

# The 2024 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers

ADAM J. FEIN, PHD

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**DRUG CHANNELS INSTITUTE**  
An HMP Global Company

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## ABOUT THE AUTHOR

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Adam J. Fein, Ph.D., is the President of Drug Channels Institute (DCI), an HMP Global company. DCI helps its customers make sense of pharmaceutical economics and the increasingly complex pharmacy distribution and reimbursement system.

Dr. Fein is one of the country's foremost experts on the pharmaceutical industry. He has published hundreds of academic and industry articles. Dr. Fein has contributed to and is regularly quoted in such national publications as *The Wall Street Journal*, *The New York Times*, and many others.



His popular and influential [Drug Channels](https://www.drugchannels.net) website is the go-to source for definitive and comprehensive industry analysis, delivered with a witty edge. *Drug Channels* is the only place where you'll find a serious discussion of PBMs, drug pricing, and pharmacy economics, all explained with humor and a healthy dose of pop culture.

Dr. Fein earned his doctoral degree from the Wharton School of Business at the University of Pennsylvania and his undergraduate degree from Brandeis University. He lives in Philadelphia with his wife and business partner, Paula.

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Visit Dr. Fein's Drug Channels website for the latest industry updates:



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## ABOUT DRUG CHANNELS INSTITUTE

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[Drug Channels Institute \(DCI\)](#) is a leading source of industry research about pharmaceutical economics and the drug distribution system.



DCI hosts live video webinars during which Dr. Fein discusses trends and policies that affect the pharmaceutical industry and its channels. [Click here to view our current and previous video webinars.](#)

DCI also combines Dr. Fein's expertise and cutting-edge analysis—such as this *2024 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*—into interactive e-learning modules that offer your team a thorough grounding in crucial industry topics. [Click here to view a module list.](#) These online learning tools explain highly complex economic and business data and concepts so you can:

- Make better decisions to achieve your business goals
- Improve relationships with key accounts
- Understand your customers, channels, and the economics of the U.S. pharmaceutical industry

To learn more about how Drug Channels Institute can help your business, please contact:

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## INTRODUCTION AND GUIDE TO THE 2024 REPORT

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Since the previous edition of this report, pharmacy and healthcare provider markets continued to experience strong post-pandemic growth. At the same time, U.S. distribution and dispensing channels for prescription drugs continue to undergo significant evolution and consolidation as conventional business models are challenged by the evolving economics of pharmaceuticals.

The 2024 edition of our *Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers* delves into all of the crucial commercial, political, financial, and legal forces driving change:

- For 2023, total prescription dispensing revenues of retail, mail, long-term care, and specialty pharmacies reached \$621 billion (excluding COVID-19 vaccines). The double-digit revenue growth was due partly to prescriptions for anti-obesity GLP-1 agonist drugs.
- Specialty drugs' share of dispensing revenues and payer costs declined for the first time in 2023. Net prices for these products were pressured by growing competition from biosimilars and generic specialty drugs as well as aggressive benefit management tactics.
- The Big Three pharmacy benefit managers (PBMs) continued to evolve their increasingly opaque profit models. States have taken the lead in regulating and monitoring PBMs, but federal legislation has stalled. Smaller PBMs are successfully challenging the Big Three's dominance, while also relying on their larger competitors for crucial business operations.
- List prices for brand-name drugs—which directly impact the revenues and profits of pharmacies and PBMs—are growing at mid-single-digit rates. Brand-name drugs' net prices are declining, due to manufacturers' mandatory and voluntary rebates and discounts. Consequently, growth in the number of people being treated and the number of prescriptions being dispensed remains the key driver of payers' drug spending growth.
- The gross-to-net bubble, which measures total rebates and discounts paid by manufacturers, reached \$334 billion for all brand-name drugs in 2023. (Note that the 2024 edition makes an important change in the presentation of the gross-to-net bubble figures.) The combined impact of changes to the Medicaid rebate program, the IRA, and novel formulary access strategies may result in the gross-to-net bubble popping for some high-list/high-rebate products, including insulin.
- Nine manufacturers began marketing 14 biosimilar versions of Humira, the best-selling pharmaceutical in the U.S. By the end of 2023, however, the collective market share of these biosimilars remained below 3%. PBMs and payers are adopting diverse tactics to respond to the biosimilars' market access and formulary strategies.

