

# Pharmacy Cost Trends and System Impacts: Drug Supply and Payments

## FACT SHEET

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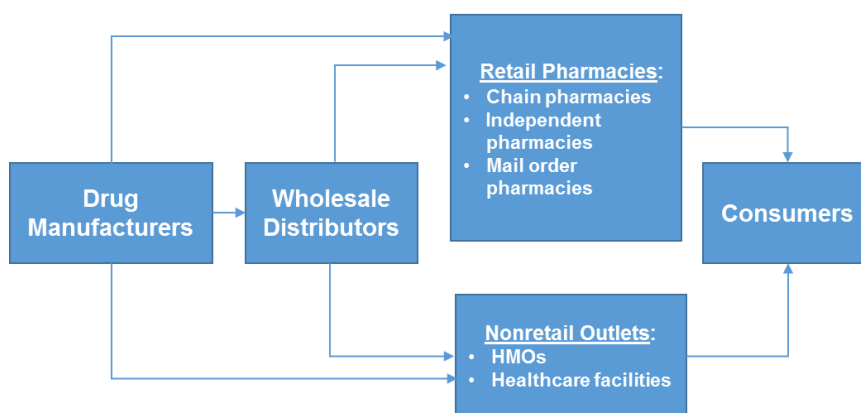
*This is the second installment of the Pharmacy Cost Trends and System Impacts fact sheet series. Our first fact sheet in this series describes drug cost trends and the increasing share of overall healthcare expenditures attributed to drugs, as well as the factors influencing higher drug costs.<sup>1</sup> This fact sheet explores the drug supply chain, price measures in the industry, and price negotiation approaches.*

## OVERVIEW

The pharmaceutical drug supply chain includes a series of complex relationships between drug manufacturers, wholesale distributors, and pharmacies. While pharmacies serve as the primary endpoint for dispensing drugs, interaction and collaboration among all of the players in the supply chain are necessary to ensure that drugs are delivered to consumers (see Figure 1).

Consumers obtain approximately three-fourths of prescription drugs through retail pharmacies, which include warehousing chains, chain pharmacies (such as Walgreens or CVS), and independent pharmacies. While the remainder of drugs reach consumers through nonretail outlets in some states,<sup>2</sup> a 1975 Arkansas statute prohibits retail pharmacies in nonprofit or government funded hospitals in in the state.<sup>3</sup> However, some hospitals were grandfathered in to continue operating retail pharmacies, including the University of Arkansas for Medical Sciences and Arkansas Children’s Hospital.

**Figure 1: Drug Supply Chain**



Although pharmacies are typically the final step in the supply chain before prescriptions reach consumers, drug prices are influenced by upstream transactions between the entities that develop and distribute drugs.<sup>4</sup> In addition to drug costs, pharmacy dispensing fees are included in calculating the overall consumer cost. The current dispensing fees do not represent a pharmacy’s total incurred cost to dispense a prescription medication. The Centers for Medicare and Medicaid Services has recognized this issue and is requiring states to move to a “professional dispensing fee,” which is based on a pharmacy’s total cost to dispense a prescription medication, by the spring of 2017.<sup>5</sup>

### Price Measures of Prescription Drugs

Prescription drugs costs show considerable variation among states, cities, and even local pharmacies. There are three price measures that influence how drug prices are set for retail pharmacies and non-retail outlets.<sup>2</sup> Generally, the average manufacturer price (AMP) provides the most accurate depiction of a drug’s cost in a retail pharmacy market, whereas the average wholesale price (AWP) provides a better approximation of payment to retail pharmacies by pharmacy benefits managers (PBMs), Medicaid, and some health plans.<sup>2</sup>

