

**A Comprehensive Study of Pharmacy Benefit Managers and Their Impacts on
Prescription Drug Prices, Access and Pharmacies
for the State of Alabama Legislative Services Agency**



Prepared by Exouza Inc.

Susheel Jain
Nathan Kleinman
Gary Rice
Bill Bailey

December 1, 2025



Table of Contents

1. Acknowledgements.....	Page 2
2. Executive Summary.....	Page 3
3. Introduction.....	Page 5
4. Scope and Methods.....	Page 7
5. Pharmacy Benefit Manger Industry.....	Page 11
6. Alabama Pharmacy Experience.....	Page 36
7. Geo-Spatial Pharmacy, Physician and Alabama Population.....	Page 40
8. Community Pharmacy Survey.....	Page 49
9. Regulatory Review and Summary Analysis.....	Page 86
10. Stakeholder Interviews.....	Page 100
11. Business Tax Incentives in Alabama.....	Page 104
12. Summary.....	Page 108
13. Glossary of Terms.....	Page 112
14. References.....	Page 115



1. Acknowledgements

This report was made possible under funding from the state of Alabama Legislature. Exouza thanks members of the Legislature for recognizing the importance of conducting this study, and in particular, Senators William Beasley, Larry Stutts and Garlan Gudger, for their tireless and dedicated efforts at improving prescription drug affordability and access for Alabamians.

Exouza is also grateful to the staff from the Alabama Legislature's Legislative Services Agency and Senate President Pro Tem's office, all of whom contributed significantly to this report with ideas, guidance, reviews and support throughout the course of this study.

A special thanks to the stakeholders who agreed to participate in interviews and have their views included in this report, some of which corroborated findings, while others provided contrarian views and added new insights.

We also want to thank the hundreds of community pharmacies that provided their voice by completing the first of its kind comprehensive community pharmacy survey, as well as the Alabama Board of Pharmacy for supporting the dissemination and implementation of the survey to its licensed pharmacies. The survey provided invaluable data and insights on the behaviors and practice patterns of, and PBM impacts to pharmacies.

In addition, we'd like to thank the Alabama Board of Pharmacy and the Alabama Board of Medical Examiners and Medical Licensure Commission for providing data on pharmacy and physician licensing, respectively. This data allowed unique analyses to examine gaps in care and access to pharmacies that supported recommendations in this report.



2. Executive Summary

Prescription drug spending is one of the fastest-growing components of health care, with **net** spending accounting for over 11% of all US personal health expenditure, and annual growth rates over 10% for each of the last two years. Pharmacy Benefit Managers (PBMs), the entities primarily responsible for managing prescription drug costs and access, have come under increasing scrutiny by regulators, customers, consumers and the media for their business practices and performance. The State of Alabama itself recently enacted SB 252, the Community Pharmacy Relief Act, which provided sweeping reform of PBM business practices in an effort to bring relief to community pharmacies and a more level playing field for them to compete.

The AL Legislature subsequently commissioned this study to more holistically evaluate PBM practices and their impacts on drug pricing, pharmacy viability, and patient access.

The study's key findings confirmed that the PBM industry lacks competition, with only 70 PBMs covering nearly 300 million Americans, and the three largest PBMs — CVS Caremark, OptumRx, and Express Scripts – accounting for 80% market share. Further, the increasing trend of PBM vertical integration with insurers, retail, mail-order and specialty pharmacies, Group Purchasing Organizations, rebate aggregators and others may produce value for customers, but has also created incentives for patient/drug steering, [opaque] spread pricing and favoring higher price drugs. Key impacts of PBMs on prices, access and pharmacies are as follows:

1. PBM Practices That May Increase Costs or Limit Access

- Rebate strategies encourage placement of high-cost brands over generics or biosimilars or other lower cost/lower rebate brands.
- Formulary exclusions have increased sharply, raising patient access concerns.
- Prior authorization denial rates vary widely, with limited transparency.
- Utilization management can reduce inappropriate use but may delay treatment and increase abandonment if not implemented with guardrails.

2. Impact on Community Pharmacies

Independent pharmacies face low reimbursement, Direct and Indirect Reimbursement (DIR) fees, clawbacks, and other retroactive charges.



- PBM-owned pharmacies benefit from steering, preferred network status, and differential reimbursement.
- These pressures disproportionately harm small rural pharmacies.

4. Alabama Pharmacy Closures and Access Gaps

- From 2019–2024, Alabama lost a net 57 community pharmacies and 70 chain pharmacies.
- 48% of Alabama ZIP codes lack a community pharmacy; 25% of residents live in areas with zero or one pharmacy.
- Over 415,000 residents live in ZIP codes with one pharmacy and zero or one physician, highlighting pharmacists' role as frontline access points.

5. Community Pharmacy Survey Insights

- 325 validated responses (44% of all community pharmacies).
- Rural pharmacies fill 45% fewer prescriptions, and have 30% lower gross margins per script, making them more vulnerable.
- PBM reimbursement pressure and administrative burden were cited as top threats.
- Early effects of SB 252 show reimbursements may have declined in anticipation of increased dispensing fees
- A majority of pharmacies cost of goods are nearly equivalent to the incremental dispensing fees, showing high value in relief from SB 252.

Several policy implications can be gleaned from this analysis. First, PBM incentives often misalign with customer incentives to lower costs, increase patient affordability and provider access. Second, rural pharmacy closures risk worsening pharmacy and care deserts. And third, SB 252 is a meaningful step but cannot fully counteract structural PBM market forces alone.

Policy options for consideration include stabilizing pharmacy reimbursements by limiting retroactive fees, leveraging tax and business incentives for adding targeted relief to pharmacies at risk or disproportionately providing public value, strengthening oversight of vertical integration, building state-level systems to track pharmacy closures, access deserts, and reimbursements for pharmacist provided clinical, health and wellness services, and synchronizing the definition of community pharmacy between the AL State Legislature, given the provisions of SB 252, and the AL State Board of Pharmacy.



3. Introduction

Prescription drug spending, and the companies largely responsible for managing this spend, pharmacy benefit managers (PBMs), have come under considerable scrutiny and regulatory activity over the last few years by customers, consumer and business trade groups, state and federal regulatory agencies, researchers and even the media.

PBM practices, revenue sources, and performance are generally characterized as opaque, poorly understood, or unfavorable. Their [financial and legal] ties to other entities in the drug supply chain (e.g. owning pharmacies) or with other healthcare organizations (e.g., health insurers) through vertical integration raise further questions about their business practices, incentives and financial alignment with their customers. PBMs in no way are considered fiduciaries of their customers' accounts.

PBMs are also central to issues surrounding access to medications and care, including practices that may deny or delay access (e.g., prior authorization), shift or eliminate availability of medications on their formularies, increase out-of-pocket costs for consumers who in turn may forego medications, and steer prescriptions to preferred pharmacies limiting consumers' ability to pick up and visit with a local pharmacy.

PBM reimbursement and contractual terms with pharmacies, along with steerage to preferred pharmacies, are often viewed as a significant contributor to the closure of community pharmacies, particularly smaller, independent pharmacies, further reducing access to medications and pharmacist support.

Meanwhile, PBMs' primary responsibility has always been to lower drug spend which has also been the top priority of PBM customers.¹ However, gross prescription drug expenditures now account for more than 20% of total healthcare spending and have risen faster than any other healthcare service component over the last 10 years.^{2,3}

As a result, it is not surprising that customer satisfaction with PBMs has declined each of the last five years and is at its lowest point in the last 10 years.⁴



At the same time, it is important to keep in mind that PBMs play a multifaceted role, providing a range of necessary services to help lower drug spend, reduce barriers to medication access, improve quality and clinical outcomes, and help members navigate their care and prescription journey.

Moreover, PBMs often must balance consumer, customer, pharmacy, business, and regulatory agency interests and requirements for many of these services – often with conflicting impacts. For instance, if regulations or customers require PBMs to have open formularies, minimal exclusions, limited to no steerage to lower cost pharmacies or pharmacy alternatives, and less stringent prior authorization, access to medications will certainly increase but so too will drug spend.

To complicate matters, there is a near absence of sound peer-reviewed research utilizing control groups from which to draw conclusions around PBM impacts and performance⁵. Many of the studies, reports and research that are widely available often have limitations that prevent wide consensus on any conclusions. These studies often contain bias, lack key data, interpret data differently (e.g., net price vs gross price of drugs), or employ methods and analyses that don't accurately capture the complexity of the PBM industry (see for instance the example cited above in how PBMs balance service priorities against customer and regulatory requirements), making it difficult to draw conclusions.

Despite these limitations, more than 75% of published articles, studies, research and government reports tend to have a negative or critical view of PBMs⁶. This directional tilt of information alone can have an outsized influence on policy and decision making by consumers, businesses, and governmental agencies.

The state of Alabama, specifically the Alabama state Legislature, has recognized these pressing issues and information gaps, and has sought to have a better, more comprehensive understanding of PBM practices and their impacts on prices, access and pharmacies as it considers policy and regulatory options to promote access, affordability, and fairness in the prescription drug marketplace.

This report, funded through a competitive procurement and required under Alabama law, attempts to provide the Legislature with a comprehensive understanding, review and policy relevant analysis of the PBM industry and its impacts on prices, access and pharmacies.



4. Scope and Methods

The scope of this study encompassed four main objectives. The first objective is to provide a comprehensive understanding of the PBM industry. To truly understand the PBM industry and their financial incentives and business practices, it is important to also understand prescription drug utilization, expenditures and trends, the drug supply chain and vertical integration strategies employed by PBMs and other key stakeholders.

The second objective of the study is to provide an analysis of the impact PBMs have on drug prices, access to drugs, and pharmacies, particularly community pharmacies.

The third objective is to provide the Legislature with an early and preliminary analysis of the impact of AL SB252, The Community Pharmacy Relief Act, enacted on April 15, 2025, on community pharmacies in Alabama.

The fourth and final objective is to identify potential recommendations and policy approaches for consideration by the Alabama State Legislature to promote access, affordability, and fairness in the prescription drug marketplace.

The methods employed to conduct the study encompassed six distinct components, summarized and described in greater detail below:

- A comprehensive review of the literature
- State and national stakeholder interviews
- A community pharmacy survey of licensed pharmacies in Alabama
- Geo-mapping of pharmacies, physicians and population to identify gaps in pharmacy/pharmacist availability
- A 50-state regulatory review and analysis
- A review and analysis of Alabama business incentives and credits

a. Stakeholder Interviews

Exouza conducted interviews with key stakeholders across the drug supply chain, payers and plan sponsors, PBMs, business and trade groups, and legislators. The interviews were all conducted via telephone/video calls.



All names of individuals who were interviewed are held confidential, but organizations they represent may be referenceable if interview content is included in this report.

b. Community Pharmacy Survey

Exouza created a survey for community pharmacies and implemented it using SurveyMonkey website and tools. The survey included 51 questions that were divided into seven sections as follows:

- 14 demographic and pharmacy-specific questions
- 4 questions on prescription volume and profit by line of business (commercial, Medicaid, etc.)
- 9 questions on prescription volume and profit by prescription type (generic, brand, specialty, compounding)
- 4 questions on other goods and products sold at the pharmacy
- 4 questions on other pharmacy services
- 12 questions on pharmacy network and PBM participation
- 4 general questions about the Community Pharmacy Relief Act, impacts on profitability, upcoming plans, and intent to stay in business

The survey was pre-tested on half a dozen community pharmacies. Changes were made from the pre-test pilot to improve reliability and validity and shorten response times.

Implementation of the survey was through a link to the SurveyMonkey survey site in an email distributed by the Alabama Board of Pharmacy to all licensed community pharmacies in the state. Exouza worked with the Board of Pharmacy and the Alabama Legislative Service Agency to draft the content and timing of emails. In addition, a letter of introduction and purpose for the survey by the Legislative Services Agency was included in an initial email sent by the Board of Pharmacy to alert pharmacies to be on the lookout for the survey and the importance of participation.



