The 2021 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers

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Drug Channels Institute

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ABOUT THE AUTHOR

Adam J. Fein, Ph.D., is the CEO of Drug Channels Institute (DCI), a leading management educator for and about the pharmaceutical industry. DCI is a subsidiary of Pembroke Consulting, Inc.

Dr. Fein is one of the country's foremost experts on pharmaceutical economics and the drug distribution system. 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*, *The Washington Post*, *Forbes*, and many others.

His popular and influential *Drug Channels* 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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ABOUT DRUG CHANNELS INSTITUTE

Drug Channels Institute (DCI), a division of Pembroke Consulting, Inc., is a leading provider of specialized management education for and about the pharmaceutical industry.

Drug Channels Institute combines Dr. Fein's expertise and cutting-edge analysis—such as this *2021 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

Drug Channels Institute also 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.

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

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INTRODUCTION AND GUIDE TO THE 2021 REPORT

In 2020, the COVID-19 pandemic disrupted every aspect of the U.S. drug channel—and our lives. Pharmacy and healthcare provider markets experienced unprecedented volatility. Stable patterns of prescription demand became highly unpredictable.

However, this period also demonstrated the underlying resilience of U.S. distribution and dispensing channels for prescription drugs. Pharmaceutical wholesalers maintained shipments and operational capacity. Payers and pharmacy benefit managers (PBMs) waived benefit limitations so patients could access therapies. Pharmacies and pharmacists stepped up as critical providers of medications and are playing a crucial role in administering COVID-19 vaccines.

In the midst of the pandemic, the industry continues to confront a diverse set of commercial, political, and legal challenges. They are among the many issues we consider in this report:

- Total prescription dispensing revenues of retail, mail, long-term care, and specialty pharmacies reached a record $465 billion in 2020. Specialty drugs accounted for nearly 40% of these revenues—and an even greater share of payers' net prescription costs.

- Insurers, PBMs, and specialty pharmacies have combined into vertically integrated organizations. The COVID-19 pandemic has slowed or delayed some companies' efforts to achieve vertical synergies. However, these organizations are still poised to exert greater control over patient access, sites of care, dispensing locations, and pricing.

- Payers and PBMs are tightening their management of specialty drugs, thereby pressuring independent specialty pharmacies, physician practices, and hospitals. The specialty pharmacy industry has become more concentrated, due to the acquisition of many large independent specialty pharmacies.

- The pharmacy industry remains intensely competitive, pressuring prescription profits. Retail pharmacies are undergoing a shakeout that is reducing the number of U.S. pharmacy locations, as small chains and supermarkets sell to larger competitors.

- List prices for brand-name drugs—which directly impact the revenues and profits of pharmacies and PBMs—are growing more slowly than they have historically. However, brand-name drugs' net prices (after rebates and discounts) have declined for the third year. Consequently, growth in the number of people being treated and the number of prescriptions being dispensed has become a key driver of rising drug spending.

- Generic market pricing has stabilized after the periods of rapid inflation and deflation. Pharmacy profits have benefited from this stability, though low generic prices are limiting pharmacies' revenues and gross profits from these prescriptions.

- Patients taking specialty drugs faced high out-of-pocket costs due to benefit design that favors deductibles and coinsurance spending. At the same time, a growing share of prescriptions is being dispensed with no patient out-of-pocket expense.

- Controversy over copay accumulator and maximizer programs is rising, as plans attempt to reduce their spending by accessing manufacturers' patient support funds.

- The gross-to-net bubble, which measures total rebates and discounts paid by manufacturers, reached $187 billion for patent-protected brand-name drugs in 2020. Regulatory efforts to remove the role of rebates in the Medicare Part D program have been delayed, perhaps indefinitely.

- Regulators and lawmakers continue to scrutinize PBMs' profit models and incentives. Disclosures about PBMs' unexpectedly large profits in Managed Medicaid programs have triggered several larger states to carve-out pharmacy to fee-for-service Medicaid.

- The 340B Drug Pricing Program is now roughly the size of the nation's Medicaid outpatient drug market. Pharmacies' role in—and profits from—the 340B program were disrupted during 2020, when some manufacturers began limiting prescriptions dispensed via contract pharmacies. These highly controversial actions have triggered litigation and raised the prospect of greater government oversight of the 340B program.

- Amazon's pharmacy strategy has become clearer, though the company is still not poised to fundamentally disrupt the existing drug channel. Venture capital firms expanded their financing of numerous digital pharmacies that are attempting to alter conventional ways of doing business.

- The retail pharmacy clinic model is fading in favor of locations with broader healthcare services. Pharmacies are competing more directly with urgent care clinics and other healthcare providers.

- The federal government has finalized regulations for the commercial importation of drugs intended for Canada. However, industry opposition and practical challenges will limit any impact on pharmacies, PBMs, and U.S. drug prices.

- Federal legislative action regarding drug prices remains highly uncertain. However, states have already enacted a total of more than 160 laws targeting various aspects of the U.S. drug channel and its participants.

