The 2019 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers

Adam J. Fein, Ph.D.
Drug Channels Institute

March 2019

Full report available at https://drugch.nl/pharmacy
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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, 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, Paula, and their two children.

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www.DrugChannels.net
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 2019 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers—into comprehensive, interactive e-learning modules that offer your team a thorough grounding in crucial industry topics. These online learning tools explain highly complex economic and business data and concepts so that you can:

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INTRODUCTION AND GUIDE TO THE 2019 REPORT

In 2018, U.S. drug channels experienced a tumultuous, eventful year. The industry is confronting a diverse set of business and political challenges:

- Total prescription dispensing revenues of retail, mail, long-term care, and specialty pharmacies reached a record $423.7 billion in 2018. Specialty drugs accounted for more than one-third of the pharmacy industry’s dispensing revenues.

- Vertical integration transformed pharmacy benefit managers (PBMs). CVS Health completed its merger with the health insurer Aetna, and Cigna completed its acquisition of Express Scripts. The largest PBMs are all now jointly owned by a health insurer.

- The specialty pharmacy industry is experiencing an unprecedented consolidation. Payer- and PBM-owned specialty pharmacies increased their market share through mergers and acquisitions. The number of accredited specialty pharmacies has reached nearly 1,000 locations as healthcare providers have expanded into specialty pharmacy.

- List prices for brand-name drugs are growing at historically slow rates, while deflation in generic drug prices continues. Politicians from both parties continue to condemn drug prices, though net prices (after rebates and discounts) have grown by low-single-digit amounts for the past four years.

- The gross-to-net bubble, which measures rebates and discounts paid by manufacturers, expanded to a record $166 billion. Regulators, lawmakers, investors, and payers are closely and publicly scrutinizing the impact of these payments and PBMs’ profit models.

- Some patients faced much higher out-of-pocket expenses, as pharmacy benefit designs evolved. Patients are increasingly exposed to the list price of their prescriptions. Many people now pay a coinsurance percentage of a prescription’s list price, or even the entire list price when they are within a deductible.

- For the first time, a serious effort exists to remove or decrease the role of rebates in the drug channel systems and reduce list price as a component of intermediary compensation. In 2019, the U.S. Department of Health and Human Services (HHS) proposed eliminating rebates in Medicare Part D and Managed Medicaid plans.

- Retail pharmacies continued to face pressures on pharmacy profits, caused by slow prescription growth, a plateau in the generic dispensing rate, the continued use of narrow networks, direct and indirect remuneration (DIR) fees, and intense competition.

- Amazon purchased PillPack and announced a major healthcare venture, creating uncertainty about its intentions and the potential for industry disruption.
The 2019 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers—our tenth edition—is the most comprehensive, fact-based tool for understanding these forces of changes and the entire U.S. drug pricing, reimbursement, and dispensing system. This new edition integrates information about pharmacy dispensing channels, third-party payers, pharmacy benefit managers (PBMs), patients’ financial contributions, government regulations, and wholesalers.

This unique resource is your ultimate guide to the complex web of interactions within U.S. prescription drug channels. The report will aid pharmaceutical manufacturers, wholesalers, pharmacists, pharmacy owners, hospital executives, pharmacy buyers, benefit managers, managed care executives, policy analysts, investors, consultants, and many others.

This definitive, nonpartisan resource synthesizes a wealth of statistical data, research studies, financial information, and my own unique business consulting experience. It contains the most current financial and industry data along with information about the strategies and market positions of the largest companies.

Thousands of companies operate within the U.S. system, enabling more than 5.9 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

<table>
<thead>
<tr>
<th>Company</th>
<th>Stock Ticker</th>
<th>Primary U.S. Channel Role(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS Health (Aetna)2</td>
<td>CVS</td>
<td>Chain drugstore/PBM/Mail &amp; specialty pharmacy/Insurer</td>
</tr>
<tr>
<td>Diplomat Pharmacy</td>
<td>DPLP</td>
<td>Specialty pharmacy/PBM</td>
</tr>
<tr>
<td>Kroger</td>
<td>KR</td>
<td>Supermarket with pharmacy/Specialty pharmacy</td>
</tr>
<tr>
<td>Rite Aid Corporation</td>
<td>RAD</td>
<td>Chain drugstore/PBM</td>
</tr>
<tr>
<td>Walgreens Boots Alliance</td>
<td>WBA</td>
<td>Chain drugstore/Mail &amp; specialty pharmacy</td>
</tr>
<tr>
<td>Walmart Stores, Inc.</td>
<td>WMT</td>
<td>Mass merchant with pharmacy/Specialty pharmacy</td>
</tr>
<tr>
<td>AmerisourceBergen Corp.</td>
<td>ABC</td>
<td>Pharmaceutical wholesaler/Specialty pharmacy</td>
</tr>
<tr>
<td>Cardinal Health, Inc.</td>
<td>CAH</td>
<td>Pharmaceutical wholesaler</td>
</tr>
<tr>
<td>McKesson Corporation</td>
<td>MCK</td>
<td>Pharmaceutical wholesaler/Specialty pharmacy</td>
</tr>
<tr>
<td>Express Scripts, Inc. (Cigna)3</td>
<td>CI</td>
<td>Pharmacy benefit manager/Mail &amp; specialty pharmacy/Insurer</td>
</tr>
<tr>
<td>Humana Pharmacy Solutions</td>
<td>HUM</td>
<td>Pharmacy benefit manager/Mail &amp; specialty pharmacy/Insurer</td>
</tr>
<tr>
<td>OptumRx (UnitedHealth Group)</td>
<td>UNH</td>
<td>Pharmacy benefit manager/Mail &amp; specialty pharmacy/Insurer</td>
</tr>
</tbody>
</table>