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- A growing share of prescriptions are being dispensed with no patient out-of-pocket expense. However, U.S. patients' out-of-pocket costs remain bifurcated, based on benefit design, diagnosis, and drug therapy. Some people take inexpensive generic drugs, have generous benefit plans, and can utilize copayment offset programs. Others face high out-of-pocket expenses due to benefit designs with deductibles and coinsurance spending.
- Plan sponsors accelerated their use of novel tools—copay accumulator adjustment, copay maximizers, and alternative funding programs—that allow them to access manufacturers' copayment support and patient assistance programs to offset plans' specialty drug costs. Patient advocacy, manufacturers' tactics, and state laws are challenging payers' ability to use these tools.
- Patient-paid prescriptions that bypass insurance at cash-pay pharmacies and via discount cards are booming, due to the widely varying prices at which inexpensive generic drugs are sold throughout the drug channel. Plan sponsors now routinely incorporate these new prescription pricing models within pharmacy benefits.
- Vertical integration among insurers, PBMs, specialty pharmacies, and providers has created large companies that are exerting greater control over patient access, sites of care, dispensing, and pricing. These organizations are now refining—and in some cases unwinding—their vertical strategies as they search for meaningful synergies.
- Pharmacies experienced renewed profit pressures, as revenues and gross profits that pharmacies earned from the administration of COVID-19 vaccines plummeted. However, retail pharmacies retained their share of flu vaccinations in the post-pandemic period.
- The retail pharmacy shakeout continued. The largest chains continued to reduce their store count, while smaller pharmacies exited the market. Rite Aid, the third largest drugstore chain, filed for bankruptcy, closed locations, and sold its PBM business.
- The 340B Drug Pricing Program continues to expand at double-digit rates, even as public scrutiny of the program's operations generates new controversies. By the end of 2023, nearly 30 manufacturers had altered their policies regarding 340B discounts available at contract pharmacies. These actions have triggered new hospital specialty pharmacy strategies and challenged profits at pharmacies and PBMs.
- The Inflation Reduction Act of 2022 (IRA) began to alter the Medicare Part D program and trigger changes in beneficiary out-of-pocket spending, drug prices, pharmacy economics, and market access strategies.
- Generic market pricing remained in a deflationary cycle during 2023, although drug shortages have triggered inflation in subsets of the market. Low generic prices continue to limit pharmacies' revenues and gross profits from these prescriptions.

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- CVS, Walgreens, and Walmart increased their investments in healthcare services and physician enablement. Following VillageMD’s acquisition of Summit Health-CityMD, Walgreens has emerged as one of the largest non-hospital employers of U.S. physicians. CVS Health announced the acquisition of Signify Health and Oak Street Health.
- The federal government approved Florida’s plan to import drugs originally intended for the Canadian market. Other states have submitted as-yet-unapproved proposals. However, commercial importation by states is unlikely to be feasible or cost-effective.
- The Food and Drug Administration delayed final implementation of the Drug Supply Chain Security Act (DSCSA) for one year, until November 2024.
- The three largest pharmacy chains—CVS, Walgreens, and Walmart—finalized national settlements of financial and other opioid obligations with states and local governments.

### Understanding an Evolving Marketplace

*The 2024 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*—our 15<sup>th</sup> edition—remains the most comprehensive, fact-based tool for understanding the entire U.S. drug pricing, reimbursement, and dispensing system. This unique, encyclopedic resource is your ultimate guide to the complex web of interactions within U.S. prescription drug channels.