- New cell and gene therapies have been launched. Specialty pharmacies that are not owned or closely affiliated with a payer seem likely to play a limited role in these emerging distribution and reimbursement channel models.

Understanding an Evolving Marketplace

The 2021 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers–our 12th edition—remains the most comprehensive, fact-based tool for understanding the entire U.S. drug pricing, reimbursement, and dispensing system. This unique resource is your ultimate guide to the complex web of interactions within U.S. prescription drug channels.

This definitive, nonpartisan report includes the most current information about pharmacy dispensing channels, third-party payers, pharmacy benefit managers (PBMs), patients' financial contributions, government regulations, and more. The report synthesizes a wealth of statistical data, research studies, financial information, and my own extensive business 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 many others.

Thousands of companies operate within the U.S. system, enabling more than 6.1 billion equivalent prescriptions to be dispensed and paid. The table below highlights the largest public companies that operate in the drug channel. Many of these firms are among the largest businesses on the *Fortune 500* list.

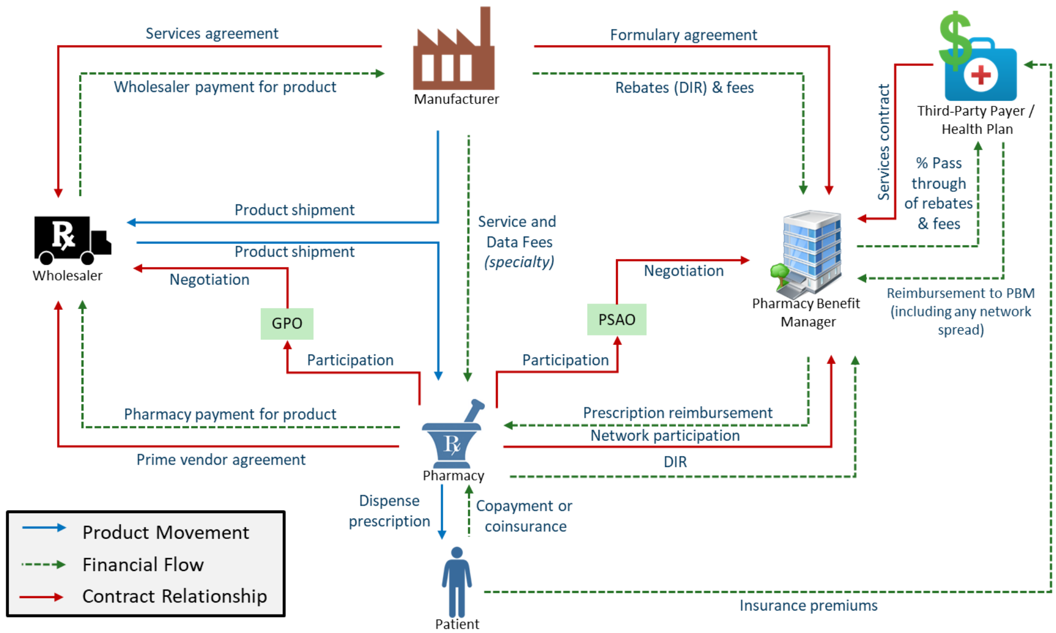
Major Public Companies Operating in U.S. Drug Channels

Company	Stock Ticker	Primary U.S. Channel Role(s)
Amazon	AMZN	Mail pharmacy
CVS Health	CVS	Insurer/PBM/Chain drugstore/Mail & specialty pharmacy/Long-term care pharmacy
GoodRx	GDRX	Discount card provider
Kroger	KR	Supermarket with pharmacy/PBM/Specialty pharmacy
Rite Aid Corporation	RAD	Chain drugstore/PBM/Mail & specialty pharmacy
Walgreens Boots Alliance	WBA	Chain drugstore/Mail & specialty pharmacy/Long-term care pharmacy
Walmart Stores, Inc.	WMT	Mass merchant with pharmacy/Specialty pharmacy
Anthem	ANTM	Insurer/PBM
Centene	CNC	Insurer/PBM/Mail & specialty pharmacy
Cigna	CI	Insurer/PBM/Mail & specialty pharmacy
Humana	HUM	Insurer/PBM/Mail & specialty pharmacy
UnitedHealth Group	UNH	Insurer/PBM/Mail & specialty pharmacy
AmerisourceBergen	ABC	Pharmaceutical wholesaler/Specialty pharmacy
Cardinal Health	CAH	Pharmaceutical wholesaler
McKesson Corporation	MCK	Pharmaceutical wholesaler/Specialty pharmacy

PBM = pharmacy benefit manager
Source: Drug Channels Institute research

These and other companies discussed in this report operate within a complex distribution, payment, and reimbursement system, illustrated on the next page.

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. 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 2021 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 pharmacy benefit managers (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.

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. To further explain these flows and their corresponding report chapters, the chart appears as Exhibit 66 (page 108).

