THE PHARMACEUTICAL SUPPLY CHAIN: GROSS DRUG EXPENDITURES REALIZED BY STAKEHOLDERS

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Executive Summary

Within the U.S. healthcare system, the flow of dollars in the pharmaceutical marketplace is a complex process involving a variety of stakeholders and myriad rebates, discounts, and fees—some of which are paid after a prescription drug is dispensed to the patient. Commonly reported figures for pharmaceutical spending fail to capture these retrospective rebates and discounts, which lower final net spending for payers and the healthcare system. Pharmaceutical spending estimates that omit rebates and discounts do not fully reflect the underlying competitive dynamics of the pharmaceutical sector and provide a misleading impression of drug spending.

In recent years, news of rising list prices and increased patient cost sharing has triggered calls for greater visibility into the pharmaceutical distribution and payment process. Against this backdrop, the market has experienced enhanced competition, especially in certain therapeutic areas, resulting in higher rebates from manufacturers to payers in exchange for patient access to medications. The goal of this paper is to bring clarity to the drug distribution and payment process and to estimate the share of spending realized by manufacturers and other entities along the supply chain.

For purposes of this paper, we begin the analysis with "initial gross drug expenditures," which we define as the sum of payments for prescription drugs made by patients and their health plans at the point of sale (*e.g.*, pharmacy, outpatient hospital) prior to any rebate, discount, or fee provided by manufacturers. By using this starting point, the analysis makes it possible to measure prescription drug spending by consumers, health plans, government payers, and employers, and the portion thereof realized by manufacturer and non-manufacturer stakeholders. **Our analysis indicates that brand manufacturers realize 39 percent of initial gross drug expenditures. Of the remainder, 42 percent is realized by non-manufacturer entities, including amounts realized by participants in the supply chain (22 percent) and transferred by manufacturers to other stakeholders through retrospective rebates, discounts, and fees (20 percent).**

After deducting price concessions that lower the cost of medicines to payers and patients, the actual, final cost of medicines is significantly less than initial gross drug expenditures. We define these final costs to payers as "net drug expenditures," which we estimate totaled $469 billion in 2015. **Brand manufacturers realized $219 billion of this amount in 2015, or less than half of net spending on prescription drugs (47 percent).**

We also observe that rebates and discounts have grown as a share of gross drug expenditures over time. **As a result, the share of gross drug expenditures realized by brand manufacturers has declined (from 41 percent in 2013 to 39 percent in 2015), while the share realized by non-manufacturer entities has increased.** This trend in increased retrospective rebates and discounts paid by brand manufacturers has largely offset increases to drug list prices, and reflects the increasingly competitive marketplace for brand drugs.

Background and Introduction

Estimates of U.S. prescription drug spend have historically been available from a variety of private institutions as well as the U.S. government. Notable among these are IMS Health, Symphony Health Solutions (f/k/a Wolters Kluwer Health), and Kaiser Family Foundation. Additionally, Centers for Medicare & Medicaid Services (CMS) publishes historical and forecasted spending on prescription drugs in the U.S. through the National Healthcare Expenditure (NHE) Data. Estimates of prescription drug spend vary depending on the starting point and assumptions relied on by the reporting source. (*i.e.*, do they measure payments to pharmacies at the time a medicine is dispensed or payments by pharmacies to acquire drugs? Do they measure gross drug spend or spend that is net of rebates and other discounts provided by manufacturers?)

One of the most widely cited data sources is IMS National Sales Perspective (NSP), which measures invoice prices paid by pharmacies and other providers to acquire the product those entities dispense to patients. While reporting based on invoice prices is relevant in some contexts, the competitive structure of the U.S. pharmaceutical market makes invoice prices an incomplete picture of gross spend by the end consumer (patients and their insurers) and an overstatement of payments realized by the manufacturer. Focusing on invoice prices also ignores important rebates, discounts, and other price concessions offered by drug manufacturers that lower the cost of medicines to the purchaser.[1] As described in greater detail in Appendix 2, invoice sales account for most of the discounts offered by generic manufacturers but do not account for off-invoice rebates and fees paid primarily by brand manufacturers. This paper addresses these issues by estimating total initial gross drug expenditures made by patients and insurers at the point of sale, apportioning the share of those payments realized by different stakeholders, and arriving at the net amount actually realized by manufacturers.