Pharmacies were also guided to use their pharmacy practice management systems to provide accurate and reliable information on prescription volumes, reimbursement, and margins. All pharmacies were asked to report data on only the pharmacy location of the respondent, and not for all pharmacies within a chain that may still be designated as a community pharmacy by the Board of Pharmacy.

In this manner, the surveys were made available to over 735 community pharmacies to complete over a seven-week period. Over 335 community pharmacies completed the survey, representing a response rate of over 45%.

Exouza reviewed respondents against the licensing data that the Board of Pharmacy provided and excluded responses from pharmacies that were facility based (e.g., long term care), even though they were designated by the Board of Pharmacy as a community pharmacy. In contrast, we included a pharmacy that was part of a larger national chain (over 60 locations) but also licensed as a community pharmacy. It was not our task to evaluate the licensing criteria or the application of those criteria to licensees, but these adjustments seemed appropriate given the purpose of the survey.

c. Geo-Mapping of Pharmacies, Physicians and Population

To identify pharmacy deserts (geographical areas with no or few pharmacies), Exouza combined Alabama zip code population data with the list of community, chain, and other pharmacies (with their addresses) provided by the Board of Pharmacy to obtain a count of zip codes with zero, 1, 2, or 3+ pharmacies in each zip code. These counts of zip codes were produced for all zip codes combined and for zip codes by population range as follows: <1,000 people, 1,000-2,500 people, 2,500-5,000 people, 5,000-10,000 people, and >10,000 people. Counts of zip codes with zero, 1, 2, or 3+ community pharmacies were also produced. Counts of Alabama counties with zero, 1, 2, or 3+ pharmacies (and community pharmacies) were also determined.

We also mapped Alabama physician location information to the pharmacy data for the purpose of determining zip codes where pharmacists might be the only source of health care/information. With this data, Exouza calculated the number of zip codes in Alabama that have zero, 1, or 2+ physician locations, as well as



the number of physician locations among zip codes with zero, 1, 2, or 3+ pharmacies.

Using Excel's 3D Maps Tours package, Exouza created a variety of visualizations using the above data. These included maps of Alabama zip codes (shaded by population range) with points on the map indicating pharmacy location and type (community vs other) and physician location. Maps were also created that highlighted zip codes with zero or 1 pharmacy and zip codes with a pharmacy and only zero or 1 physician location.

d. State Regulatory Review

We reviewed regulations in all 50 states that dealt with PBM requirements for reporting, patient out-of-pocket expenses, formulary requirements, pharmacy reimbursement, 340B entities, pharmacy networks, and other requirements. This scan of regulatory activity was conducted through web searches (e.g., <https://nashp.org/state-tracker/state-drug-pricing-laws-2017-2025/>, <https://law.justia.com>, <https://advance.lexis.com>), state regulation websites, and supported by AI to scan for additional regulatory activity by state that may have been missed.

Regulatory activity was catalogued by state and also grouped into five distinct categories that the regulations were assessed to primarily impact. The five categories included:

- Drug pricing
- Patient access
- Pharmacies
- PBM administration
- Drug acquisition costs

A given regulation could address multiple issues and contain multiple topics. Therefore, we allowed each regulation to potentially be counted as having an impact on more than one category. We used AI to scan the regulation descriptions and determine which of the five categories each regulation would impact (allowing a regulation to be counted in multiple categories). We then



counted the number of regulations from each state that had an impact in each of the five categories.

These categories were developed to identify the primary area of impact of regulatory activity so that the Legislature and others are more efficiently able to digest the scope and focus of regulatory activity, as well as identify and compare specific regulatory activity of interest.



5. Pharmacy Benefit Manager Industry

a. Overview

Overall *net* spending on prescription drugs at retail is estimated at \$529 billion for 2025, or 11.1% of all personal health expenditures in the US.⁷ This represents more than a \$200 billion, or an increase of 65% in spending from 2015. During this 10-year period, prescription drug spending was one of the fastest growing components of healthcare, more so than spending for hospitals and physicians. More recently, in 2023 and 2024, it was the fastest growing component, increasing by 11.4% and 10.1%, respectively.⁸

Notably, these estimates are net spending on prescription drugs, which nets out rebates as well as discounts and coupons by pharmacies. They also include prescription drug spending at long term care and institutional facilities but not spending on prescription drugs administered in physician offices, or spending on drugs that are sourced outside of retail outlets (e.g., importation).

The stakeholders largely tasked with managing this spend, providing and determining access to these drugs, and paying pharmacies for dispensing them are Pharmacy Benefit Managers, or PBMs.

Recently, PBMs have come under intense scrutiny from all corners – employers and insurers who ultimately foot the bill, consumers who want lower out of pocket costs and easy access for their medications, pharmacies who want to be paid fairly and not be discriminated against for referrals, physicians who want to prescribe what is best for their patients and not jump through delays or administrative barriers for approvals, federal and state authorities concerned about transparency, antitrust, and unfair or unethical business, and even pharmaceutical manufacturers, who blame PBMs for increasing expenditures on drugs and excessive profit taking.

PBMs sit in the middle of all these stakeholders for nearly every prescription and play an outsized role in impacting prescription drug prices, access and pharmacy participation and referrals. It is not surprising that they face scrutiny and criticism from nearly all other stakeholders, and why more than 75% of published articles, studies, research and government reports tend to have a negative or critical view of PBMs⁹.



b. PBM Role

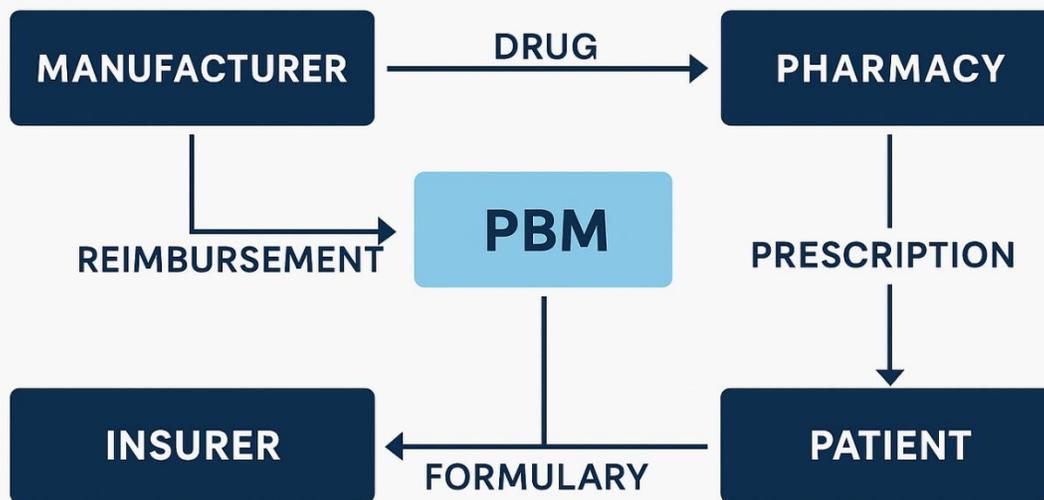
Pharmacy Benefit Managers are often called “middlemen” because they act as intermediaries in the prescription drug supply chain, standing between the payer (insurance plan or employer) and the patient, the pharmacy, and sometimes the drug manufacturer. PBM intermediary roles include:

- Between payers and pharmacies: PBMs manage which drugs are covered on formularies and negotiate reimbursement rates with pharmacies
- Between payers and manufacturers: PBMs negotiate rebates and discounts from drug manufacturers in exchange for favorable formulary placement.
- Between patients and pharmacies: PBMs process prescription claims, determine copays, and may steer patients toward certain pharmacies.

A high-level schema of PBMs role as a middleman is provided below in Figure 5.1.

Figure 5.1: PBMs as Middlemen

PHARMACY BENEFIT MANAGERS “MIDDLEMAN”



Because of their intermediary role, PBMs can influence drug prices, pharmacy reimbursement, and patient access.



c. PBM Services, Practices and Operations and Their Impacts on Prices, Access and Pharmacies

Despite the continuing debate and controversy over PBMs, they are essential service providers and provide substantial value. Table 5.1 lists the many services that PBMs provide. This is not necessarily an exhaustive list, nor do all PBMs provide all of these services. Moreover, many are optional as selected and needed by PBM customers.

Table 5.1 PBM Services

ADMINISTRATIVE SERVICES
Claims processing and payment
Retail pharmacy network and negotiation
Mail order pharmacy
Specialty pharmacy
Rebate administration
Provider/Pharmacy help desk
Member help desk
Administrative prior authorization
Reporting and analytics
Benefit plan design/consultation
ID card management
Customer and Member portals, apps
Prior authorization appeals
CLINICAL / CARE MANAGEMENT SERVICES
Clinical informatics
Pharmacy and Therapeutics Committee
Clinical programs, care and case management
Adherence management
UTILIZATION MANAGEMENT AND COST CONTAINMENT
Repricing
Prior Authorization (Basic and Clinical)
Formulary Management
Patient Assistance Programs
Utilization Management
Drug Importation / Alternate Sourcing / 340b / Cash Price Networks
Manufacturer Coupons
Narrow networks including home infusion
Pharmacy Audit
Fraud, Waste and Abuse / Payment Integrity



A more detailed description of key PBM services, practices and operations is provided below, including their impact on drug prices, drug expenditures, access, and pharmacies.

Claims Processing and Payments – PBMs handle the processing of prescription drug claims, with the goal of ensuring that transactions between pharmacies, plan sponsors, and patients are efficient and accurate.^{10,11} PBMs vary in how they charge customers for this core function, often charging nothing but then taking a cut of rebates that more than offset the administrative fees they would have charged for this service. This is particularly advantageous for the largest PBMs, who because of their volumes, are able to secure higher rebates.

Pharmacy Network Management – PBMs must provide pharmacies that offer retail locations, mail order, specialty, and limited distribution drugs (LDDs). The latter are products deemed by manufacturers to require special handling and administration, typically very high-cost products, and thus only dispensable by select pharmacies. Because manufacturers limit the number of pharmacies allowed to dispense LDDs, competition is minimal, and PBMs are typically unable to negotiate aggressively on these products.

Retail pharmacies dispense the majority of prescription drug transactions (i.e., brand and generic drugs at brick-and-mortar locations) and consist of community pharmacies (independents and small chains), larger national chains, and mass retailers and grocery chain operators (e.g., Walmart, Costco, Giant Food, etc.). PBM customers often require a retail pharmacy within a certain distance from a member, or to have major pharmacy chains included, as a method to assure access to drugs by members. Most independent and community pharmacies also contract with Pharmacy Services Administrative Organizations (PSAOs), who in turn negotiate and contract directly with PBMs.

PBMs negotiate drug prices (i.e., reimbursement) with pharmacies along with other fees and contractual terms for participation in the PBM pharmacy network. These other fees may include network participation fees, clawbacks and direct and indirect reimbursement (DIR) fees, which are retroactive charges that pharmacies must pay to PBMs, often based on performance metrics such as generic dispensing rates.¹ There is evidence that these retroactive fees harm independent pharmacies in particular, as

¹ In 2024, Medicare eliminated the retroactive nature of DIR fees, requiring that they be reflected in the negotiated price at point of sale.



they create cash flow problems and budget uncertainty, are applied disproportionately to them, or are based on metrics that independent pharmacies are at a disadvantage in achieving, as compared to larger pharmacy chains.^{12,13}

Meanwhile, PBMs (and their customers) often implement utilization steerage (mandatory or incented through lower copays) to preferred pharmacies, typically those that accept a lower reimbursement in exchange for greater volume and to mail order pharmacies, who have the ability to package prescriptions for longer days' supply (e.g., 90 day supply) and thus accept lower reimbursement per unit than a comparable 30-day supply provided by a retail pharmacy. These network steerage and reimbursement strategies typically work against independent and community pharmacies, by lowering utilization at their pharmacies, but may help control costs for PBM customers and lower member out-of-pocket costs.

