent of the market.[12]

PBMs' Business Model

PBMs are frequently referred to as "middlemen" because they connect health insurance plans, drug manufacturers, and pharmacies in a complex prescription drug supply chain, even though they do not make or sell drugs, nor do they provide insurance in the marketplace. Figure 1 is an illustration of what kinds of services PBMs provide and who pays for them. The blue arrows indicate the flow of services provided by one entity to another, while the green arrows indicate the flow of funds.

[7] *Id.*
[8] Robin J. Strongin. "The ABCs of PBMs." *National Health Policy Forum, Issue Brief, No. 749* (Oct. 27, 1999). <https://www.ncbi.nlm.nih.gov/books/NBK559746>.
[9] "The Origin Story of PBM's." *HealthCommentary* (Aug. 13, 2020). <https://www.healthcommentary.org/2020/08/13/the-origin-story-of-pbms>.
[10] "Advance PCS." *Wikipedia*. <https://en.wikipedia.org/wiki/AdvancePCS>.
[11] "UnitedHealth to Buy Change Healthcare for Nearly $8 bln to Boost Tech Services." *Reuters* (Jan. 6, 2021). <https://www.reuters.com/business/unitedhealth-buy-change-healthcare-nearly-8-bln-boost-tech-services-2021-01-06>.
[12] Fein, Adam J. "The Top Pharmacy Benefit Managers of 2021: The Big Get Even Bigger." *Drug Channels* (Apr. 5, 2022). <https://www.drugchannels.net/2022/04/the-top-pharmacy-benefit-managersof.html>.

Figure 1: *Interaction Between PBMs, Health Plans, Drug Manufacturers and Pharmacies*[13]



PBMs provide a suite of administrative services to health insurance plans. Outside of the traditional role of claims processing, PBMs also advise health insurance companies on ways to structure drug benefits, commonly known as "formularies," including a list of drugs to be covered, the placement of drugs in different "tiers" of preference, and the cost-sharing for each covered drug. In addition to drug benefits, PBMs also manage pharmacy networks for health plans and contract with individual pharmacies to deliver drugs to beneficiaries and reimburse pharmacies for the drugs dispensed. In return for these services, PBMs charge the health plans administrative fees.

Another revenue stream for PBMs is rebate sharing. Health plans routinely request from manufacturers discounts off the list prices of prescription drugs in efforts to contain drug costs. PBMs are usually tasked with negotiating these discounts with manufacturers, known as "manufacturer rebates," and retain a portion of the negotiated rebates as revenue for themselves. Manufacturers are incentivized to offer these rebates in exchange for preferred placement of their drugs in formularies. There is, however, little transparency as to the magnitude of these rebates. A report by the Pew Charitable Trusts estimated that PBMs on average retained 9 percent of manufacturer rebates in 2016,[14] although the share was much smaller for Medicare Part D plans.[15]

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[13] Adopted from "Pharmacy Benefit Managers and Their Role in Drug Spending." *The Commonwealth Fund* (April 22, 2019). <https://www.commonwealthfund.org/publications/explainer/2019/apr/pharmacy-benefit-managers-and-their-role-drug-spending>.
[14] "The Prescription Drug Landscape, Explored." *The Pew Charitable Trusts* (March 2019). <https://www.pewtrusts.org/-/media/assets/2019/03/the_prescription_drug_landscape-explored.pdf>.
[15] "Medicare Part D: Use of Pharmacy Benefit Managers and Efforts to Manage Drug Expenditures and Utilization." *Government Accountability Office* (July 2019). <https://www.gao.gov/products/gao-19-498>.