Overview of the Pharmaceutical Marketplace

The flow of dollars in the pharmaceutical marketplace is complex. In addition to multiple stakeholders that participate in the distribution of and payment for medicines, manufacturers face a blended marketplace with public and private payers and varied regulatory requirements depending on the payer (*e.g.*, commercial insurer versus Medicaid), sales channel (*e.g.*, 340B hospital versus retail pharmacy), and provider type (*e.g.*, private clinician versus Veterans Administration hospital). However, the purchase price of a prescription drug can ultimately be distilled into three types of transactions: initial gross expenditures on prescription drugs made by patients and their health plans (both public and private), payments and discounts along the supply chain, and retrospective rebates and fees paid by manufacturers.[2]

Much like any consumer good, prescription drugs have an end buyer, in this case patients and their health plans. Also similar to most consumer goods, patients and their health plans do not buy drugs directly from the manufacturer. Rather, there is a multi-step supply chain comprised of wholesalers, pharmacies, and others where each entity plays a role in bringing medicines from manufacturer to patient. Wholesalers purchase directly from the manufacturer, and in turn sell drugs to the pharmacies or healthcare providers that dispense them to patients. Although pharmacy benefit managers (PBMs) do not take physical possession of drugs, in many cases they aggregate the buying power of health plans and employer groups by negotiating discounted purchase prices with retail pharmacies, purchasing drugs at discounted prices for delivery by mail, and separately securing rebates on brand pharmaceuticals from manufacturers. For non-retail drugs, healthcare providers who administer drugs in the office or hospital typically purchase from a wholesaler and realize price concessions at the time of purchase through membership in a group purchasing organization (GPO) rather than through retrospective rebates and discounts.

1 To address the omission of rebates, discounts, and other price concessions, IMS began publishing estimates of net drug spending in 2016.

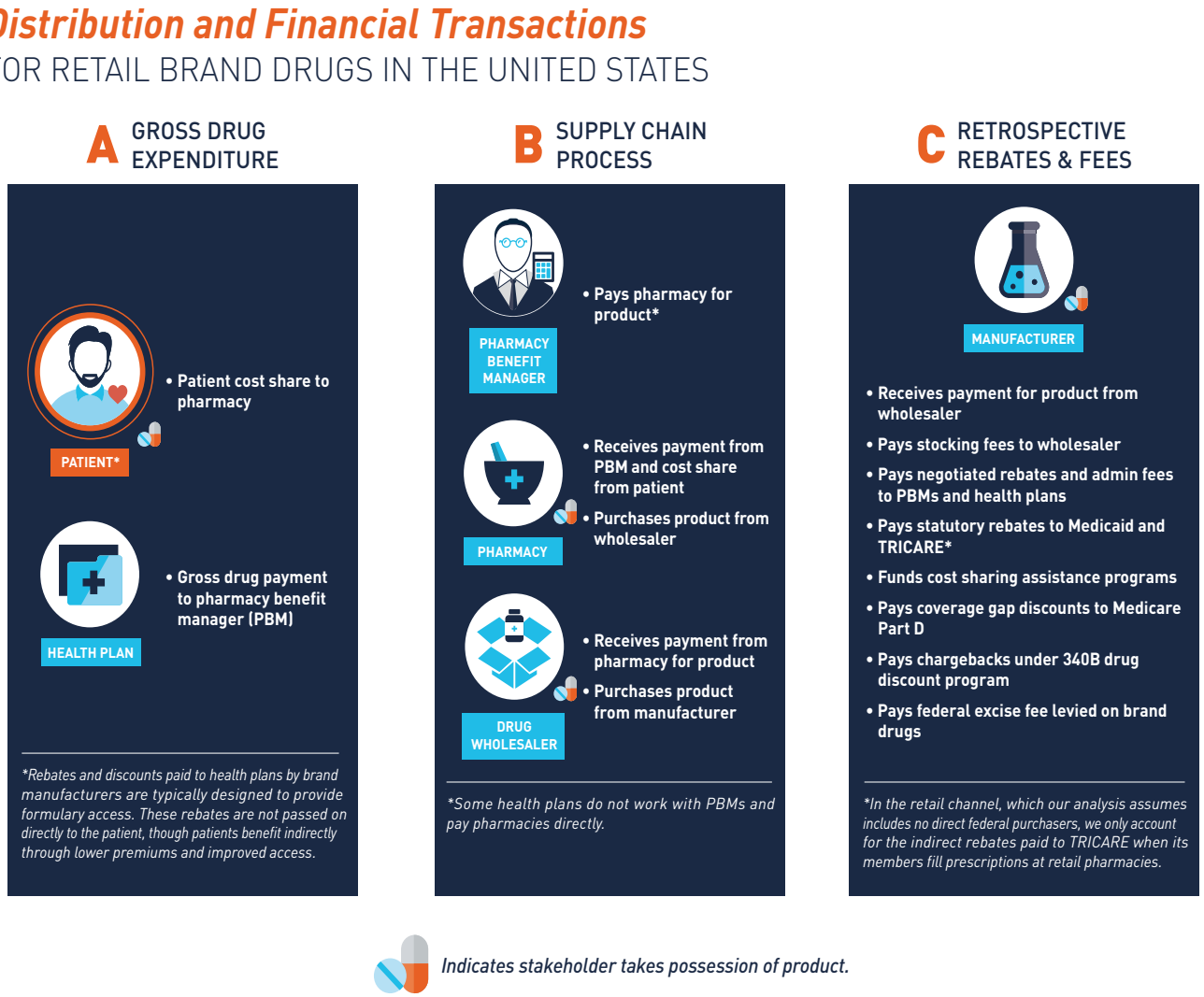
2 For additional background on the payment for and distribution of pharmaceuticals, see the Academy of Managed Care Pharmacy Guide to Pharmaceutical Payment Methods (available at: http://www.amcp.org/pharmaceutical-payment-guide/).