Further, many PBMs own pharmacies – retail, mail and specialty – creating perverse incentives to drive utilization to these pharmacies, through even lower reimbursement and/or lower copays, exacerbating the negative impacts to independent and community pharmacies.

The federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)) can apply to referrals of prescriptions to PBM-owned pharmacies, and the risk rises when financial incentives are tied to steering, inducement is shown, and federal dollars (e.g. Medicare or Medicaid) are involved. Even then, safe harbors exist for PBMs, particularly if plan sponsors require PBMs to include steerage services, not unlike the safe harbors described in AL SB 252.¹⁴

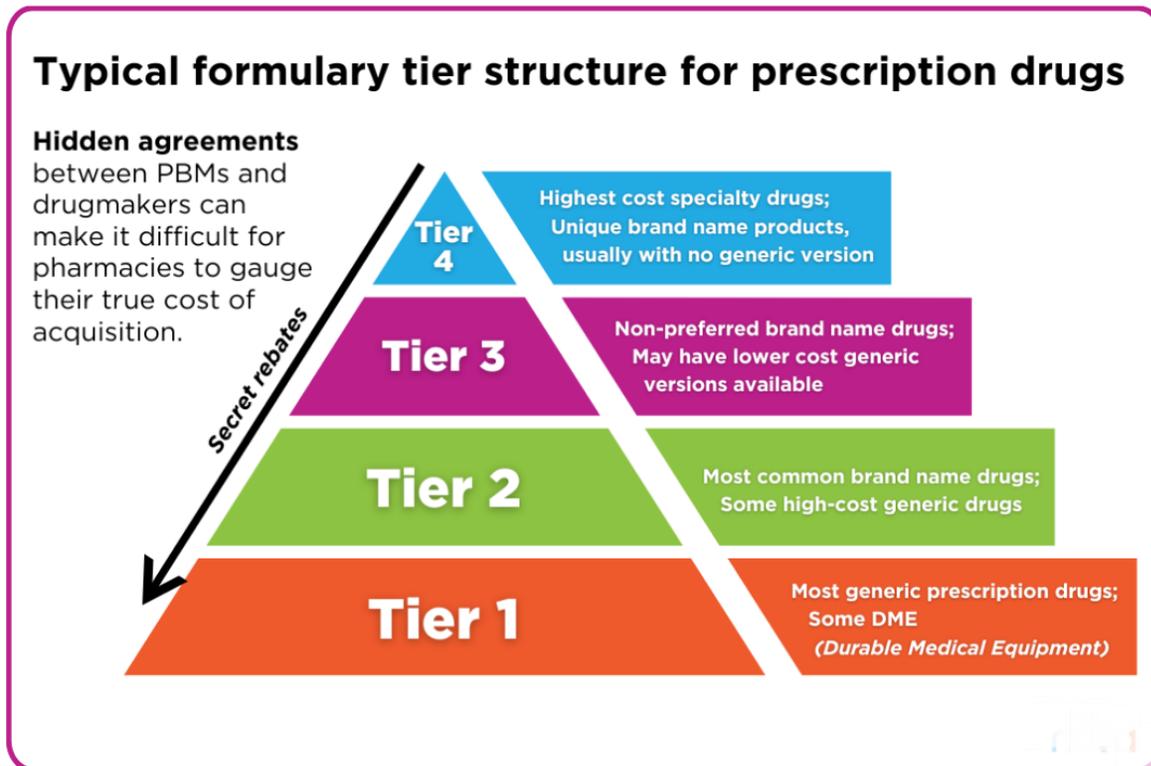
Formulary Management – PBMs develop and manage formularies, which are lists of covered medications. A formulary determines which drugs are covered and at what tier, influencing patient access to certain medications and the amount a patient pays for a prescription to encourage the use of clinically appropriate, cost-effective options.¹⁵ Drug manufacturers negotiate with PBMs to secure favorable formulary placement for their products, often in exchange for rebates. These rebates are financial incentives given by manufacturers to ensure their drugs are more accessible to patients by being placed on lower, more preferred tiers of the formulary. The formulary design, including which drugs are included and their tier placement, plays a pivotal role in determining the rebate amounts PBMs can secure, ultimately affecting the overall cost management strategies of the health plans they administer.¹⁶



While some plan sponsors have the option to customize their formulary, it is more common for commercial plan sponsors to utilize a PBM's standard formulary, which is generally designed to maximize rebate value, while providing appropriate access to clinically appropriate therapies for patients. According to a national survey of employers and health plans, 62% relied on a PBM's national / preferred formulary with exclusions, 11% used the PBM's national basic formulary with no exclusions (i.e., open formulary), 24% used a custom formulary, and the remaining three percent (3%) were unsure.¹⁷

A typical formulary and its ties to rebates is shown in Figure 5.2. Pharmacies are not privy to the rebates secured by PBMs, which ultimately lower the net cost of the drugs. As rebates are tied to overall drug utilization across all pharmacies, not just the utilization patterns of a specific pharmacy, pharmacies do not see or share in the rebates earned by PBMs.

Figure 5.2 Sample Formulary Design and Rebate Relationship¹⁸



Formulary design is critically related and influential on the financial and clinical outcomes of PBM contracts by affecting rebate structures, drug mix, member experience, and overall cost management strategies.¹⁹



Rebate Management – PBMs negotiate with drug manufacturers to obtain discounts (e.g., rebates) on medications. They leverage their scale to secure larger rebates, which can help reduce overall drug costs.²⁰ Drug manufacturers often secure favorable formulary placement for their products, often in exchange for rebates. Rebate value is often applied to overall plan costs, lowering premiums for all members, not just those utilizing the drug that generated the rebate.”²¹

When PBMs keep a share of rebates, the average tends to be around 9% of total rebates earned, with the balance returned to the customer.²² This negotiation process is crucial for PBMs, as it directly impacts their ability to offer competitive pricing and rebate guarantees to plan sponsors.²³

Since higher rebates are tied to drugs that are more costly, it incentivizes both manufacturers **and** PBMs to favor drugs with higher list prices, as well placing these products on their formulary and on preferred tiers. High list price / high rebate strategies benefit PBMs but not necessarily plan sponsors nor patients, as this strategy can increase costs for both.²⁴ Further, a high list price / high rebate strategy can generally disadvantage biosimilars and generics, which typically have lower list prices than their brand counterparts but often do not offer comparable rebates.²⁵

Conversely, a drug with a high list price and high rebate value may have overall lower net cost to the plan sponsor than lower list price/lower rebate alternatives; however, this can still result in higher costs for patients when their cost share (e.g., coinsurance) is based on the higher list price (excluding rebate value).²⁶

Importantly, PBMs may receive remuneration from manufacturers tied to rebates or related utilization patterns that are also not included at point of sale or passed on to members directly. For instance, Manufacturer Administrative Fees (MAF) are paid by drug manufacturers to PBMs for administering the rebate program. These fees might not always be shared with plan sponsors or defined as rebates in contracts. They can represent a significant portion of manufacturer remuneration and are often used to cover the administrative costs associated with managing rebate agreements.²⁷

Prior Authorization – Prescription drug prior authorization (PA) services represent the first line in potential utilization and cost containment impact for PBMs, as they use PA to assure prescriptions, particularly novel therapies and high-cost drugs, are medically necessary, while balancing provider burden and patient access to medications. There is little Industry data on PA denials by PBMs, and what exists shows significant



variation. The limited data available shows PBM PA denials can range from less than 10% to upwards of 70%, depending on benefit plan, the payor type, definitions of PA denials (e.g., many denials are overturned on appeals) and several other factors.^{28,29,30,31}

Moreover, none of these studies show a causal relationship between higher rates of PA denials and a higher percentage of errors in determining medical necessity, which would suggest that PBMs inadvertently or intentionally block access to medically necessary drugs for patients. On the contrary, PBMs have an incentive to have **low** PA denial rates, as that means more drugs are processed which in turn generates more administrative fees, rebates, and, if PBMs own pharmacies, reimbursement. Low PA denial rates also make prescribers and members happier, which PBMs also likely have an incentive to achieve with performance guarantees.

This is why plan sponsors and health insurers sometimes look to contract with an entity other than a PBM to perform PA services in order to achieve the clinical rigor and utilization impacts desired. More plan sponsors would likely do this if not for PBM contracts and rebate guarantees which have stipulations that PA services cannot be carved out to another entity, or if carved out, would require changes to contract terms.

Utilization Management and Cost Containment – PBMs implement various strategies to control drug use and to ensure that medications are used safely and appropriately. This can include requiring approval to obtain a specific medication (i.e., prior authorization described above) or requiring the trial and failure of an alternative, possibly less expensive drug prior to pursuing more costly therapy (i.e., step therapy).³²

Other utilization management activities include:

- Concurrent (usually through point of sales edits and messaging to pharmacies), retrospective and prospective drug review
- Formulary management (i.e., exclusions, preferred vs non-preferred status, tiers)
- Therapeutic interchange (i.e., substituting lower cost, clinically equivalent drugs)
- Generic and biosimilar substitution
- Quantity limits
- Refill management (e.g. refill too soon or missed refill edits)
- Adherence programs
- Clinical/safety edits (e.g., duplicate therapy, drug-drug interactions, high risk medication alerts, age or gender specific edits)



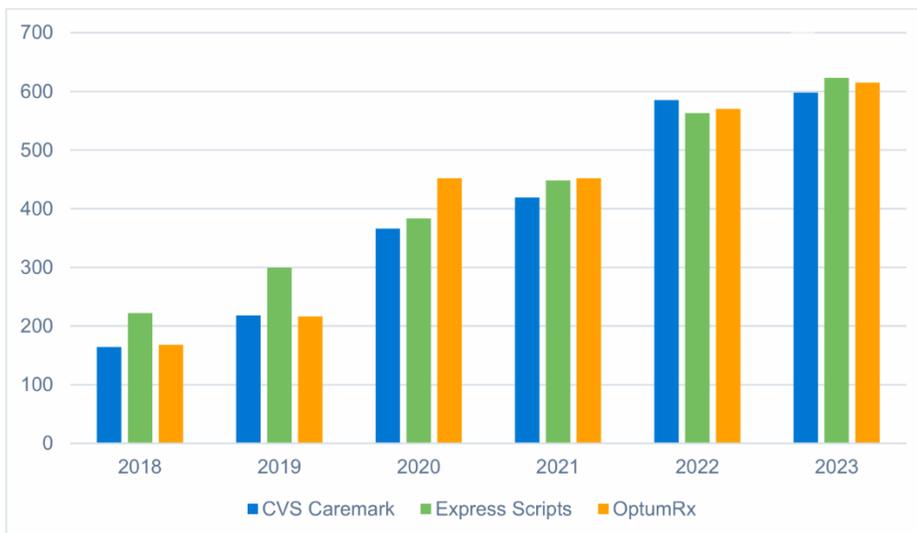
- Medication therapy management and comprehensive medication reviews (i.e., assessing medication use and appropriateness for patients on multiple drugs and /or whose spend per month is above a certain threshold),

The majority of these utilization management activities serve to eliminate or reduce utilization, or to shift utilization to lower cost alternatives. Further, while PBMs aim to manage utilization by preventing inappropriate or ineffective treatments, they may also have implications for member experience and access (e.g., treatment delays, treatment access and abandonment).^{33,34}

In the last five years there has been an increase in the number of drugs excluded from the PBMs' standard commercial formularies (Figure 5.3). There may be several reasons for this increase, including an increase in therapy options within heavily rebated drug categories, an increased number of therapies on the market, along with market demand from payers for increased rebates. However, this has also raised concerns about patient access.^{35,36,37}

Figure 5.3: Trend in Formulary Drug Exclusions by Big 3 PBMs

THE NUMBER OF DRUGS EXCLUDED FROM BIG 3 PBM STANDARD COMMERCIAL FORMULARIES BY YEAR AND PBM, 2018-2023^{67,68}



Note, while the number of drug exclusions has increased year-over-year, this does not necessarily reflect the proportion of drugs excluded.