What's New in the 2021 Report

The 2021 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers retains the overall structure we employed in last year's edition. 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.

The most notable new material throughout this 2021 edition addresses COVID-19 and its impact on the pharmacy and PBM industries. Given this uncertainty, we plan to revisit the topic in future editions. We will also continue to monitor these trends on *Drug Channels*.

Many sections and chapters have been expanded and/or reorganized to better cover the latest industry developments. Changes and updates in this 2021 edition include:

- Chapter 1 includes new material about healthcare and clinical services at retail locations, as well as additional data about vaccine and immunization services.
- Chapter 2 incorporates new data analyses that address COVID-19 and its impact on the pharmacy industry.
- We have further expanded and updated our Chapter 3 analyses of the specialty market, including additional information about PBMs, hospitals, and specialty hubs.
- Chapter 4 includes new estimates of health insurance coverage and our projections of how COVID-19 will alter these figures. We also incorporate CMS's comprehensive revision to national healthcare spending data, including outpatient prescription drugs.
- Section 4.3. has been split into two sections to better cover the cash-pay prescription market and the role of discount cards.
- Chapter 5 expands our coverage of PBMs to include additional market participants. We have also updated and expanded our analyses of spread pricing in Managed Medicaid.
- In Chapter 6, the data on patient out-of-pocket expenses include new information on cost sharing, coinsurance, and average out-of-pocket spending.
- Chapter 8 contains new material discussing the differences between pharmacy reimbursement under fee-for-service and managed care approaches in Medicaid.
- Chapter 9 offers a new section on pricing for the Department of Veterans Affairs.
- Chapter 11 includes significant new information about pharmacies' profits from the 340B Drug Pricing Program.

- Chapter 12, which covers the industry outlook and emerging trends, has been significantly updated to reflect developments that have occurred since the preceding edition of this report.

- Throughout the report, we have added new industry data sources, deepened our coverage of many topics, and added more trending information. There are 211 exhibits in the 2021 edition, compared with 203 in the 2020 edition and 180 in the 2019 edition.

Structure of the 2021 Report

This report analyzes the industry in 3 major sections, comprising 12 total chapters:

SECTION I: THE U.S. PHARMACY INDUSTRY

- **Chapter 1: Industry Overview** (page 12) 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 among 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) and healthcare clinics.

- **Chapter 2: Pharmacy Industry Market Structure** (page 46) 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 69) 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, 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 109) 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 the cash-pay prescription market and the use of discount card programs.

- **Chapter 5: Pharmacy Benefit Management** (page 130) identifies the services and roles of pharmacy benefit managers (PBMs). Chapter 5 also analyzes the structure of the PBM industry and reviews the business strategies of the largest PBMs. It describes the relationship between PBMs and the pharmacies that participate in a PBM's network, reviews how pharmacy services administrative organizations (PSAOs) intermediate between retail pharmacies and PBMs, and explains how plan sponsors compensate PBMs for benefit management services. Chapter 5 includes a detailed review of PBMs' spread pricing profits from Managed Medicaid programs. This material appeared in Chapter 11 of the 2020 edition.

- **Chapter 6: Consumer Copayments and Coinsurance** (page 161) 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, and provide data on patient out-of-pocket expenses. We also explore how benefit design affects patients' costs.

- **Chapter 7: Narrow Pharmacy Networks** (page 198) 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 222) 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 acquisition-cost reimbursement approaches now utilized in fee-for-service Medicaid programs. We also review the economics of mail vs. retail pharmacies for payers and consumers.

- **Chapter 9: Drug Pricing, Rebates, and Payer Costs** (page 237) 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 a typical traditional and specialty prescription.

- **Chapter 10: Relationships With Pharmaceutical Wholesalers** (page 270) 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.

- **Chapter 11: Pharmacy and Prescription Profitability** (page 282) unites the reimbursement and cost discussion 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 PBMs' gross profits from network and mail pharmacies. 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 315) presents the outlook for net prescription drug spending and our updated projections for the pharmacy industry's product mix and revenues in 2025. This chapter also considers future trends, including pharmacy-dispensed biosimilars, importation, state and federal legislation, cell and gene therapies, and such new entrants as Amazon and venture-backed startup pharmacies.

How to Use the 2021 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. After clicking a link, use the following shortcuts to return to your previous location in the document:

- Windows: **ALT+Left Arrow**
- Mac: **Command+Left Arrow**

There are more than 700 endnotes, most of which have hyperlinks to original source materials. The report also includes a list of the Acronyms and Abbreviations used within it. To search the entire PDF document for every occurrence of a word or phrase, use the following shortcuts:

- Windows: **Shift+CTRL+F**
- Mac: **Shift+Command+F**

As always, I welcome your feedback. Please contact me if you have any questions or comments about *The 2021 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*.

Adam J. Fein
March 2021

P.S. Click here for post-publication errata.

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LIST OF EXHIBITS