Wholesalers, pharmacies, healthcare providers, GPOs, PBMs, and health plans (*i.e.*, non-manufacturer stakeholders) seek to cover their operational costs and earn a return on pharmaceutical transactions. As a result, the price paid by the end consumer (and her health plan) is typically higher than the price entities along the supply chain pay to acquire or distribute a medicine. A unique feature of the retail pharmaceutical supply chain is that retrospective rebates are negotiated by health plans or PBMs and serve to reduce the initial price of brand drugs after the point-of-sale. After a prescription is filled, the manufacturer frequently pays a negotiated rebate back to the health plan or PBM, which results in a lower net price.

Beyond negotiated rebates and discounts with GPOs, PBMs, and health plans, pharmaceutical manufacturers are also legally responsible for a variety of additional statutory rebates and fees tied to the sales of the drugs they manufacture. These rebates and fees are typically paid to government health plans and other state and federal entities on a retrospective basis and serve to (1) reduce net spending on medicines by those entities and (2) further reduce the percentage of gross drug expenditures ultimately realized by the manufacturer as net sales.

Figure 1 depicts the primary categories of transactions in the pharmaceutical marketplace for brand prescription medicines dispensed in the retail setting.

FIGURE 1:



Study Findings

Considerable attention has been paid to pharmaceutical drug prices and drug spending in the U.S. over the past several years. Headlines tend to focus on list prices or total U.S. drug spending by pharmacies and generally fail to account for the rebates and fees paid by manufacturers, which may significantly lower the net price to patients, health plans, and government payers. This study, which considers all rebates, discounts, and fees paid as the medicine is distributed, reveals a more complex and robust picture of the competitive dynamics in the pharmaceutical marketplace.

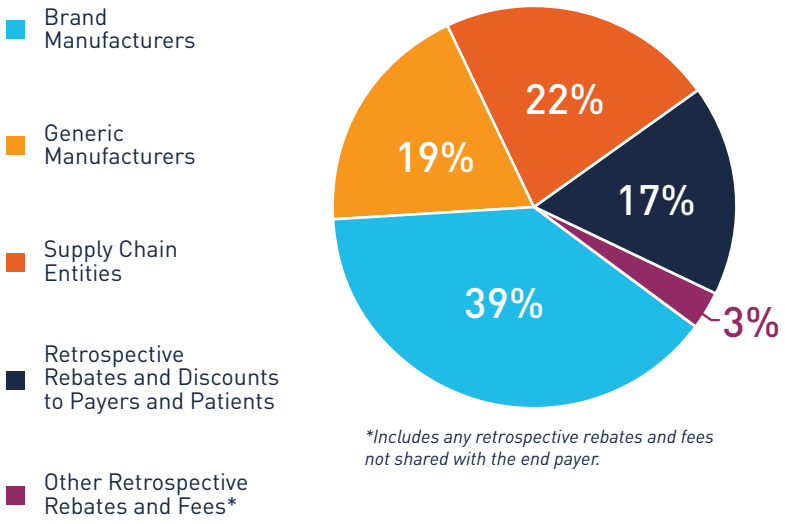
Our analysis highlights that, on average:

- Brand manufacturers realize less than half of total drug expenditures, including:
  - 39 percent of initial gross drug expenditures
  - 47 percent of net drug expenditures
- Non-manufacturer stakeholders realize 42 percent of initial gross drug expenditures, of which the largest components are rebates, discounts and fees paid by manufacturers after the point of sale
- Over time, the share of gross drug expenditures realized by stakeholders has declined for manufacturers and increased for non-manufacturers

Brand Manufacturers Realize 39 Percent of Initial Gross Drug Expenditures

As depicted in **Figure 2**, we calculate that in 2015, 39 percent of initial gross drug expenditures was realized by brand manufacturers. Of the remainder, 42 percent was realized by payers and various entities in the pharmaceutical supply chain in the form of margin on the resale of drugs and rebates, discounts, and fees paid by manufacturers. This includes amounts realized by participants in the supply chain (22 percent) and price concessions transferred by manufacturers to health plans, PBMs, governments, and other industry participants through retrospective statutory and negotiated rebates that lower gross drug expenditures (20 percent).