Thousands of companies operate within the U.S. system, enabling the 6.6 billion equivalent prescriptions to be dispensed and paid. The table below highlights the largest public companies that operate in the drug channel, along with their various channel roles. Many of these firms are among the largest businesses on the *Fortune 500* list.

### Major Public Companies Operating in U.S. Drug Channels and Primary Roles

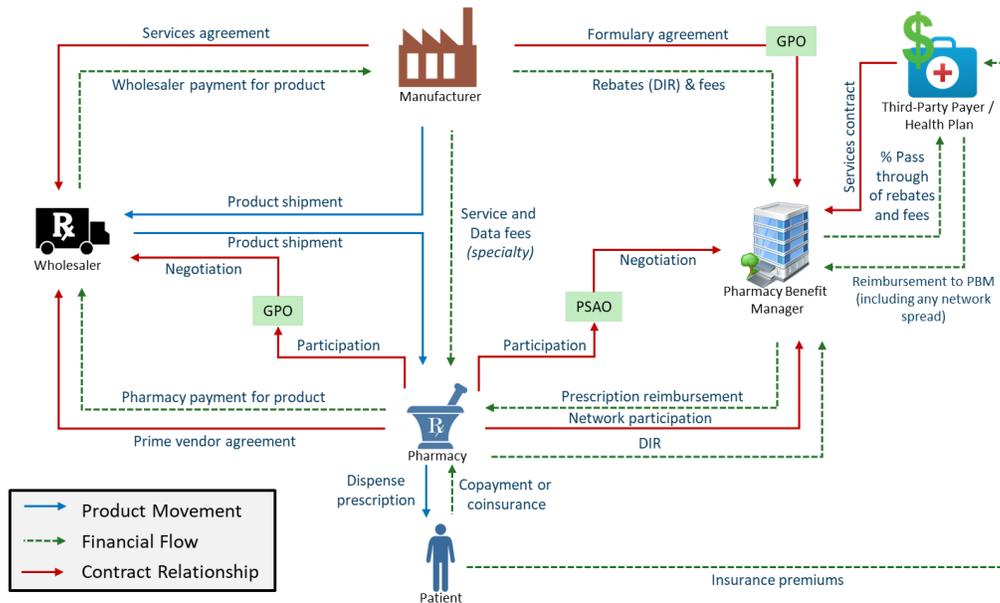
Company	Stock ticker	Primary U.S. channel role(s)						
		Insurer	Pharmacy benefit manager	Community pharmacy	Mail and/or specialty pharmacy	Healthcare provider	Discount card provider	Pharmaceutical wholesaler
Amazon	AMZN				✓		✓	
Cencora <sup>1</sup>	COR							✓
Cardinal Health	CAH							✓
Centene	CNC	✓	✓		✓	✓		
Cigna	CI	✓	✓		✓	✓	✓	✓
CVS Health	CVS	✓	✓	✓	✓	✓	✓	
Elevance Health	ELV	✓	✓		✓	✓		
GoodRx	GDRX						✓	
Humana	HUM	✓	✓		✓	✓		
Kroger	KR		✓	✓	✓	✓	✓	
McKesson Corporation	MCK				✓		✓	✓
Rite Aid Corporation	RAD			✓	✓		✓	
UnitedHealth Group	UNH	✓	✓	✓	✓	✓	✓	✓
Walgreens Boots Alliance	WBA			✓	✓	✓	✓	
Walmart	WMT			✓	✓	✓	✓	

1. Previously known as AmerisourceBergen  
Source: Drug Channels Institute research

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These and other companies discussed in this report operate within a complex distribution, payment, and reimbursement system, illustrated below. It is important to understand that not every product or channel strategy will incorporate every one of these flows.