An industry report on PBM formulary exclusions expresses concern that these formulary exclusions are at least partially driven by misaligned PBM incentives, citing instances where PBMs have excluded lower list price generics or biosimilars, in favor of higher list price counterparts with higher rebates that may drive more revenue for PBMs.^{38,39}

As with PA services, PBMs have conflicting incentives to implement robust utilization management services. If utilization management services are not implemented, or implemented well, drug utilization increases, expenditures increase, rebates increase, and PBM revenues increase, while prescribers and members are more satisfied. Customers meanwhile experience higher net spending.

A common and rather dramatic example of this is when plan sponsors and PBMs do **not** implement PA for diabetes drugs, particularly for GLP-1s. Utilization typically explodes, with consequent increases in spending. While rebates also increase (estimated at 30-40% of the cost of GLP-1s), overall net spending for customers increases.¹ Meanwhile, with increased utilization, PBM revenue increases in several ways, including more transaction fees, more rebates and more clinical services. And if PBMs own pharmacies that dispense GLP-1s, substantially more reimbursement.

Unfortunately, utilization management is often, if not mostly overlooked by customers and their brokers and consultants when requesting and evaluating bids from PBMs. Instead, the focus is on guarantees on drug pricing by type of drug (i.e., generic, brand, specialty) or by quantity (i.e., 30- vs 90-day supply) and guarantees on rebates by type of drug (the same categories used for drug pricing). Thus, a PBM may have aggressive drug pricing and rebate guarantees by drug type, but with limited utilization management, overall spending is likely to increase, while PBMs make more money.

PBMs implement a host of cost containment approaches in addition to utilization management. Whereas utilization management reduces or eliminates utilization, or shifts utilization to lower cost alternatives, cost containment services focus on reducing the prices paid for a specific drug. These services include:

- Manufacturer Patient Assistance Programs, which can pay the full cost of the drug if a member is eligible

¹ A TPA customer of Exouza decreased spending on GLP-1s by nearly half a million dollars a year by implementing PA for GLP-1s.



- Manufacturer Coupon Assistance, which is designed to lower or eliminate patient copayments for a drug
- Copay Maximizers which are a form of coupon assistance but also used to buy down plan payments in addition to member copayments
- Importation
- Cash Networks which route a prescription to cash payment if that is less than what a member's copay would be under insurance benefits
- Pharmacy Steerage to lower cost pharmacies, including to preferred pharmacies, mail order
- 340b Pharmacies for eligible members
- Online pharmacies such as GoodRx, Mark Cuban Cost Plus Drug Company
- Other non-network contracted pharmacies with lower pricing
- Site of Care which can move administration / purchase of a drug from physician/clinic to either home (e.g. home infusion) or to retail at lower prices

These programs have varying degrees of impact, depending on plan benefit design, member incentives and penalties, access to temporary fills, outreach and engagement of members, and coordination with prescribers. They can be quite disruptive to a member's access to prescribed drugs, with some (such as Patient Assistance Programs and Importation) taking up to 90 days for members to qualify and receive their drug. If a member does not qualify for one program, further delays may occur if they enroll in another program subsequently. These programs can also be measurably impactful, reducing overall drug expenditures by as much as 40% for implementation of Patient Assistance Programs, Copay Maximizers and Importation, while having no disruption in access for members.⁴⁰

Pharmacies, which often help members lower the cost of their copayments through the use of coupons, typically do not get paid administratively for that service, and likely face lower reimbursement (if they participate in a cash network or GoodRx), or steerage of the product away from them (e.g., importation, 340b, Patient Assistance Programs).

d. PBM Value

The services provided by PBMs are essential and necessary and deliver value. How much value is debatable. PBM industry reports suggest that PBM services provide an



incremental \$87 billion in value to the American health care system, compared to what it would cost if employers managed prescription drug benefits on their own. This report also suggests that PBMs save an additional \$148 billion a year, which would represent 28% of the \$529 billion in net spend on prescription drugs in 2025.⁴¹

Other reports directionally agree that PBMs provide value, often in the tens of billions of dollars per year.^{42,43,44,45}

But there is considerable disagreement on the distribution of that value – how much and where that value goes to – patients, plans, pharmacies, or PBMs themselves. In addition, there is concern over how much value is unrealized through vertical integration, through markups, spreads, cost shifting and other means, described in the next section.

e. PBM Market

The PBM industry is fairly concentrated. There are only 70 PBMs in the US managing prescription drug spend in for nearly 325 million Americans who have some sort of commercial or government prescription benefit coverage. The three largest PBMs – Express Scripts, CVS Caremark, and OptumRx – manage 79% of all prescription drugs serving approximately 290 million Americans.⁴⁶

In contrast, there are over 1155 health insurers in the US.⁴⁷ The three largest – United Health Group, Elevance, and CVS/Aetna (CVS Health) – own 40% of the market share of enrollment.⁴⁸ Moreover, there are an additional 250 Third Party Administrators (TPAs) managing health benefits for an additional 50 million Americans covered by self-insured groups.⁴⁹

In Alabama, there are 80 entities listed as having a license as a PBM through the Alabama Department of Insurance.⁵⁰ However, due to AL DOI licensing criteria, not all listed firms are actual PBMs (e.g. Mark Cuban Cost Plus Company), and several listed may also include shell entities, subsidiaries, or corporate affiliates rather than independently functioning PBM companies.

Generally, high market concentration tends to lower competition, which can harm patients and plan sponsors by raising insurance premiums above competitive levels.



However, the literature does not have any peer reviewed studies that provide empirical evidence that causally ties PBM market concentration directly to higher drug prices.

Notably, all three of the largest PBMs also own or are owned by three of the four largest health insurance companies, and most other large health insurers also own PBMs.⁵¹ For example:

- OptumRx is owned by UnitedHealth Group
- CVS Caremark is part of CVS Health, which also owns Aetna
- Express Scripts is owned by Cigna
- Elevance owns CarelonRx
- Humana Pharmacy Solutions is part of Humana.
- Health Care Service Corporation (HCSC) and several other Blue Cross and Blue Shield insurers, including Blue Cross and Blue Shield of Florida, and BCBS of Alabama, own and almost exclusively use Prime Therapeutics
- Kaiser Pharmacy is owned by Kaiser Permanente
- Envolve Pharmacy Solutions is owned by Centene

PBMs also own and/or have affiliated relationships with other stakeholders in the drug supply chain. Several own pharmacies – specialty pharmacies, mail order pharmacies, and retail pharmacies – with CVS Caremark owning the largest national retail chain consisting of over 9000 stores.⁵² In addition, PBMs also may own (or may be owned), or be affiliated with Group Purchasing Organizations (GPOs), wholesalers, rebate aggregators, health care delivery or provider services. Figure 5.4 below shows the flow of product and money between key stakeholders in the drug supply chain.



Figure 5.4: Flow of Product and Funds Between Key Stakeholders

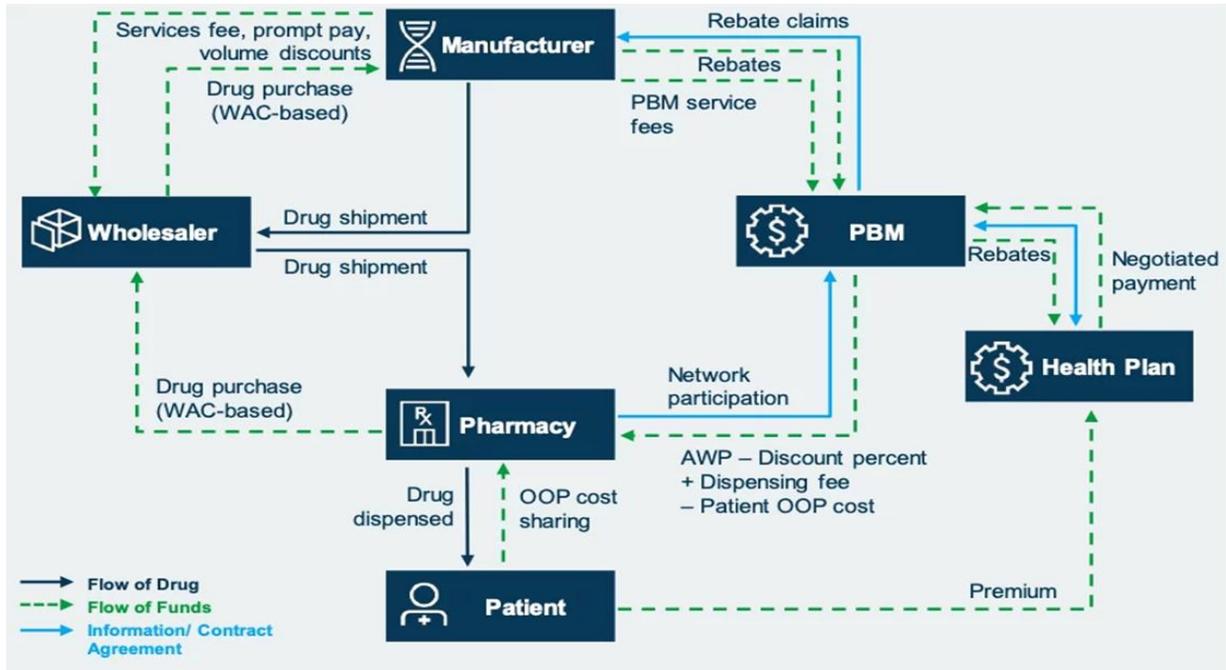


Figure 5.4 is useful in showing how drug flows are tied to money flows, and it provides some insight into the potential conflicts for PBMs should they have financial ties to other key entities in the vertical chain. To get a more comprehensive understanding of PBM-stakeholder relationships, and the potential impacts they have with regards to drug prices, member access and pharmacies, we provide a more detailed analysis below.

Health Insurers - Many large PBMs are owned by, or own, health insurers, creating vertically integrated payer–PBM systems. This can better align benefit design, formularies, and reimbursement between drug and medical benefit, and provide opportunity for improved care coordination. However, it allows for significant leverage by the insurer in pressuring customers to also use their PBM, which may be less than optimal for the customer. Anecdotal evidence from a plan sponsor we interviewed suggested that the insurer would dramatically increase premiums if they chose to carve out the PBM to another entity.⁵³

Insurers and PBMs that own provider networks have the ability to control scripts from the prescriber all the way to the pharmacy. They can also more easily shift drug and overhead expenditures from one entity to the other, obfuscating real costs (and performance) under either the medical or pharmacy benefit plan.



Retail Pharmacy Chains - PBMs may own or be affiliated with retail pharmacies, especially large chain and mail-based operations. This allows them to create preferred networks that favor drug referrals to their pharmacies, reimburse their pharmacies better than other pharmacies, which in turn also rewards them with more revenue and margins for their pharmacy operations.

Mail-Order Pharmacies - PBMs frequently own or operate mail-service pharmacies, including:

- Maintenance-drug mail pharmacies
- Central fill facilities
- Automated dispensing centers

This allows PBMs to create preferred networks that include their own pharmacies, sometimes even exclusively, while also capturing revenue and margin for the pharmacy business.

Specialty Pharmacies – PBMs commonly own or have exclusive relationships with specialty pharmacies, which dispense high-cost biologics and complex therapies. This allows PBMs to create preferred, if not exclusive networks that include their pharmacy, capture revenue and pharmacy margin, control limited distribution drugs, retain spread and rebates, and control data on high-cost patients that is highly monetizable.

Wholesalers - Some PBMs or their corporate owners are affiliated with drug distribution entities, including:

- In-house distribution arms
- Specialty drug distribution hubs
- Limited-service wholesaling

These arrangements often involve direct contracts with manufacturers that allow PBMs to capture spread/mark ups, and control inventory, leading to suboptimal competition.

Group Purchasing Organizations (GPOs) – PBMs are often linked to, or own, GPOs that purchase drugs from wholesalers and supply pharmacies. While the advantage of combining lives from different customers can offer greater leverage in negotiating prices with wholesalers, it offers the PBM control (and knowledge) of pharmacy paid prices, as well as the opportunity for mark-ups and spreads.