FIGURE 2: SHARE OF 2015 INITIAL GROSS DRUG EXPENDITURES REALIZED BY MANUFACTURER AND NON-MANUFACTURER STAKEHOLDERS



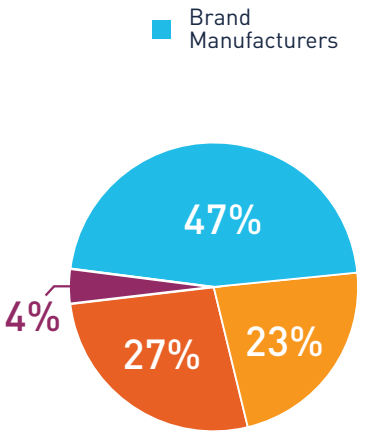
**Includes any retrospective rebates and fees not shared with the end payer.*

A detailed analysis of changes in the share of gross drug expenditures for brand medicines realized by manufacturer versus non-manufacturer stakeholders over the period from 2013 to 2015 is presented in Appendix 3.

Brand Manufacturers Realize 47 Percent of Net Drug Expenditures

After accounting for all rebates and discounts realized by patients and their health plans, we estimate that 2015 net expenditures were $469 billion. As depicted in **Figure 3**, brand manufacturers realized $219 billion of this amount, or less than half of net spending on prescription drugs (47 percent). Generic manufacturers accounted for $108 billion of this amount (23 percent). The combined net drug expenditures realized by brand and generic manufacturers is generally consistent with IMS's estimate of $310 billion in net drug spending for 2015. Supply chain entities realize the next largest share at $125 billion, or 27 percent of net spending.

FIGURE 3: SHARE OF 2015 NET DRUG EXPENDITURES REALIZED BY MANUFACTURER AND NON-MANUFACTURER STAKEHOLDERS



**Includes any retrospective rebates and fees not shared with the end payer.*

	Net Expenditures	
	$ (Billions)	%
MANUFACTURERS		
Brand Manufacturers	$218.6	47%
Generic Manufacturers	$107.6	23%
NON-MANFACTURER STAKEHOLDERS		
Supply Chain Entities	$125.3	27%
Other Retrospective Rebates and Fees	$17.5	4%
Total†	**$469.0**	**100%**

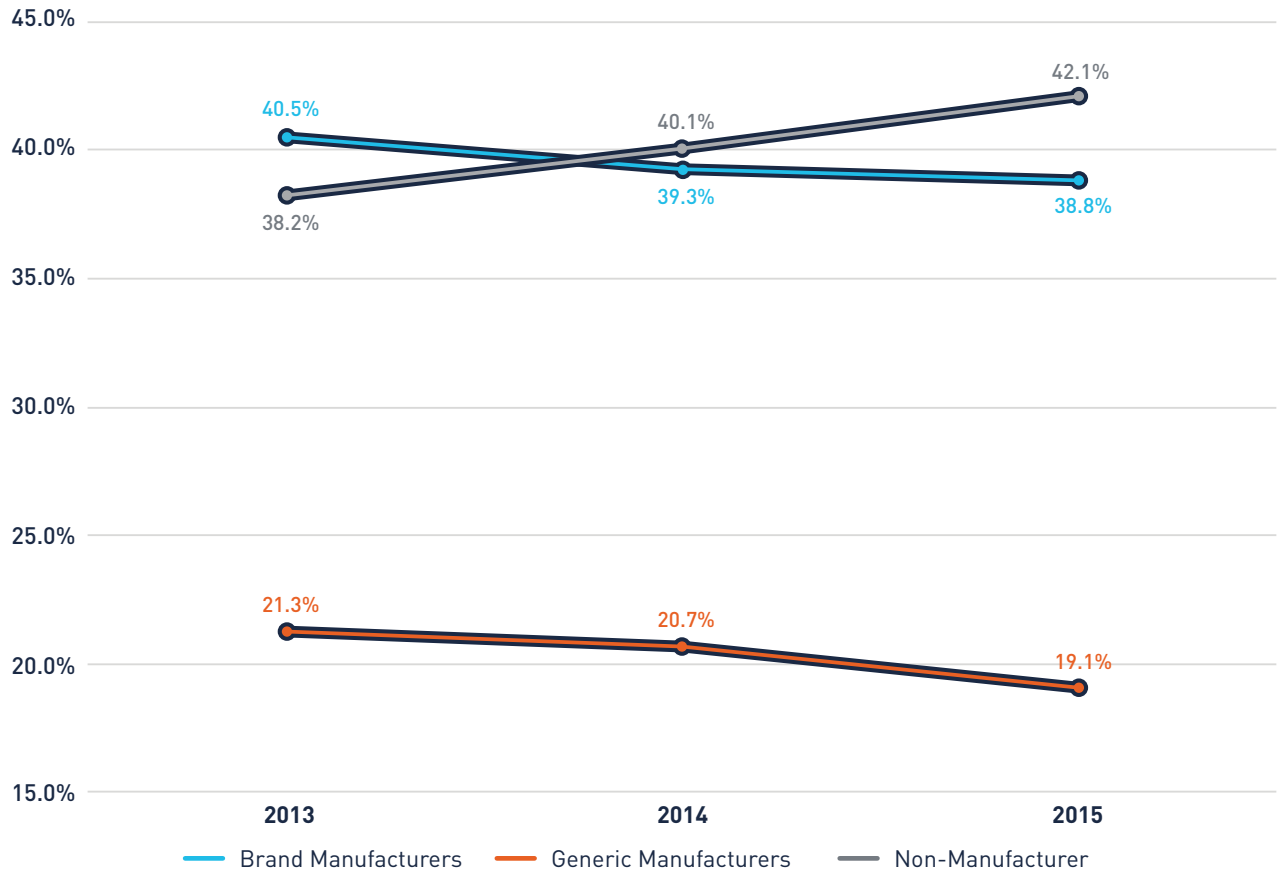
†Components may not sum to total due to rounding