Average Manufacturer Price (AMP)	Wholesale Acquisition Cost (WAC)	Average Wholesale Price (AWP)
<ul style="list-style-type: none"> <li>• Price paid by wholesalers to manufacturers or by pharmacies that buy directly from manufacturers</li> <li>• Reflects rebates paid by manufacturers to wholesale purchases and retail pharmacies</li> <li>• Does not include rebates paid to pharmacy benefits managers (PBMs), Medicaid, or third-party payers</li> </ul>	<ul style="list-style-type: none"> <li>• Represents manufacturers’ list price of a specific drug to wholesalers</li> <li>• Does not reflect what wholesalers ultimately pay to acquire a drug with the exception of brand-name drugs still under patent (therefore lacking manufacturer competition)</li> </ul>	<ul style="list-style-type: none"> <li>• Represents wholesalers’ list price of a specific drug to retail and non-retail pharmaceutical providers</li> <li>• Does not reflect what purchasers ultimately pay for drugs, but instead represents a basis for payment to pharmacies by PBMs, private health plans, and Medicaid</li> <li>• Is related to a pharmacy’s cost of brand name medications; has no relation to pharmacy’s cost of generic medications</li> </ul>

## Price Negotiation Approaches: Pharmacies

While manufacturers and wholesale distributors represent two key components of the supply chain, pharmacies represent entities with direct consumer contact. The prices that pharmacies pay for prescriptions is dependent upon negotiations between the entities described in Figure 2.<sup>4</sup> Retail chains generally procure drugs directly from wholesalers, with the exception of some larger chains who purchase directly from manufacturers. Smaller chains and independent pharmacies often work directly with wholesalers.<sup>2</sup> An additional driver of pharmaceutical costs is dependent upon whether the drug is single-source (patent protected and produced by one manufacturer) or multiple-source/generic (drugs that have come off patent with multiple manufacturers producing the drug).<sup>4</sup>

### Figure 2: Pharmacy Supply Chain Key Players

- **Drug Manufacturers:** Develop pharmaceuticals and have greatest influence over drug prices
- **Wholesale Purchasers:** Acquire majority of pharmaceuticals from manufacturers and sell drugs to pharmacies
- **Pharmacy Benefit Managers:** Negotiate discounts for health plans and other customers through cost-containment programs
- **Pharmacies:** Final step on supply chain before drugs reach consumers; pharmacies can negotiate directly with wholesalers or manufacturers for discounts, or they may work directly with a pharmacy benefit manager (PBM) for network inclusion

## Role of Pharmacy Benefit Managers (PBMs)

PBMs, which negotiate pharmacy benefits on behalf of health plans, play a significant role in the final payment that manufacturers and pharmacies receive on a drug sale and represent a large share of pharmaceutical networks. The primary strategy employed by PBMs is the use of a drug formulary, which determines covered drugs, required copayments, and other cost measures under a particular health plan. PBMs are often able to negotiate better drug prices due to their relationships with drug manufacturers, who offer rebates in exchange for favorable formulary listings which increase the volume of their drugs purchased within the PBM network.<sup>6</sup> As PBM networks continue to grow, there is increasing concern regarding public transparency with PBM arrangements. This includes debate on whether the savings promised by PBMs are truly passed down to health plans and consumers, along with the safeguarded contracts that PBMs enter into with drug manufacturers.

## Payer Variation

As noted above, many private health plans enter into contracts with PBMs in order to negotiate better prices for pharmaceuticals. Federal programs such as Medicaid can also utilize PBM networks and related cost-containment strategies, but changes under the Affordable Care Act (ACA) also required major changes to Medicaid prescription drug plans. Notable changes include a revised definition of AMP, increasing rebate percentages for covered outpatient drugs, extending rebate coverage to enrollees within managed care organizations, and providing additional discounts for Medicare Part D drugs in coverage gaps for those eligible for both Medicaid and Medicare.<sup>7</sup>

## CONCLUSION

The pharmaceutical supply chain and payment framework represents a complicated network of interests. While pharmacies provide a direct link to consumers, PBMs in their intermediary role have a major impact on the negotiated rates that many health plans offer to their beneficiaries. There remains notable variation in the price retail pharmacies pay to acquire prescription drugs and the price consumers pay for their prescriptions, raising questions about the transparency of the drug supply chain and its pricing structure. As prices continue to rise, supply chain participants have turned to additional strategies to mitigate drug costs. Value-based payment strategies, which promote high-value and high-quality healthcare services, offer opportunities to improve pharmacy management practices. The next installment of this series will focus on the rising costs of specialty drugs, representing a quarter of total commercial pharmaceutical spending,<sup>8</sup> and will further explore options to reduce prescription costs while aligning provider and patient incentives.

## REFERENCES

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