Rebate Aggregators – These entities negotiate with manufacturers or other aggregators to receive manufacturer rebates, process and allocate rebate payments, and take administrative fees for rebate management and a host of data management and resale fees. In an egregious example of PBM – rebate aggregator relationship



inefficiency, OptumRx (owned by United Health Group) was sued by the state of Ohio for not sharing contractually obligated rebates. The case was settled without any admission of wrongdoing by OptumRx but became a flashpoint for regulations and scrutiny on transparency and spread pricing.⁵⁴

Manufacturer-Facing Service Facilities – PBMs may also control businesses that charge manufacturers for formulary placement fees, data access fees, and outcomes-based contracting infrastructure. These firms are commonly branded as “manufacturer services” or “trade relations” subsidiaries and allow PBMs to further monetize PBM data and services, often without customer knowledge or pass through.

Administrative Services Only (ASOs) or Third Party Administrators (TPA’s) – PBMs owned by or who own a health insurer are also affiliated with ASOs and likely TPAs. ASOs are business divisions or units within an insurer that provide administrative services for plan benefits for self-insured groups – this same type of service provider is called a TPA when it sits outside an insurance company. Alabama BCBS for instance, owns a subsidiary called 90 Degree Benefits, a roll-up of several TPAs, while also having its own ASO business.

This gives the PBM affiliated with the health insurers preferential, if not sometimes exclusive access to business under both ASOs and TPAs, and the opportunity for steeage, spreads, and cost shifting.

Manufacturers – PBMs have even dipped their toes into becoming drug manufacturers. The big three PBMs have entered into relationships with manufacturers to private label certain drugs. CVS Health launched Cordavis, a subsidiary that co-produces biosimilars with manufacturers, beginning with Sandoz’s Humira biosimilar (Hyrimoz). The company’s PBM, CVS Caremark, removed Humira from commercial formularies in April 2024, replacing it with a private-label Cordavis Hyrimoz, Sandoz’s Hyrimoz, and Sandoz’s unbranded adalimumab-adaz. As a result, Sandoz now controls 13% of the anti-inflammatory market while eight other Humira biosimilar manufacturers share less than 5%.

The Cigna Group’s Evernorth Health Services followed suit in April 2024, announcing the production of a \$0 copay Humira biosimilar via its subsidiary Quallent Pharmaceuticals, a private-label distributor. Alvotech and Teva Pharmaceuticals will manufacture a Humira biosimilar (Simlandi) for Quallent distribution, as will Boehringer Ingelheim under Cyltezo. Evernorth, Cigna’s PBM (commonly known as Express Scripts), will doubtless take the same approach as CVS Caremark, excluding Humira



and preferring Simlandi and Cyltezo. UnitedHealth Group's PBM OptumRx is preparing to launch Nuvaila, a biosimilar procurer and private-label manufacturer.

As the biosimilar market for specialty drugs comes into the forefront, these PBM-Health Insurer-Manufacturer relationships will be a dominant force affecting pricing, access and pharmacy steerage for these products.

In sum, PBM relationships with other entities in the drug supply chain give them substantial power and control, which is compounded by how many other stakeholders are included in the ownership/affiliation chain. In the end, this power across the drug supply chain gives PBM a financial win by having control over:

- who gets access to patients (formulary control)
- where patients fill (owned/affiliated pharmacies)
- what manufacturers must pay (rebates & fees)
- owning high margin dispensing channels (mail + specialty)

Stakeholders that generate profit tied to list prices of pharmaceutical products can benefit from higher drug costs, creating potential misaligned incentives. Many participants in the pharmacy supply chain in addition to PBMs, including manufacturers, wholesalers, PBMs, rebate GPOs, and pharmacies, also have the potential to benefit from higher costs of drugs.^{55,56}

f. PBM Business Models with Plan Sponsors

Generally, PBMs charge plans one of two ways – “Pass Through” or “Traditional” – terms used most commonly in PBM RFPs for how they are to price their services.

Pass Through (or transparent) pricing is where the PBM charges a plan sponsor the exact amount paid to the pharmacy for the drug and passes through 100% of manufacturer rebates and fees to the plan. The PBM makes money through explicit administrative fees that are clearly stated in the contract, along with any performance payments. This type of pricing is transparent, easy to audit, with no spreads or rebates retained by the PBM. Pricing for all services is typically a per member per month or per claim processing fee and typically excludes value-added services which are negotiated separately.



Traditional Pricing (or spread models) is where PBMs charge the plan more than it pays the pharmacy, keeping the difference (“the spread”) as revenue. Spreads can apply not only to the payments for drugs but also to dispensing fees, where PBMs charge the

customer a higher amount than what it pays the pharmacy. In addition, PBMs retain some portion of manufacturer rebates. This model is less transparent, and PBM revenues are more closely tied to drug prices and drug utilization. PBMs make money through spreads, rebate retention, data fees and possibly administrative fees, though more than likely the revenue from spreads and rebates allows the PBM to not charge any administrative fees. As with Pass Through pricing, value-add services are negotiated separately with plan sponsors.

Under both Pass Through and Traditional pricing, PBMs typically must provide customers with pricing for drugs that they will administer and pay pharmacies for dispensing (and often have to guarantee). Drug pricing is usually supplied for brand and generic drugs at retail, mail order and specialty, with separate pricing for 30-day and 90-day fills. Limited Distribution Drugs (LDDs) may be priced with specialty drugs or separately.

Under commercial plans, pricing is overwhelmingly provided using a discount off of Average Wholesale Price (AWP) for brand and specialty drugs, and a discount off of AWP for generic drugs that ties to Maximum Allowable Cost (MAC) pricing. In some instances, a different benchmark is used to submit drug pricing, such as Wholesale Acquisition Cost (WAC) plus some percentage, or National Average Drug Acquisition Cost (NADAC), from which a discount is applied. A more detailed discussion of these terms and other pricing methods used by PBMs to reimburse pharmacies and their implications is provided in Section 5.g below, and a Glossary of Terms is also provided in Section 13. PBMs must usually guarantee the pricing submitted, typically at the category level of pricing (e.g. 30-day brand at retail).

These complex negotiations, pricing methods and determination of value are handled by another entity in the drug supply chain that receives little to no attention – brokers and consultants. These stakeholders are retained by plan sponsors to conduct and evaluate PBM RFPs that attempt to provide plan sponsors with the goals and objectives they have, that may include lowering spend, improving member services, delivering clinical outcomes and other objectives. It is estimated that well over 70% of PBM contracts result from the broker/consultant RFP process, who are thus a significant stakeholder in the drug supply chain.



These broker/consultant led RFPs almost universally score PBMs based on three primary price points:

- the drug price by category (e.g., 30-day at retail AWP – X%), including guarantees (e.g., 99% of the AWP – X% price submitted)
- administrative fees (per claim or per member per month)
- rebates by the same drug category (e.g., \$2200 per 90-day specialty) and their guarantees (e.g., 99% of the rebate amount submitted)

Utilization management and clinical services are priced and negotiated separately but rarely scored. This is significant, as even with the most aggressive pricing and rebates, if utilization increases, the PBM wins while the customer loses.

Moreover, plan sponsors pay brokers and consultants – indirectly through PBMs, who are required to include broker fees as part of their RFP pricing bids. These fees can be extraordinary, often equaling or surpassing fees charged by PBMs to customers for their services. This means PBMs either have to increase their administrative fees (in Pass Through pricing) or retain greater share of rebates or spreads (under Traditional Pricing) to accommodate broker/consultant fees, which distort the value PBMs deliver.

For some of the larger brokers and consultants, they also get paid by the PBMs as part of a consortium with 2-3 other PBMs that supposedly offers deeper discounts to the broker's / consultant's customers in exchange for positioning and larger potential volumes.

g. PBMs and Pharmacy Contracting and Pricing Models

PBMs provide prescription drugs through contracts with pharmacies that members can physically go to or have delivered the same day (retail outlets) or receive via mail (mail-order). Specialty drugs, depending on storage, handling and administrative needs, can sometimes be picked up at retail but more likely is shipped by specialty pharmacies.

Retail pharmacies include independent stores, small chains, as well as large national chains such as CVS and Walgreens, and also include mass retailer and grocery outlets, such as Walmart, Costco, and Giant Food. Typically, the size of a retail network for most PBMs is around 60,000 pharmacies, with nearly one-third of those being



community pharmacies. CVS, which has over 9,000 stores nationally, can thus make up around 15% of an overall PBM's retail network.

PBMs, particularly the largest ones, contract directly with pharmacies to be included in their networks, and with PSAOs, who aggregate independent and community pharmacies that provide scale and operational efficiencies for PBMs in creating a retail pharmacy network. With direct contracting, PBMs have greater control over pharmacy reimbursement and other key terms for participation. Midsize and smaller PBMs often lease a network that includes retail, mail order and specialty, though each can be contracted separately. Under leasing arrangements, PBMs do not hold the contract directly with pharmacies, and thus have less control over pharmacy reimbursements or other terms and services of participation. These are set by the leasing entity. This is important as PBMs who lease a network must match the drug pricing that the leased network offers with bid pricing that the PBM supplies to brokers/consultants and customers, giving them less flexibility on pricing.

PBMs impose a variety of fees on pharmacies. Table 5.2 below shows these different fees, what they are applied to and the relative size and impact of these fees on community pharmacies.



Table 5.2: PBM Fees and Their Impact on Pharmacies

Fee Type	How It Works	Typical \$ Range	Why It Matters for Pharmacies
DIR Fees (Direct & Indirect Remuneration)	Retroactive charges tied to adherence, formulary compliance, or rebate reconciliation.	\$2–\$12 per claim (sometimes up to 10% of reimbursement)	Creates uncertainty; pharmacies may lose margin months later.
Clawbacks	PBMs reclaim funds if patient copay > contracted reimbursement.	\$1–\$5 per claim	Can turn a profitable script into a net loss.
GDR (Generic Dispensing Ratio) Penalties	Fees if generic dispensing % falls below target.	\$0.50–\$2 per claim (or flat monthly penalties)	Pressures dispensing choices, especially on brand-heavy patient panels.
Network Participation / Access Fees	Flat charges to remain in PBM’s preferred network.	\$100–\$1,000 per month (or \$0.10–\$0.50 per claim)	Small pharmacies may pay more relative to their volume.
Transaction / Adjudication Fees	Per-claim charges for switch use and system access.	\$0.05–\$0.25 per claim	Adds unavoidable admin overhead.
Performance-Based Fees	Based on quality or outcomes defined by PBM.	\$0.50–\$5 per claim (varies widely by metric)	Often opaque; independents struggle to influence outcomes at scale.

With small margins, these fees can add up pretty quickly and make it difficult for pharmacies to be profitable.

Reimbursements to pharmacies follow what PBMs bid pricing model is to customers. Each pricing method has different impacts on pharmacies, as Table 5.3 below shows.



Table 5.3: Pharmacy Reimbursement Methods and Impacts on Community Pharmacies

Reimbursement Method	Description	Benchmark Used	Why Community Pharmacies May Face Higher Costs
AWP minus (%)	Average Wholesale Price less a contracted discount.	AWP (list price $\times 1.20$ over WAC)	Chains negotiate deeper discounts with wholesalers and direct contracts; independents buy at smaller volumes closer to WAC, so “AWP –20%” may fall below their actual acquisition cost.
WAC plus (%)	Wholesale Acquisition Cost plus a small margin.	WAC	Independents may pay WAC or slightly higher (no large-volume rebates), meaning WAC+0–2% often does not cover their cost of goods.
MAC (Maximum Allowable Cost)	PBM sets a ceiling reimbursement per generic drug.	PBM-defined (not transparent)	Chains can source generics at or below MAC; independents often pay higher due to smaller purchasing leverage, so MAC reimbursements can be underwater.
NADAC-based	CMS National Average Drug Acquisition Cost, updated weekly.	NADAC (survey-based average)	NADAC reflects large chain and mail-order prices; independents’ costs tend to be higher than the survey average, especially for low-volume or low-competition drugs.
AAC (Actual Acquisition Cost)	State Medicaid model: reimbursement closer to pharmacy’s real invoice cost.	AAC (state-defined, often NADAC-like)	Independents may still be above AAC if their wholesalers don’t match survey averages.
Ingredient Cost + Dispensing Fee	Base ingredient reimbursement (via one of the above) plus a fixed fee.	Benchmark varies	Dispensing fees are often too low (e.g., \$1–\$2) to offset higher ingredient costs for independents, unlike chains that spread costs across scale.