The Percentage of Gross Drug Expenditures Realized by Manufacturers is Declining

Figure 4 shows how the share of gross drug expenditures realized by manufacturer versus non-manufacturer stakeholders has evolved over the period from 2013 to 2015. [3] The share of gross drug expenditures realized by brand manufacturers declined from 41 percent to 39 percent between 2013 and 2015. Meanwhile, the share of gross expenditures realized by non-manufacturer entities increased from 38 percent in 2013 to 42 percent in 2015. The largest driver in this trend is the increase in retrospective rebates and discounts paid to health plans, PBMs, and government payers by brand manufacturers, which largely offset increases to drug list prices and reflects the increasingly competitive marketplace for brand drugs. Accounting for these discounts and rebates, the share of net drug spend realized by brand manufacturers remained relatively consistent between 2013 and 2015.

3 For non-manufacturer stakeholders, realizing a higher percentage of initial gross drug expenditures over time implies receipt of additional rebates, discounts, and fees, thereby lowering those entities' actual spending on medicines.

FIGURE 4: SHARE OF INITIAL GROSS DRUG EXPENDITURES BY ENTITY TYPE, 2013-2015



Conclusion

Within the highly complex U.S. pharmaceutical market, myriad entities play a role in the process of making, shipping, filling, and paying for a prescription drug, and the dollars spent on prescription drugs are not realized by any one stakeholder. As competition in the pharmaceutical marketplace has increased in recent years, brand manufacturers have been making larger payments for market access to their medicines. Government-mandated discounts and fees have also increased over the last five years. Many of these discounts are not plainly visible, leading to misperceptions about the relative share of gross and net drug expenditures realized by brand manufacturers.

An informed discussion about pharmaceutical spending and affordability must be supported by an understanding of the role played by all entities involved in the distribution and purchase of medicines and a recognition of the discounts that lead to far lower net spending than is commonly reported based on invoice price figures. Our estimate of the percentage of initial gross drug expenditures realized by various stakeholders in the pharmaceutical supply chain reveals a number of key findings. First, brand manufacturers realize 39 percent of gross and 47 percent of net drug expenditures. Second, non-manufacturer stakeholders realize 42 percent of gross drug expenditures, of which the largest components are the various rebates, discounts, and fees paid by manufacturers after the point of sale. Third, in recent years, the percentage of gross drug expenditures realized by manufacturers has decreased.

Defined Terms

Brand Drug: Innovator drug with no marketed generic equivalent, the manufacturer of which typically negotiates rebates and discounts with commercial payers for formulary placement and other forms of market access for retail drugs, and negotiates purchase discounts with providers for market access for non-retail drugs.

Generic Drug: Any drug with at least one generic equivalent, the manufacturer of which typically negotiates purchase discounts and rebates with retail and non-retail providers to ensure stocking and dispensing of the drug.

Initial Gross Drug Expenditure: Initial point-of-sale payment by a payer and patient for a drug prior to accounting for any negotiated rebates, discounts, or fees. Does not include dispensing fees or claims administration fees.

Net Drug Expenditure: Net amount paid by a payer and patient for a drug after accounting for any negotiated rebates, discounts, or fees.

Non-retail Setting: Healthcare provider locations where drugs are dispensed or administered directly to patients (*e.g.*, inpatient and outpatient hospitals, physician offices, Veterans Administration facilities).

Market Access: Set of mechanisms through which payers and PBMs structure patient access to medicines, such as formulary tiers, copays, step therapy, prior authorization, etc.

Retail Setting: Chain, independent, long-term care, and mail order pharmacies, in addition to food stores with pharmacies.

Supply Chain: Stakeholders involved in bringing medicines from manufacturer to patient, including wholesalers, pharmacies, and healthcare provider locations.

Appendix 1 – Methodology and Data Sources Considered

The analysis presented in this paper encompasses all prescription drug sales in the U.S. in addition to a variety of rebates and fees, many of which are proprietary to the parties involved. As a result, there is no single source to rely on for this analysis. Our analysis uses Wholesale Acquisition Cost (WAC) sales and invoice sales data from IMS Health's National Sales Perspectives (NSP) as a baseline for the estimation of gross drug expenditures. The analysis relies on secondary research to estimate the portion of gross drug expenditures realized by manufacturers and supply chain stakeholders, as well as amounts paid by manufacturers through retrospective rebates, discounts, and fees.