### The U.S. Pharmacy Distribution and Reimbursement System for Patient-Administered, Outpatient Brand-Name Drugs



GPO = group purchasing organization; PSAO = pharmacy services administrative organization; DIR = direct and indirect remuneration  
 Source: Drug Channels Institute research. Chart illustrates flows for Patient-Administered, Outpatient Drugs. Please note that this chart is illustrative. It is not intended to be a complete representation of every type of product movement, financial flow, or contractual relationship in the marketplace.

The 2024 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers discusses and analyzes the key channel flows illustrated above:

- **Product movement**, which traces shipments from pharmaceutical manufacturers to the drug wholesalers that supply pharmacies. Retail, mail, long-term care, and specialty pharmacies mark the final step, in which a prescription is dispensed to a patient.
- **Financial flows**, which transfer money from third-party payers to PBMs, which in turn reimburse pharmacies. Funds flow to manufacturers via pharmacies, which purchase drugs from wholesalers. Funds flow from manufacturers to PBMs in the form of rebates and fees. The PBMs share most of these payments with plan sponsors, reducing plans' net prescription costs. Manufacturers' payments to PBMs and other third-party payers do not flow through wholesale or retail channels.
- **Contractual relationships**, which govern the relationships between: 1) payers and PBMs; 2) PBMs and pharmacies; 3) pharmacies and wholesalers; 4) wholesalers and manufacturers; and 5) manufacturers and PBMs.

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In Sections II and III of the report, we revisit this chart to link each flow with the corresponding report chapters that explain and analyze it. This chart appears as [Exhibit 68](#) (page 117).

This definitive, nonpartisan report includes the most current information about pharmacy dispensing channels, third-party payers, PBMs, patients' financial contributions, government regulations, and more. The report synthesizes a wealth of statistical data, research studies, financial information, and my own extensive consulting experience. It will aid pharmaceutical manufacturers, wholesalers, pharmacists, pharmacy owners, hospital executives, pharmacy buyers, benefit managers, managed care executives, policy analysts, investors, consultants, and anyone else who wants to understand and benefit from this ever-changing industry.

### **What's New in the 2024 Report**

*The 2024 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers* retains the overall structure we employed in previous editions. As always, we have updated all market and industry data with the most current information available, including our annual analyses of the market positions of the largest pharmacies, specialty pharmacies, and PBMs. Throughout the report, we have added new industry data, deepened our coverage of many topics, and added more trending information.

The notable new material in this 2024 edition includes the following:

- [Section 4.3.](#) has new explanatory material to better cover the economics behind the growing market for patient-paid prescriptions—cash-pay prescriptions and discount cards. We have also updated [Section 12.4.3.](#), which reviews how and why plan sponsors are incorporating these programs within pharmacy benefits.
- [Section 5.1.4.](#) and [Section 12.2.2.](#) contain new analyses of the market dynamics for Humira biosimilars.
- [Section 6.2.](#) has been reorganized and contains an expanded presentation of material related to plan sponsors' use of such benefit design tools as copay accumulator adjustment, copay maximizers, and alternative funding programs.
- [Section 7.3.2.](#) now integrates material related to specialty pharmacies' role in the gene therapy market. Since these therapies are typically covered by patients' medical benefits, we have shifted more detailed coverage to our companion [Economic Report on Pharmaceutical Wholesalers and Specialty Distributors](#).
- [Section 8.4.](#) has been reorganized into two new subsections to address developments in acquisition cost reimbursement for prescriptions. [Section 8.4.1.](#) updates our analysis of fee-for-service Medicaid programs, while [Section 8.4.2.](#) focuses on cost-based models by commercial payers and cash-pay pharmacies.