Perhaps the most important point of PBM pricing and reimbursement to pharmacies is that reimbursement is based off some benchmark, as shown in Table 5.3. Each benchmark represents an average of prices, most often tied to acquisition costs. Reimbursement tied to an average, even of acquisition costs, by definition will overpay some pharmacies and underpay others, as reimbursement is not tied to the acquisition or cost of goods of a specific pharmacy. This is not unique to prescription drugs, as most healthcare services reimbursed under insurance are paid off benchmarks as well. Even insurance in other fields performs in the same manner (e.g. auto, home), where claims are paid off benchmark data and not by the service provider’s specific costs.



Are pharmacies who are underpaid through these insurance reimbursement schemes just poor operators and don't know how to run their business efficiently, or are there certain attributes of pharmacies that make it difficult for them to be profitable? Sections 6-8 below shed considerable light on this question for pharmacies in Alabama.

h. How Have Pharmacies Fared?

National data on pharmacy counts and trends are highly inconsistent, using different source data, definitions, and methodologies, resulting in widely differing conclusions on pharmacy counts, openings and closures. For example, even the definition of closure is different, some listing a pharmacy that closed but reopened as a closure, whereas other sources correct for that if the reopening was within 30 days. Table 5.4 uses the most reliable data, methods and definitions to show independent (community) pharmacy counts, along with openings and closings by year over a 10-year period from 2016 to 2025.¹

Table 5.4: Independent Pharmacy Counts, Openings and Closings by Year

Year	Estimated Independent Openings ⁵⁷	Estimated Independent Closures ⁵⁸	Net Change (Open-Close)	NCPA Mid-Year Independent Locations ⁵⁹
2016	789	607	+182	—
2017	779	630	+149	—
2018	769	653	+116	—
2019	760	677	+83	—
2020	750	805	-55	—
2021	740	831	-91	19,397 (June 2021)
2022	731	858	-127	19,479 (June 2022)
2023	721	885	-164	19,432 (June 2023)
2024 (modeled)	~700	(modeled) ~1,148	-448	18,984 (June 2024)
2025 (modeled)	~700	(modeled) ~724	-24	18,960 (July 2025)

¹ JAMA/NCPDP uses a definition for independent community pharmacies as a chain with three or fewer pharmacies whereas NCPA defines independent pharmacies as pharmacist owned and privately held but also include owned and operated long term care, IV, privately owned supermarkets and multi-store chains and franchises.



The data shows a marked turn in net openings, going from positive net opening every year from 2016 to 2019, and then showing net closings for each of next six years. The counts of independent pharmacies provided by NCPA corroborate the overall declines.



6. Alabama Pharmacy Experience

How did Alabama communities fare? The Alabama State Board of Pharmacy provided data on all pharmacies licensed in the state, by licensing category. Table 6.1 shows all licensed pharmacies in Alabama as of August 2025 by licensing category.

Table 6.1. Alabama Pharmacies by Licensing Category, 2025

Pharmacy Licensing Category ¹	Active	% of Total
Total Pharmacies ²	1600	
Community Pharmacies ³	732	46%
Chain	549	34%
Institutional	155	10%
Retail Medical Oxygen Supplier	158	10%
Pharmacy Services	5	0%

The State Board of Pharmacy provided definitions for each licensing category as follows:

- Chain pharmacy: a pharmacy with several locations but historically has been a pharmacy that employes >40 full-time pharmacists⁴
- Community pharmacy: any pharmacy with <40 full-time pharmacists^{5,6}
- Institutional: any of the following four definitions
 - A pharmacy that is a physical portion of a licensed healthcare facility
 - A pharmacy that is a physical portion of a healthcare facility located outside Alabama

¹ The AL State Board Pharmacy uses categories of licensing, and definitions for pharmacy licensing category, that may be different than other states, and are different than the national data provided above, and thus should not be used for strict comparisons to those sources.

² One of the 1600 pharmacies was listed as “on probation”

³ The licensing designation of community pharmacies includes at least 35 pharmacies whose name suggested they were either an infusion pharmacy, a specialty pharmacy, a long-term care pharmacy, a hospital pharmacy, a cancer clinic pharmacy or one that is known to be part of a national chain pharmacies (i.e., Avita Pharmacy with more than 60 locations nationally). These may warrant further review by the State Board of Pharmacy.

⁴ According to the State Board of Pharmacy this definition is still being discussed

⁵ Ibid

⁶ According to Alabama Administrative Code Rule 680-X-2-.13, titled “Community Pharmacies”: A *community pharmacy* means any pharmacy engaged in the general practice of pharmacy and which is open to, and serves, the general public.



- A pharmacy that is not a physical portion of a licensed healthcare facility but provides centralized services to an institutional pharmacy
- A pharmacy providing services for patients who receive care through an integrated correctional health care system
- Pharmacy services: any location that performs only non-dispensing services. No drugs are stored in these locations
- Retail medical oxygen supplier: sells or provides medical oxygen to patients or consumers and which bills the patient or consumer or their insurance, Medicare, Medicaid, or other third-party payor

The data in Table 6.1 shows that there are a total of 1281 community and chain pharmacies in Alabama, representing 80% of all licensed pharmacies in the state, with most (57%) of these being community pharmacies. Of the 732 licensed community pharmacies, the largest chain comprised of 12 locations (or just 1.6% of all community pharmacies) and most were independent or small retail chains. In contrast, CVS and Walgreens accounted for 292 or 53% of all chain pharmacies.⁶⁰

The State Board of Pharmacy did not have data that allowed year by year licensing status to identify trends in pharmacy number counts or licensing category by year. However, through public records requests, the State Board of Pharmacy was able to identify new openings and closings of licensed community and chain pharmacies for each of the previous six years, which is shown in Table 6.2 below.⁶¹

Table 6.2: Alabama Community Pharmacy Openings and Closings by Year

Year	Community Pharmacies			Chain Pharmacies		
	Opened	Closed	Net Change	Opened	Closed	Net Change
2019	24	19	5	7	26	-19
2020	9	27	-18	2	6	-4
2021	13	20	-7	3	3	0
2022	15	27	-12	6	8	-2
2023	19	41	-22	6	47	-41
2024	16	19	-3	5	9	-4
2019-2024	96	153	-57	29	99	-70

By including both openings and closings, the State Board of Pharmacy licensing data is able to clearly show a net decline in community pharmacies of 57 locations in Alabama over the six-year period from 2019 to 2024, which follows the exact trend shown on national data above. This data also shows that chain pharmacies experienced an even



greater net loss of 70 locations over the same six-year period, or 56% of the 127 total net pharmacy closures.

Chain pharmacies, however, had much greater volatility in store closings, with 73 (74%) of the total of 99 closings occurring in just two of the six years. Community pharmacies on the other hand had relatively steady closings each year, ranging from 19-27 across each year except for 2023 when 41 community pharmacies closed, or 26% of the 153 total community pharmacy closings.

While the data sample for community and chain pharmacy openings and closings is relatively small, it may provide some useful insights.

First, the trend confirms that Alabama is experiencing a net decline in community pharmacies, at an average of slightly less than one (0.8) per month over the six-year period. However, chain pharmacies are experiencing a faster net decline, at an average of one per month over this same period.

Second, the number of community pharmacy openings each year suggests that the market does react in trying to replace store closures. In fact, Table 6.3 below shows that 53 (55%) of the 96 community pharmacy openings occurred in zip codes that lost a community pharmacy, six (6%) opened in zip codes that lost a chain pharmacy, and 37 (39%) opened in other zip codes. Overall, of the 252 community or chain pharmacy closings, 87 new pharmacies opened in the same zip code as one of the store closings, representing a 35% replacement factor of a closed pharmacy. Given a likely lag in market introduction of a new pharmacy, this percentage may climb even higher. However, the majority of zip codes that lost a pharmacy did not see it replaced by another, and this gap as well as the recent trend in net decline of pharmacies is cause for concern.

Table 6.3: Community Pharmacy Openings in Same Zip Code as Closings, 2019-2024

	Total Closings	Total Openings	Total Openings in Same Zip Code as Closings	
			Same Type of Pharmacy	Community or Chain
Community Pharmacies	153	96	53	66
Chain Pharmacies	99	29	15	21
Total	252	125	68	87



Third, the volatility in chain pharmacy closings (i.e., 75% concentrated in two of the six years) suggests that consolidation, including mergers and acquisitions, may be more of a factor in chain closings than location specific economic pressures. This in fact bears out in 2023, the year with the most chain pharmacy closings (47), when Winn-Dixie closed or transferred 34 licensed chain pharmacy locations stores in Alabama in a transaction with Southeastern Grocers, LLC, and prior to this transaction, transferred all prescriptions to CVS or Walgreens.^{62,63}

Overall, there is a consistent net decline in community and chain pharmacies in Alabama, though chains appear to close more due to consolidation activity rather than any local market pressures and/or PBM impacts. Does this impact consumer access to medications by creating delays or abandonment of prescriptions? Evidence suggests closures have substantial impacts to consumers, as described on page 45.

However, losing a community pharmacy at the minimum may cause continuity of care disruption, as patients typically visit their pharmacist two or more times as frequently as their primary care physician.^{64,65} Moreover, visits with pharmacists are increasingly encompassing clinical, health and wellness services, suggesting they play an important and growing role in providing “routine” care for minor and common health issues.^{66,67,68}



7. Geo-Mapping Pharmacies, Physicians and Alabama Population

To further explore what the impact of community pharmacy net decline might mean in Alabama, we mapped community (and all other) pharmacies, population and physicians by zip code and county to assess geographic specific gaps in access and care, and the population impacted by these gaps.⁶⁹

Expectedly, Figure 7.1 below clearly shows that as zip code level population counts become smaller, there are fewer and often no community (or any) pharmacies at all. It also shows fairly large swaths of the state have few or no pharmacies, with particular gaps all the way south and west of Birmingham (with the exception of Montgomery and Tuscaloosa), and north of Mobile.