To calculate gross drug expenditures, we rely on third-party data sources to convert WAC sales into an estimate of initial gross drug expenditures paid by patients and their health plans to pharmacies and other providers. We calculate gross drug expenditures separately for brand and generic drugs within the retail and non-retail channels to account for differences in payer reimbursement schemes within these four categories. For the retail channel, reimbursement is often determined based on WAC or Average Wholesale Price (AWP). Contracts between health plans and PBMs that are based on WAC or AWP incorporate negotiated adjustments that differ dramatically for brands versus generics. For the non-retail channel, reimbursement is more often determined based on Average Sales Price (ASP), hospital submitted charges, or bundled payment arrangements. When reimbursement is based on ASP, as is the case under Medicare Part B, a percentage is added to ASP. The purchase discounts provided to non-retail providers by brand and generic manufacturers are reflected within ASP.

In addition to calculating on-invoice discounts, we also calculate prompt-pay discounts, stocking fees, and other margin realized by wholesalers, as well as the many off-invoice discounts, rebates, and fees paid by manufacturers to health plans, PBMs, patients, and the government. We estimate these payments based on secondary research where exact numbers are not publicly available. This analysis is developed separately for the retail and non-retail channels, as well as for brand and generic drugs, in order to identify key differences in the supply chain for each. We exclude additional fees and costs in the pharmaceutical supply chain, such as dispensing fees paid to pharmacies, manufacturer payments to specialty pharmacies, and claims administration fees paid to PBMs by health plans and employer groups. These are fees for a service and not adjustments to initial gross drug expenditures (*i.e.*, the fee is not calculated as a percentage of the gross drug expenditure but rather is usually a flat dollar amount for the service performed). This analysis also does not take into account operating expenses (*e.g.*, sales, marketing, and general administrative expenses) of manufacturers or supply chain stakeholders that further reduce margins and realized net revenue.

To calculate gross drug expenditures and amounts realized by each participant, we rely on secondary research from sources listed in **Table 1**. There are inherent limitations with the data sources we use in this analysis, particularly those that attempt to estimate metrics based on proprietary information. For instance, the Pharmacy Benefit Management Institute (PBMI) offers useful survey data on typical pharmacy discounts off of AWP negotiated by employers and/or their PBMs. Though this data does not represent the entire universe of commercial health plans, we assume that the average discounts reported serve as a reasonable estimate of average discounts across the market. We make a similar assumption on wholesaler margin, referencing financial data from the three largest wholesalers (McKesson, Cardinal, and AmerisourceBergen) to estimate margins realized by the wholesaler industry at large. Though a precise calculation is not possible with such a high-level analysis, our methodology results in a reasonable estimate of the amounts realized by stakeholders in the pharmaceutical supply chain.

TABLE 1: SOURCES CONSIDERED

CATEGORY	COMPONENT	SOURCES
Gross Drug Expenditures	Gross Drug Expenditures	• IMS WAC Sales Data for 2013–2014 (2015 projected based on prior years) • IMS NPA Data, 2013–2014 (2015 projected based on prior years) • Pharmacy Benefit Management Institute, "2014–2015 Prescription Drug Benefit Cost and Plan Design Report" • Pharmacy Benefit Management Institute, "2013–2014 Prescription Drug Benefit Cost and Plan Design Report" • CMS ASP Drug Pricing Files • MagellanRx Management, "Medical Pharmacy Trend Report: 2015, Sixth Edition" • Medical Group Management Association, "MGMA Cost Survey: 2014 Report Based on 2013 Data: Key Findings Summary Report" • Becker's Hospital Review, "50 Things to Know About the Hospital Industry," July 23, 2013 • McKesson, "Becoming a Long-Term Care Pharmacy: Opportunities and Important Considerations" • PharMerica, 2015 Annual Report • Omnicare, 2014 Annual Report • Medicaid Covered Outpatient Prescription Drug Reimbursement Information by State, Quarter Ending June 2016
Supply Chain Discounts	Pharmacy/ Provider Margin	• IMS NSP Sales Data for 2013-2015
	Wholesaler Margin	• McKesson, 2015 Annual Report • Cardinal, 2015 Annual Report • AmerisourceBergen, 2015 Annual Report • Morningstar, "Healthcare Observer," April 2014 • Barron's, "Prescription for Success," June 16, 2012 • Congressional Budget Office, "Prescription Drug Pricing in the Private Sector," January 2007
	GPO Fees	• Government Accountability Office, "Group Purchasing Organizations: Funding Structure Has Potential Implications for Medicare Costs," October 2014 • Healthcare Supply Chain Association, "Frequently Asked Questions"