PBMs also derive revenue from pharmacies through what is commonly known as "DIR fees."[16] Direct and Indirect Remuneration (DIR), in the context of Medicare Part D, represents post point-of-sale price concessions plan sponsors/PBMs report to CMS for payment reconciliation.[17] Related to transactions with pharmacies, PBMs use the term DIR fees in a broader sense to describe both periodic reimbursement reconciliations, as well as various other fees. For example, pharmacies pay a "pay-to-play" fee to obtain preferred status in the health plans' pharmacy network, which may increase the sale of prescription drugs and other front-of-store products. Pharmacies may also pay fees that are tied to certain performance metrics sch as refill rates.[18] PBMs often assess these DIR fees post point-of-sale or post claims adjudications, constituting a "claw back" from pharmacies' point of view. These post-sale payment adjustments may result in pharmacies receiving less for certain dispensed drugs than what health insurance plans remit to PBMs, the difference is often termed a "pharmacy spread."[19]

Some PBMs, especially large ones, also operate their own mail order and specialty pharmacies and can steer health plan members to fulfill prescriptions there. According to a recent report, these pharmacies are becoming a dominant source of profit for PBMs—in 2019, affiliated mail order/specialty pharmacies generated over $10 billion in gross profit, more than administrative fees and retained rebates combined.[20]

Why Are PBMs Under Scrutiny?

According to a survey conducted by the Kaiser Family Foundation, eight in ten adults considered the cost of prescription drugs unreasonable and about one third have stopped taking a prescribed medicine due to cost.[21] Additionally, Medicare spending on prescription drugs has increased by 8 percent each year since 2006 and by 2021, one in every eight dollars of Medicare spending was for prescription drugs.[22]

Why is the focus on PBMs for these price increases? We discuss some of the rationales below.

Lack of Price Transparency

A common complaint about PBMs is the lack of price transparency. PBMs negotiate rebates with drug manufacturers but rarely disclose how much they pass through to health plans, leaving

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[16] "Frequently Asked Questions (FAQs) About Pharmacy 'DIR' Fees." *National Community Pharmacists Association*. <https://www.ncpa.co/pdf/faq-direct-indirect-remuneration-fees.pdf>.
[17] "Medicare Part D – Direct and Indirect Remuneration (DIR)." *Centers for Medicare & Medicaid Services* (Jan. 19, 2017). <https://www.cms.gov/newsroom/fact-sheets/medicare-part-d-direct-and-indirect-remuneration-dir?num=1&strip=0&vwsrc=1>.
[18] "Frequently Asked Questions (FAQs) About Pharmacy 'DIR' Fees." *National Community Pharmacists Association*. <https://www.ncpa.co/pdf/faq-direct-indirect-remuneration-fees.pdf>.
[19] "Spread Pricing 101." *National Community Pharmacists Association*. <https://ncpa.org/spread-pricing-101>.
[20] "Understanding the Evolving Business Models and Revenue of Pharmacy Benefit Managers." *PBM Accountability Project* (2021). <https://b11210f4-9a71-4e4c-a08f-cf43a83bc1df.usrfiles.com/ugd/b11210_264612f6b98e47b3a8502054f66bb2a1.pdf>.
[21] Ashley Kirzinger, Alex Montero, Grace Sparks, Isabelle Valdes, and Liz Hamel. "Public Opinion on Prescription Drugs and Their Prices." *Kaiser Family Foundation* (Aug. 21, 2023). <https://www.kff.org/health-costs/poll-finding/public-opinion-on-prescription-drugs-and-their-prices>.
[22] "NHE Fact Sheet." *Centers for Medicare & Medicaid Services*. <https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/nhe-fact-sheet>.

consumers in the dark about the actual cost of the medicine they pay for. In some cases, members may find themselves paying more through insurance copay than buying the drug in cash. Pharmacies are often not allowed, due to contractual obligations, to inform consumers about less expensive options.[23]

Similarly, pharmacies have protested the opacity of DIR fees.[24] At the point of sale, pharmacies face uncertainties about when revenue from dispensing a given prescription drug would be reduced or by how much. This may increase operating costs for pharmacies, especially for smaller community pharmacies.

Misaligned Incentives

Some critics of PBMs point directly at the structure of manufacturer rebate as the culprit for inflated drug prices.[25] This may sound odd at first, because rebates represent discounts off prices and in theory should *lower* prices, not increase them.