Figure 7.1: Alabama Pharmacies by Zip Code

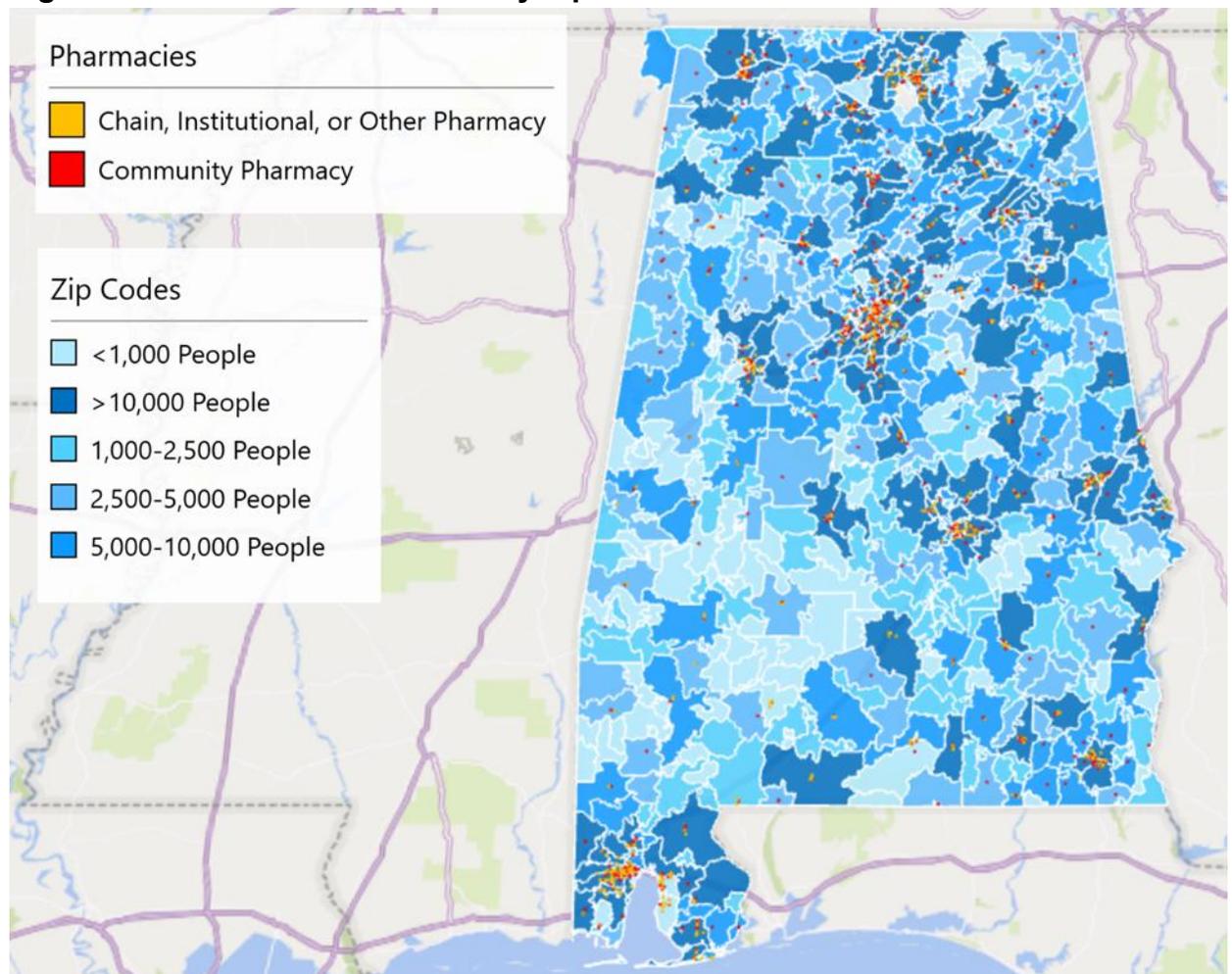




Table 7.1. below provides greater clarity on the disparity of pharmacy availability by population density. For the 148 zip codes with the smallest populations (fewer than 1000 residents), only three (2%) had a community pharmacy, and of the 114 zip codes with population between 1000-2500, only 14 (12%) had a community pharmacy. In contrast, of the 172 zip codes with more than 10,000 residents, 158 (92%) had a community pharmacy. Overall, nearly half (48%) of all zip codes in Alabama do not have a community pharmacy.

Table 7.1: Number of Alabama Zip Codes by Number of Pharmacies

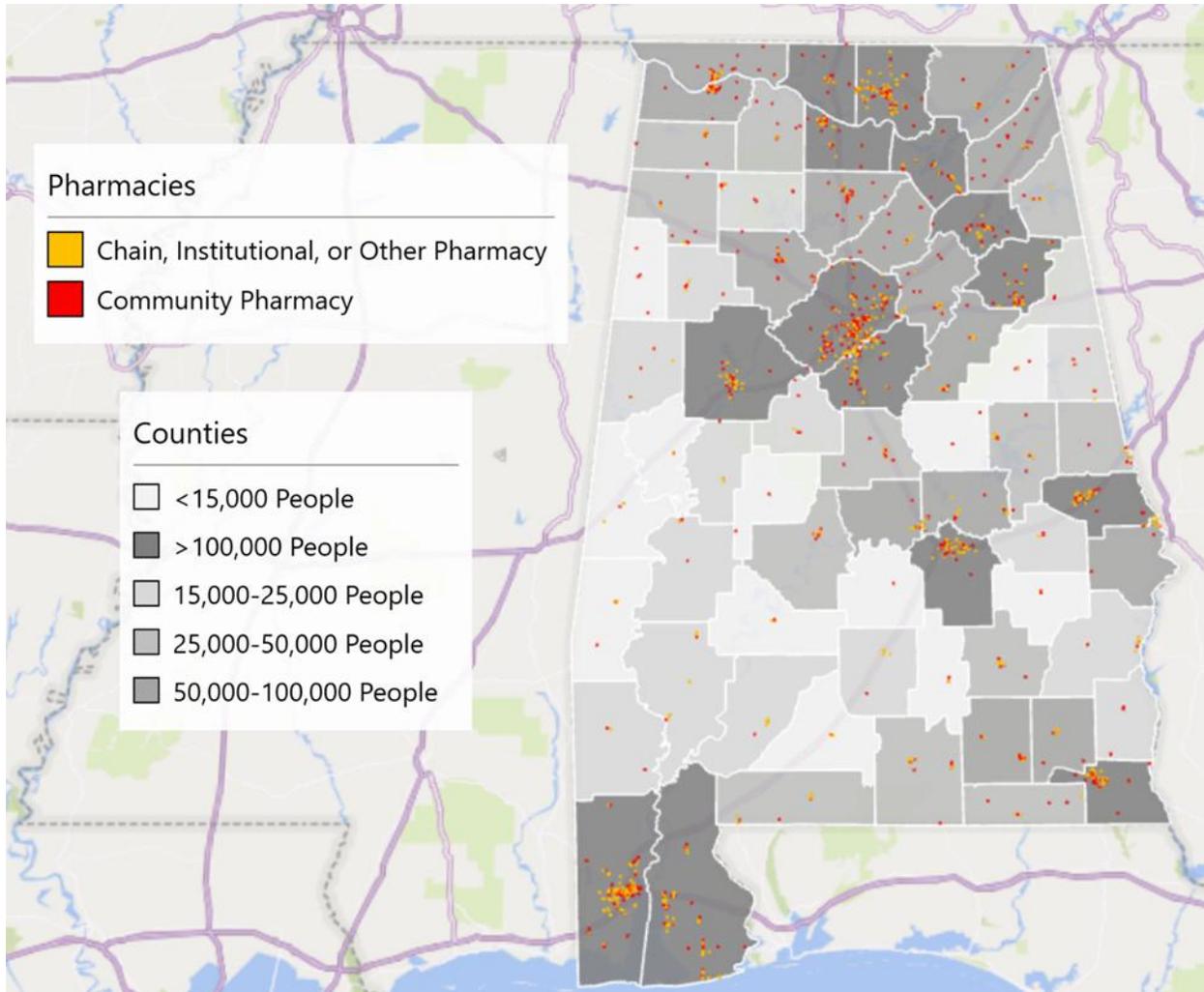
Zip Codes	Number of Zip Codes	Number Zip				Number of			
		Number of Zip Codes with No Pharmacies of any Type*	Codes with Only 1 Pharmacy Type*	Number of Zip Codes with Only 2 Pharmacies of any Type*	Zip Codes with 3 or More Pharmacies of any Type*	Number of Zip Codes with No Community Pharmacies	Number Zip Codes with Only 1 Community Pharmacy	Number of Zip Codes with Only 2 Community Pharmacies	Number of Zip Codes with 3 or More Community Pharmacies
Zip Codes with <1,000 People	148	144	2	1	1	145	1	2	0
Zip Codes with 1,000-2,500 People	114	100	12	2	0	100	13	1	0
Zip Codes with 2,500-5,000 People	107	47	42	8	10	50	46	9	2
Zip Codes with 5,000-10,000 People	116	26	35	25	30	33	46	23	14
Zip Codes with >10,000 People	172	6	14	13	139	14	45	35	78
All Zip Codes	657	323	105	49	180	342	151	70	94

* Pharmacy types include Community, Chain, Institutional, and Other



Since much of policy, regulatory and business incentives, resources and requirements are aimed at the county rather than zip code level, we performed the same analysis of pharmacy access by county. The results follow the zip code analysis above, with less populated counties having fewer community pharmacies (see Figure 7.2 below).

Figure 7.2: Alabama Pharmacies by County



It is worth noting that the lack of pharmacies in any zip codes in and of itself does not necessarily mean lack of access to a pharmacy, as they may be available in a neighboring zip code, including across state lines. However, since counties are geographically much larger than a zip code, the county map above clearly indicates that residents living in counties with one or no pharmacies will have greater travel distance challenges.



Table 7.2 below shows that no county had zero pharmacies. However, 14 of the 27 smallest counties (population under 25,000) had just one or two pharmacies. In contrast, all counties with more than 25,000 residents had three or more community pharmacies.

Table 7.2: Number of Alabama Counties by Number of Pharmacies

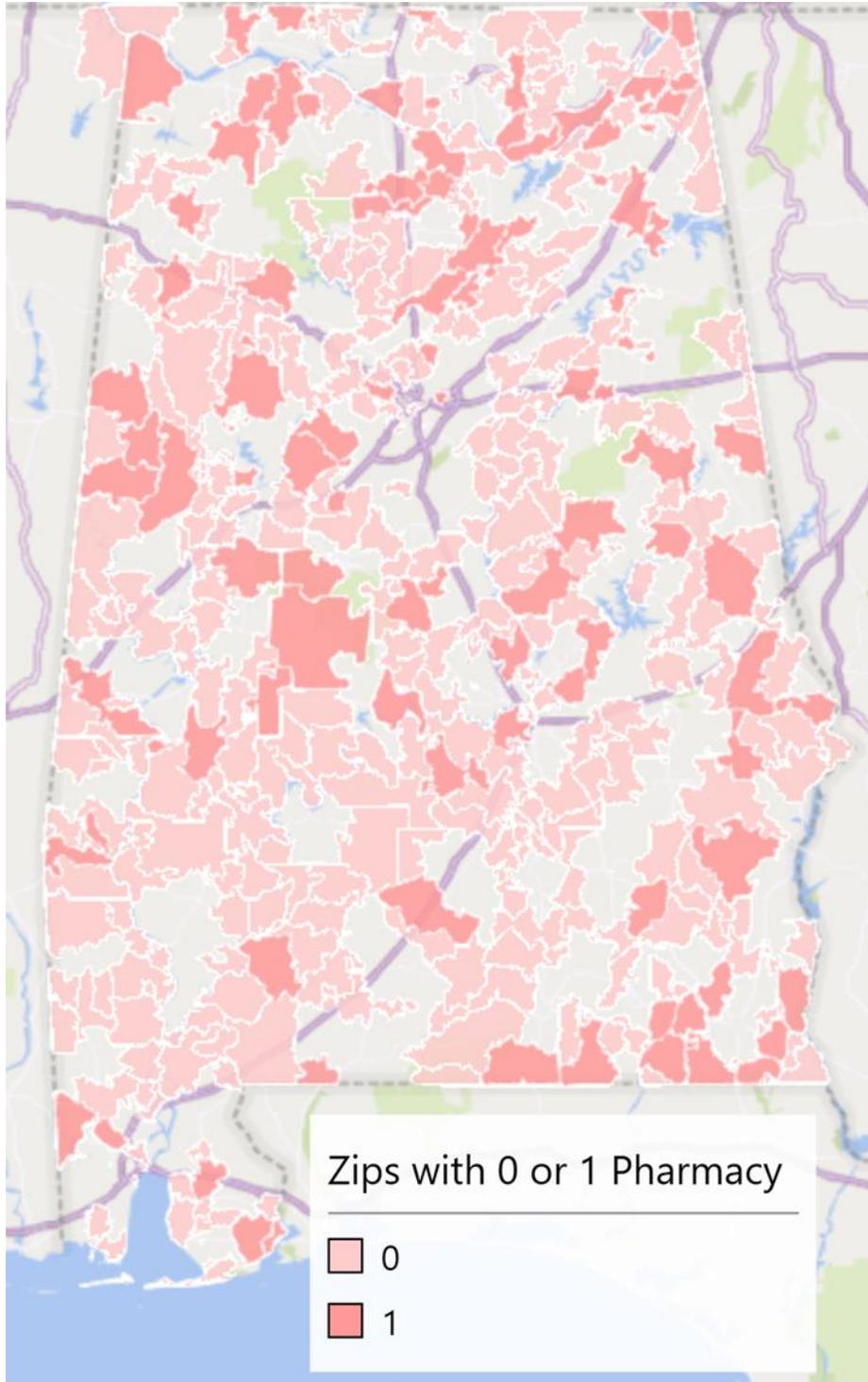
Counties	Number of Counties	Number of Counties				Number of Counties			
		Number of Counties with No Pharmacies of any Type*	Number of Counties with Only 1 Pharmacy of any Type*	Number of Counties with Only 2 Pharmacies of any Type*	Number of Counties with 3 or More Pharmacies of any Type*	Number of Counties with No Community Pharmacies	Number of Counties with Only 1 Community Pharmacy	Number of Counties with Only 2 Community Pharmacies	Number of Counties with 3 or More Community Pharmacies
<15,000 People	12	0	1	3	8	0	5	3	4
15,000-25,000 People	15	0	0	1	14	0	0	6	9
25,000-50,000 People	12	0	0	0	12	0	0	0	12
50,000-100,000 People	14	0	0	0	14	0	0	0	14
>100,000 People	14	0	0	0	14	0	0	0	14
All Counties	67	0	1	4	62	0	5	9	53