CATEGORY	COMPONENT	SOURCES
Statutory Rebates & Fees	340B Program Income	• 340B Prime Vendor Apexus disclosure on sales at 340B price
	Federal Supply Schedule Discounts	• IMS NSP Sales and WAC Data for 2013-2015
	Medicaid Rebates	• MACPAC, "Medicaid Spending for Prescription Drugs," January 2016 • MACPAC, "Medicaid Gross Spending and Rebates for Drugs by Delivery System & Medicaid Gross Spending for Drugs by Delivery System and Brand or Generic Status," FY 2015
	Excise Fee	• IRS, "Annual Fee on Branded Prescription Drug Manufacturers and Importers"
	TRICARE Rebates	• Medical Expenditure Panel Survey (MEPS) data • Defense Department, "Civilian Health and Medical Program of the Uniformed Services (CHAMPUS)/TRICARE: Inclusion of TRICARE Retail Pharmacy Program in Federal Procurement of Pharmaceuticals," October 15, 2010
	Medicare Part D Coverage Gap Discounts	• CMS, Coverage Gap Discount Data Spreadsheets
Market Access Rebates and Discounts	Patient Cost Sharing Assistance	• Bloomberg, "That Drug Coupon Isn't Really Clipping Costs," December 23, 2015
	Negotiated Health Plan and PBM Rebates	• 2015 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds • 2016 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds • Visante, "The Return on Investment (ROI) on PBM Services," November 2016 • Quintiles IMS Institute, "Estimate of Medicare Part D Costs After Accounting for Manufacturer Rebates," October 2016

Appendix 2 – Invoice Pricing as a Measure of Drug Expenditures

As described above, relying on invoice prices as a measure of drug expenditures does not account for the amounts actually paid by patients and their health plans at the point of sale. Notably, initial gross drug expenditures for generic drugs are significantly higher than the price at which retail and mail order pharmacies acquire generic drugs. This is not the case for brand drugs, on which pharmacies tend to earn small margins, meaning that pharmacies are typically paid an amount that does not significantly exceed their acquisition cost. As a result of this dynamic, relying on invoice sales data overstates actual spending on brands, and understates spending on generics relative to brands.

Similarly, invoice prices do not account for retrospective rebates and fees that lower the net amount actually realized by manufacturers. For generics, nearly all discounting is in the form of purchase discounts or rebates offered directly to pharmacies and wholesalers in an effort to secure shelf space at the retail or mail order pharmacy. For brands, however, the majority of discounting occurs off-invoice after the pharmacy's initial purchase in the form of rebates negotiated with health plans and PBMs and through statutory rebates and fees provided to government programs, many of which are only paid by brand manufacturers. While generic manufacturers realize the vast majority of invoice payments made by wholesalers and pharmacies when they acquire product, brand manufacturers transfer much of the invoice payments to other stakeholders through rebates, patient cost-sharing assistance, and other fees that are paid after the initial sale to wholesalers and pharmacies.

Appendix 3 – Components of Gross Brand Drug Expenditures

As discussed above, the share of total gross drug expenditures realized by brand manufacturers dropped from 41 percent in 2013 to 39 percent in 2015. This change was driven by increases in rebates and discounts paid by brand manufacturers to health plans, PBMs, and entities in the supply chain. Total gross drug expenditures include payments for generic medicines, in addition to brands. The decline in the share of initial gross drug expenditures realized by brand manufacturers is greater when limiting the analysis to spending on brand medicines. Between 2013 and 2015, retrospective rebates, discounts and fees paid to health plans, PBMs and the government for brand medicines climbed from an estimated $67 billion in 2013 to $106 billion in 2015, as shown in Figure 5. This trend led to a decline in the manufacturer share of brand spending from an estimated 67 percent on average in 2013 to 63 percent in 2015.