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- [Section 9.1.1.](#) contains new analyses of PBMs' state-mandated disclosures on rebates.
- [Section 9.1.2.](#) and [Section 11.4.](#) include new data and updated estimates for manufacturers' and pharmacies' Part D liabilities, including direct and indirect remuneration (DIR) payments and coverage gap discounts.
- [Section 12.2.3.](#) includes expanded data and analyses of nonbiological generic specialty drugs, given the importance of these products for such cash-pay pharmacies as the Mark Cuban Cost Plus Drug Company.
- A new [Section 12.3.4.](#) analyzes how acquisition cost reimbursement could impact pharmacy profitability and the overall industry.
- We have added significant new material to the sections introduced in the 2023 edition of this report that discuss the Inflation Reduction Act of 2022. These include [Section 12.5.1.](#), which summarizes the key provisions of the law and current guidance, and [Section 12.5.2.](#), which highlights potential implications of the IRA for the drug channel.
- There are 262 exhibits in the 2024 edition, compared with 241 in the 2023 edition.

### Structure of the 2024 Report

This report analyzes the industry in three major sections, comprising 12 total chapters:

#### [SECTION I: THE U.S. PHARMACY INDUSTRY](#)

- [Chapter 1: Industry Overview](#) (page 13) defines the industry and its regulatory framework, describes the different products and prescriptions that a pharmacy dispenses, provides data on traditional and specialty prescription costs, delineates different pharmacy industry participants, and quantifies differences among dispensing formats. This chapter includes our analysis of pharmacist-provided clinical services (including medication therapy management services), retail healthcare services, and COVID-19 vaccine administration.
- [Chapter 2: Pharmacy Industry Market Structure](#) (page 51) analyzes the industry's prescription and revenue growth trends. It identifies the largest pharmacies based on prescription revenues. It then analyzes recent market share trends for each dispensing format and for the major national companies.
- [Chapter 3: Specialty Drugs and Specialty Pharmacies](#) (page 74) provides a comprehensive overview of the pharmacies dispensing specialty medications. It includes our exclusive analyses of national market share for pharmacy-dispensed specialty drugs and accreditation trends among pharmacies. It also provides a competitive analysis of the various organizations that compete to dispense specialty medications. The chapter

reviews the channel strategies that pharmaceutical manufacturers use for specialty drugs, provides our exclusive analyses of limited and exclusive specialty dispensing networks, explains the role of service fees, and profiles the specialty hub services market.

## **SECTION II: THIRD-PARTY PAYMENT AND PHARMACY BENEFITS**

- **Chapter 4: Payment and Spending for Prescription Drugs** (page 118) examines the primary payers for prescription drugs at retail, mail, long-term care, and specialty pharmacies. It analyzes recent changes in the payer mix and spending on traditional vs. specialty drugs. Chapter 4 also reviews patient-paid prescriptions using cash-pay pharmacies and discount card programs.
- **Chapter 5: Pharmacy Benefit Management** (page 146) identifies the services and roles of PBMs, analyzes the structure of the PBM industry, reviews the business strategies of the largest PBMs, profiles many smaller PBMs, and discusses PBM-owned purchasing organizations. It describes the relationship between PBMs and the pharmacies that participate in a PBM's network, explains the largest pharmacy services administrative organizations (PSAOs) and identifies the largest players, and details how plan sponsors compensate PBMs for benefit management services. Chapter 5 also reviews the primary sources of PBM compensation by plan sponsors, including spread pricing.
- **Chapter 6: Consumer Copayments and Coinsurance** (page 190) analyzes the benefit designs and plan structures that determine patients' out-of-pocket spending for the major third-party payers: employer-sponsored health plans, health insurance marketplace (HIM) plans, Medicare Part D, and Medicaid. We explore manufacturers' out-of-pocket payment support programs, explain the emergence and use of copay accumulators and maximizers, discuss alternative funding programs (sometimes known as specialty carve-out programs), and provide the latest data on patient out-of-pocket expenses. We also present the latest data on how benefit design affects patients' out-of-pocket costs.
- **Chapter 7: Narrow Pharmacy Networks** (page 237) analyzes the structure, utilization, and economics of narrow network models. We explain the use and economics of narrow networks for pharmacies in commercial health plans and Medicare Part D. We review mail and retail pharmacies as narrow network options for maintenance prescriptions. This chapter also evaluates the latest data on payer-defined networks for specialty drug dispensing in commercial health plans and for buy-and-bill channels.