PBM = pharmacy benefit manager
1. Includes role of parent company where relevant
2. In 2018, CVS Health completed its acquisition of Aetna.
3. In 2018, Cigna completed its acquisition of Express Scripts.
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 2019 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers discusses the three 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 in the form of rebates to PBMs. The PBMs share a portion of these payments with plan sponsors, reducing net prescription costs. Manufacturers’ rebates 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 the chart above to associate each flow with the corresponding report chapters that explain and analyze it. To further explain these flows and their corresponding report chapters, the chart also appears as Exhibit 56 (page 91).
What’s New in the 2019 Report

The 2019 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers has been significantly restructured since last year’s edition. Many sections and chapters have been expanded or reorganized to better cover the latest industry developments. 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 and PBMs.

The many significant changes and updates in this 2019 edition include:

- A new Chapter 9 contains expanded material on drug pricing, rebates, and payer costs.

- We have added a new chapter (Chapter 12) to provide an industry outlook and cover emerging trends. Topics include pharmacy revenue forecasts, biosimilars, drug pricing, and the reform of the rebate system. This chapter also includes new material on potential disruption by Amazon and venture-capital-backed start-up pharmacies.

- We have expanded Chapter 3’s coverage of health systems’ specialty pharmacies, including a never-before-published list of 10 leading systems ranked by prescription dispensing revenues.

- Chapter 4, which addresses payment for prescription drugs, includes new material on the cash-pay market and such discount card programs as GoodRx and Blink Health.

- We have incorporated newly disclosed information about PBMs’ business models and profit sources in Chapter 5 and Chapter 9.

- In Chapter 6, the data on patient out-of-pocket expenses include additional information on cost sharing and average out-of-pocket spending.

- The material on wholesalers now appears in Chapter 10. It has been streamlined to accompany our companion Economic Report on Pharmaceutical Wholesalers and Specialty Distributors, which contains a detailed analysis of this sector.

- Chapter 11 includes updated profitability analyses for the 340B Drug Pricing Program based on newly revealed information about pharmacy contracts. This chapter also incorporates new data on the financial impact of direct and indirect remuneration (DIR) fees.

- Throughout the report, we have added new industry data sources, deepened our coverage of many topics, and added more trending information. The number of exhibits has therefore grown, from 160 in the 2018 edition to 180 in the 2019 edition. The 2019 editions is also more than 30 pages longer than the 2018 edition.
Structure of the 2019 Report

This report analyzes the industry in 3 major sections, comprising 12 total chapters. There are 2 additional chapters in this year’s edition, so some material does not correspond to that of chapters in previous editions.

SECTION I: THE U.S. PHARMACY INDUSTRY

- **Chapter 1: Industry Overview** (page 9) 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 retail clinics and pharmacist-provided clinical services, including medication therapy management services.

- **Chapter 2: Pharmacy Industry Market Structure** (page 35) 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 56) 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 reviews the specialty hub services market.

SECTION II: THIRD-PARTY PAYMENT AND PHARMACY BENEFITS

- **Chapter 4: Payment and Spending for Prescription Drugs** (page 92) 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. (Material on the industry forecast now appears in Chapter 12.)

- **Chapter 5: Pharmacy Benefit Management** (page 107) identifies the services and roles of pharmacy benefit managers (PBMs). Much of this material has been expanded and reorganized for the 2019 edition. 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. Material on rebates now appears in Chapter 9.
• **Chapter 6: Consumer Copayments and Coinsurance** (page 132) 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 also explore manufacturers’ out-of-pocket payment support programs, explain the emergence and use of copay accumulators, and provide data on patient out-of-pocket expenses.

• **Chapter 7: Narrow Pharmacy Networks** (page 158) 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 the use of 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 180) explains the most recent formulas and methodologies for computing a pharmacy’s revenue from brand-name, generic, and specialty prescriptions. This chapter compares traditional list price methods with acquisition-cost reimbursement approaches. We also review the economics of mail vs. retail pharmacies for payers and consumers.

• **Chapter 9: Drug Pricing, Rebates, and Payer Costs** (page 193) is new for the 2019 edition. The chapter explores rebates in commercial health plans, Medicare Part D, and Medicaid. 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 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 212) 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 has appeared in Chapter 9 of previous editions.

• **Chapter 11: Pharmacy and Prescription Profitability** (page 225) unites the reimbursement and cost discussion from Chapter 8 and Chapter 10 by presenting the latest 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’ per-
prescription profits from network and mail pharmacies. Chapter 11 also includes material on the DIR fee payments that pharmacies make to PBMs and health plans. Finally, we consider pharmacies’ role and profits in the 340B Drug Pricing Program. This material has appeared in Chapter 10 of previous editions.

- **Chapter 12: Outlook and Emerging Trends** (page 253) is new for the 2019 edition. It presents the outlook for net prescription drug spending, the future payer mix, and our updated projections for the pharmacy industry’s product mix and revenues in 2023. This chapter also considers the outlook for pharmacy-dispensed biosimilars, drug pricing, prospects for reform of the rebate system, and such new entrants as Amazon and venture-backed startup pharmacies.

**How to Use the 2019 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 500 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 keyboard 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 2019 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*.

Adam J. Fein
March 2019

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