FIGURE 5: RETROSPECTIVE REBATES, DISCOUNTS, AND FEES FOR BRAND MEDICINES

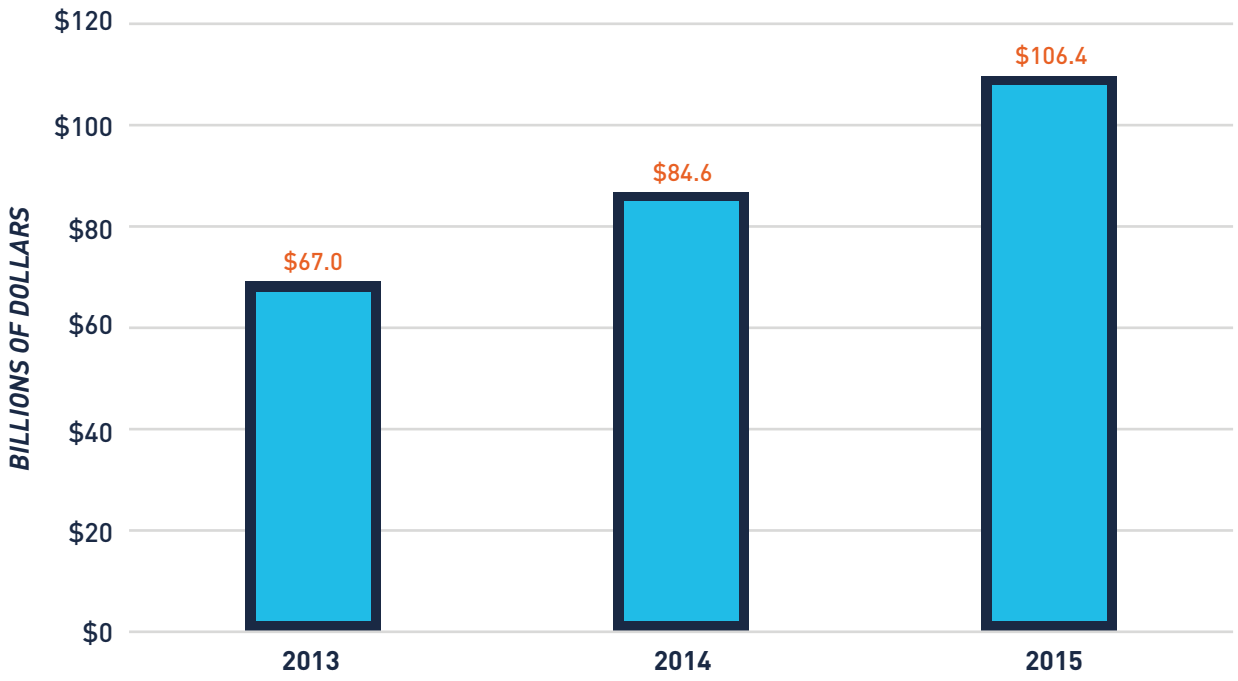


Table 2 provides more detail about how the breakdown of initial gross drug expenditures for brand medicines has changed over the 2013 to 2015 period. In 2015, brand manufacturers realized $219 billion of the $349 billion in total initial gross expenditures for brand medicines, or 63 percent of the gross amount. Gross expenditures for brand medicines were reduced by $58 billion in negotiated discounts and rebates in 2015. These discounts are provided to health plans and PBMs to secure preferential formulary placement of the medicine, which improves patients' access to the medicine. While these discounts benefit patients indirectly through lower premium payments, the discounts themselves do not directly reduce the amount patients must pay to meet a deductible and do not always reduce their required co-insurance and co-payments at the point-of-sale. As a result, manufacturers also offer cost-sharing assistance to many patients, which further improves access to medicines.

TABLE 2: INITIAL GROSS BRAND DRUG EXPENDITURES BY COMPONENT, 2013-2015

GROSS BRAND DRUG EXPENDITURES BY COMPONENT (IN BILLIONS)				
TYPE OF COMPONENT	COMPONENT	2013	2014	2015
Initial Gross Drug Expenditures[1]		**$264.9**	**$306.3**	**$349.1**
Statutory Rebates and Fees	Medicaid Drug Rebate Program[2]	$19.1	$23.0	$28.3
	Part D Coverage Gap Discounts	$4.2	$5.1	$5.8
	TRICARE Rebates & Federal Supply Schedule Discounts	$3.5	$4.6	$4.7
	Excise Fee[3]	$2.8	$3.0	$3.0
Market Access Rebates and Discounts	Negotiated Health Plan and PBM Rebates and Fees[4]	$33.2	$43.5	$57.7
	Patient Cost Sharing Assistance	$4.2	$5.4	$6.9
Supply Chain Entities	Pharmacy/Provider Margin[5]	$17.5	$18.5	$20.4
	Wholesaler Margin[6]	$2.3	$2.7	$3.1
	GPO Administrative Fees	$0.6	$0.6	$0.7
Net Amount Realized by Brand Manufacturer ($)		**$177.5**	**$199.9**	**$218.6**
Net Amount Realized by Brand Manufacturer (%)		**67.0%**	**65.3%**	**62.6%**

[1] Components may not sum to total due to rounding.

[2] Component includes statutory rebates, supplemental rebates negotiated by states and managed care plans, and 340B margin.

[3] Component represents annual fee paid by brand manufacturers as stipulated in the Affordable Care Act (ACA).

[4] Component includes the portion of gross drug expenditures that may be retained by health plans and PBMs through their role in the pharmaceutical payment process. This may not be inclusive of all health plan or PBM revenue streams (*e.g.*, claims administration fees, utilization management service fees, etc.).

[5] Component represents the difference between what a pharmacy or non-retail provider is paid for the drugs it dispenses and the price at which those drugs were acquired. Includes rebates paid by manufacturers to long-term care pharmacies.

[6] Component represents the difference between what a drug wholesaler is paid by pharmacies for drugs and what the wholesaler paid to acquire those drugs from the manufacturer, inclusive of prompt-pay discounts and stocking fees.