Insurance plans typically pay less than the list price, due to discounts such as negotiated manufacturer rebates. Because PBMs may retain a portion of the manufacturer rebates, they might lean towards covering drugs that offer bigger discounts, even if the list prices are higher. Because coinsurance is typically indexed to list price, a higher list price also means plan members pay more out of pocket for drugs. All these factors—list price, manufactured rebates passed through by PBMs, and member cost-sharing—affect health insurance plans' drug coverage decisions. This pricing system could potentially create misaligned incentives between the insurance plans, their members, and PBMs.

Lack of Competition

The fact that the PBM market is highly concentrated—80 percent of the market is split between just three large companies—also invites questions about whether the market is sufficiently competitive. Lawmakers have taken notice. Earlier this year, the Congress House Oversight Committee chair launched an investigation into the business practices of PBMs that are "harming patient care and increasing costs for consumers."[26]

Where the PBM Industry is Headed

In recent years, PBMs have been integrating vertically with health insurance plans. CVS Health, for example, combines CVS Pharmacy, CVS Caremark, and the health insurer Aetna under one roof.

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[23]More than a dozen states have enacted legislations banning such "gag clauses." *See, e.g.*, Connecticut's Senate Bill No. 445, passed in 2017. <https://www.cga.ct.gov/2017/ACT/pa/2017PA-00241-R00SB-00445-PA.htm.>.

[24] Ross, Meghan. "Pharmacies Face Financial Hardship with Rising DIR Fees." *Pharmacy Times* (Nov. 2, 2015). <https://www.pharmacytimes.com/view/pharmacies-face-financial-hardship-with-rising-dir-fees>.

[25] *See, e.g.*, Sood, Neeraj, et al. "The Association Between Drug Rebates and List Prices." *Leonard D Schaeffer Center for Health Policy & Economics* (2020). <https://healthpolicy.usc.edu/wp-content/uploads/2020/02/SchaefferCenter_RebatesListPrices_WhitePaper.pdf>.

[26] "Comer Launches Investigation into Pharmacy Benefit Managers' Role in Rising Health Care Costs." *Committee on Oversight and Accountability, United States House of Representatives* (March 1, 2023). <https://oversight.house.gov/release/comer-launches-investigation-into-pharmacy-benefit-managers-role-in-rising-health-care-costs%ef%bf%bc>.

OptumRx is part of UnitedHealth, another giant health insurance company. Cigna, another major health insurance company, acquired Express Scripts in 2018.[27] Such vertical integration further spurs concern about conflicts of interest and potential anticompetitive effects. For example, some have pointed out that PBM-affiliated pharmacies are making profits many times over the cost of drugs than the typical community pharmacy.[28]

However, after years of facing pressure for change, some industry players are overhauling the traditional prescription drug pricing system. CVS Health will launch a new model for pricing drugs and reimbursing pharmacies in 2025.[29] CVS said it will use a formula to determine a medication's price in its pharmacies based on the cost of the drug, a defined markup, and a fee to cover handling and dispensing the prescriptions. CVS Caremark, its PBM business segment, will also introduce a new model of reimbursement reflecting the net cost of prescription drugs, with visibility into administrative fees.

The views expressed in this article are solely those of the authors, who are responsible for the content, and do not necessarily represent the views of Vega Economics. For additional inquiries, please contact info@vegaeconomics.com.

[27] "Cigna Completes Combination with Express Scripts, Establishing a Blueprint to Transform the Health Care System." The Cigna Group (Dec. 1, 2018). <https://newsroom.thecignagroup.com/Cigna-Completes-Combination-with-Express-Scripts-Establishing-a-Blueprint-to-Transform-the-Health-Care-System>.
[28] "How Pharmacy Benefit Managers Profit at the Expense of Others." *PBM Accountability Project*. <https://www.pbmaccountability.org/_files/ugd/b11210_ad1da58cb3b14e8f953f7d9d6afa8061.pdf>.
[29] Luhby, Tami and Nathaniel Meyersohn. "CVS Will Change the Way It Prices Prescription Drugs." *CNN*(Dec. 5, 2023). < https://www.cnn.com/2023/12/05/investing/cvs-drug-prices/index.html>.