## **SECTION III: DRUG CHANNEL ECONOMICS AND OUTLOOK**

- **Chapter 8: Prescription Reimbursement by Third-Party Payers** (page 267) explains the formulas and methodologies for computing a pharmacy's revenue from brand-name, generic, and specialty prescriptions. It also delves into maximum allowable cost (MAC)

- prices as well as the regulations and laws related to MAC prices. This chapter compares traditional list price methods with the acquisition-cost reimbursement approaches—such as the use of the National Average Drug Acquisition Cost (NADAC)—now utilized by fee-for-service Medicaid programs, commercial payers, and cash-pay pharmacies. We also review the economics of mail vs. retail pharmacies for payers and consumers.
- [Chapter 9: Drug Pricing, Rebates, and Payer Costs](#) (page 285) explores rebates in commercial health plans, Medicare Part D, Medicaid, and the Department of Veterans Affairs. It explains how PBMs negotiate with manufacturers, analyzes trends in list and net drug prices, and describes the gross-to-net bubble phenomenon. The chapter explains how plan sponsors use rebates, the role of point-of-sale rebates, and controversies over rebates. The chapter concludes by illustrating how prescription reimbursement, formulary rebates, and consumer copayments affect a plan sponsor’s net costs for traditional and specialty prescriptions.
  - [Chapter 10: Relationships with Pharmaceutical Wholesalers](#) (page 325) explores pharmacies’ interactions with their primary wholesale suppliers of drugs. It explains wholesalers’ channel roles and services, identifies the largest wholesale suppliers, and analyzes how wholesalers affect pharmacies’ acquisition costs for drugs. We present our latest data on pharmacy group purchasing organizations and the generic sourcing relationships between wholesalers and large pharmacies. This material is adapted from our [Economic Report on Pharmaceutical Wholesalers and Specialty Distributors](#).
  - [Chapter 11: Pharmacy and Prescription Profitability](#) (page 337) unites the reimbursement and cost discussions from Chapter 8 and Chapter 10 by presenting the latest available data on pharmacy and prescription profitability. This chapter documents overall drugstore profitability, pharmacy margins for prescriptions from different dispensing formats, profit differences between brand and generic prescriptions, and the sources of PBMs’ gross profits. Chapter 11 also includes material on the direct and indirect remuneration (DIR) fee payments that pharmacies make to PBMs and health plans. Finally, we consider pharmacies’ role and profits in the 340B Drug Pricing Program.
  - [Chapter 12: Outlook and Emerging Trends](#) (page 373) presents the outlook for the pharmacy industry’s product mix and revenues in 2028. This chapter also considers the outlook for specialty drugs, including the growth in specialty generic drugs and pharmacy-dispensed biosimilars. We also discuss crucial emerging trends, including vertical integration, importation, state legislation, cost-based reimbursement, controversy over the 340B program, and shakeout and consolidation in retail pharmacy. We also address such new entrants as Amazon and venture-backed digital pharmacies, as well as the growth of patient-paid prescriptions within pharmacy benefits. The final section reviews the Inflation Reduction Act of 2022 and its potential impact on the drug channel.

## How to Use the 2024 Report

***The chapters are self-contained and do not need to be read in order.*** We include extensive internal clickable hyperlinks to help you navigate the entire document and customize it to your specific needs. You can use keyboard shortcuts to return to your previous location in the document. We also encourage you to search the entire PDF document for every occurrence of a word or phrase. The shortcuts and search approach will vary based on your computer platform.

There are nearly 1,100 [endnotes](#), most of which have hyperlinks to original source materials. The report also includes a list of the [Acronyms and Abbreviations](#) used within it.

As always, I welcome your feedback. Please contact me if you have any questions or comments about *The 2024 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*.

Adam J. Fein  
March 2024

P.S. [Click here for post-publication errata.](#)

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