* Pharmacy types include Community, Chain, Institutional, and Other

Just how many residents in Alabama are impacted? The presence of “pharmacy deserts”, in this analysis defined as zip codes with one or zero pharmacies, is fairly widespread in Alabama, and not just the S/SW regions, as Figure 7.3 below shows.



Figure 7.3: Alabama Pharmacy Deserts



The number of Alabamians living in pharmacy deserts is fairly significant, as shown in Table 7.3 below.



Table 7.3: Number of Zip Codes and Population in Zip Codes with 0 or 1 Pharmacy

	Number of Alabama Zip Codes	Total Alabama Population
0 Pharmacies of Any Type	322	634,445
1 Pharmacy of Any Type	105	620,677
Total	427	1,255,122

Nearly 50% of all zip codes in Alabama do not have any pharmacies (community, chain or other), comprising 13% of the total population, as shown in Table 7.3. When including zips with just one pharmacy, the total population that lives in pharmacy deserts makes up 1.25 million residents, or 25% of the total Alabama population.

There is fairly strong evidence that pharmacy closures impact access to prescriptions. A national study of 3.1 million individuals filling B-blockers, statins or oral anticoagulants at pharmacies that then closed found an immediate statistically and clinically significant decline in adherence in the first three months compared to a control group, and a sustained decline over 12 months. The impact was worse for individuals who used independent pharmacies and who lived in communities with fewer pharmacies.⁷⁰

Another study estimated travel distance impacts with pharmacy closures and found that individuals residing in medically underserved areas (MUAs) would face two times greater travel distances with pharmacy closures compared to individuals not residing in MUAs.⁷¹

Further, a survey found that 59% of Americans worry about obtaining medications close to home. While internet and mail-order pharmacies can serve as an alternative to brick-and-mortar pharmacies, the survey revealed that only 16% of those surveyed prefer using online pharmacies, signaling an undiminished demand for in-person care options as more stores close.⁷²

In addition to prescription access and adherence issues, the loss of a pharmacy also means a loss of a pharmacist. As described earlier, patients visit pharmacists twice as often as their physician. Moreover, the visits with pharmacists are increasingly a source of clinical, health and wellness services for these patients.



Using data provided by the Alabama Medical Board of Licensure, we are able to identify the impact of losing pharmacies in a community as a source of care. By overlaying physician data on the zip code analysis of pharmacy deserts, we see from Table 7.4

below that of the 105 zip codes with only one pharmacy, 32 of these had no physicians, and another 25 had only 1 physician, showing that pharmacists play a critical role in filling gaps in the availability of care providers.

Table 7.4: Number of Zip Codes by Number of Pharmacies and Physician Locations

	Number of Zip Codes	Number of Zip Codes with No Physician Location*	Number Zip Codes with Only 1 Physician Location*	Number of Zip Codes with 2 or More Physician Locations*
Number of Zip Codes with No Pharmacies of Any Type	323	240	42	41
Number Zip Codes with Only 1 Pharmacy of Any Type	105	32	25	48
Number of Zip Codes with Only 2 Pharmacies of Any Type	49	7	8	34
Number of Zip Codes with 3 or More Pharmacies of Any Type	180	1	2	177
All Zip Codes	657	280	77	300

* Physician license types include Medical Doctor, Doctor of Osteopathy, Physician Assistant, Anesthesiology Assistant, and Limited License

While Alabama already has a substantial number of zip codes (240) without either a pharmacy or a physician, affecting 100,000s of residents, another 225,496 residents live in a zip with just one pharmacy and no physicians, and another 189,530 live in zip code with just one pharmacy and one physician, as Table 7.5 below shows. This means nearly 8.3% of the Alabama population are at risk of having no care provider or just one if their pharmacy closed.



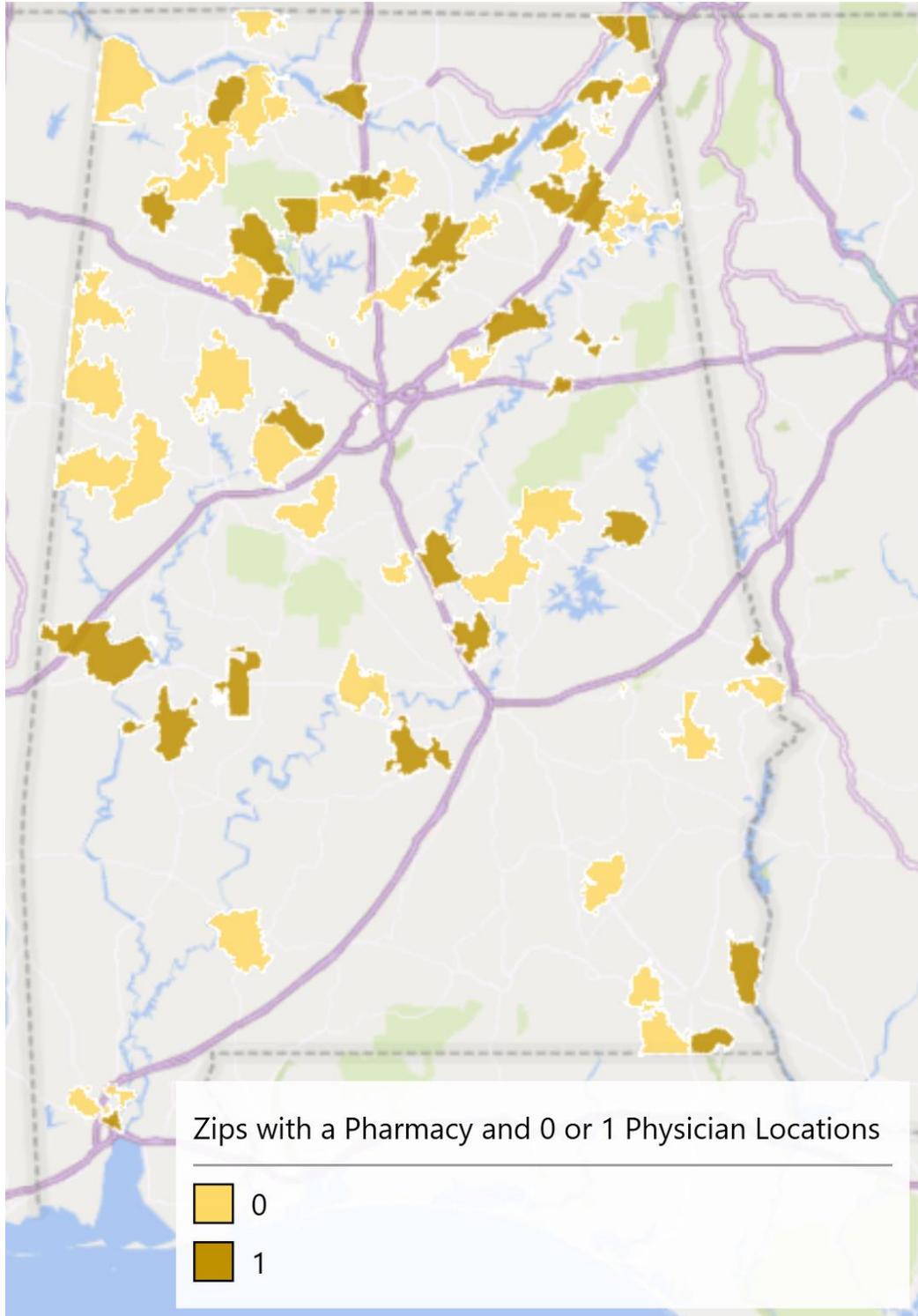
Table 7.5: Alabama Population by Number of Pharmacies and Physician Locations

	Number of People	Percent of Alabama Population
People in Zip Codes with No Pharmacies of Any Type	643,810	12.8%
People in Zip Codes with Only 1 Pharmacy of Any Type	620,677	12.3%
People in Counties with Only 1 Pharmacy of Any Type	9,485	0.2%
People in Counties with Only 2 Pharmacies of Any Type	41,042	0.8%
People in Zip Codes with ≥ 1 Pharmacy of Any Type and No Physician Locations	225,496	4.5%
People in Zip Codes with ≥ 1 Pharmacy of Any Type and Only 1 Physician Location	189,530	3.8%

A map of the zip code locations of these 415,000 residents with one pharmacy and one or zero physicians is shown in Figure 7.4. In general, the map shows a fairly distributed location of these pharmacies and care deserts across the state. Clearly, closures of pharmacies have an impact that extends beyond access to prescriptions and puts a considerable number of Alabamians at risk for losing pharmacists that play a significant healthcare role in these communities.



Figure 7.4: Alabama Zip Codes with a Pharmacy and 0 or 1 Physician Locations





8. Community Pharmacy Survey

The previous section clearly shows a net decline in community and chain pharmacies in Alabama. While larger chain pharmacies are associated with greater price efficiencies than community pharmacies, the latter still play a major part of the retail pharmacy business, accounting for approximately one-third of brick-and-mortar pharmacies in the U.S. and six percent of retail prescription drug sales. And, as seen in the prior section, community pharmacies play an outsized role in many rural and underserved urban areas, and often may be the sole providers of prescription drugs and other services such as vaccinations.

The literature generally suggests that low reimbursement, administrative and fee burdens, and antitrust related issues (e.g., chains acquiring and subsequently closing community pharmacies) are the main causes for community pharmacy closures.

We undertook a more detailed look at community pharmacies in Alabama by conducting a statewide community pharmacy survey, to identify variability in pharmacy practices, including prescription volumes, revenue and margins, overhead, other sources of revenue, community pharmacy views about PBM practices, and other factors and strategies to better understand how community pharmacies fare. In addition, we wanted to provide an early view of the impact of SB 252, the Alabama Community Pharmacy Relief Act on community pharmacies.

The methodology employed for the community pharmacy survey is described above. The survey was distributed to all licensed community pharmacies in Alabama, and over the course of six weeks, 331 responded, for a 45% response rate, as Table 8.1 below shows.

Table 8.1: Summary of Community Pharmacy Responses

Number of Active Community Pharmacies in AL BoP Listing	732
Number of Survey Responses	331
Response Rate	45%
6 Responses Excluded from Analysis:	
Listed as "Chain" in AL BoP Listing (Walmart)	1
Renal Pharmacy Chain (Fresenius)	1
Responses from Long-term Care Pharmacies (PharMerica and 2 Others)	3
Non-prescribing Methadone/Opioid Treatment Clinic (Walker)	1
Total Responses in Analysis	325
Final Response Rate	44%



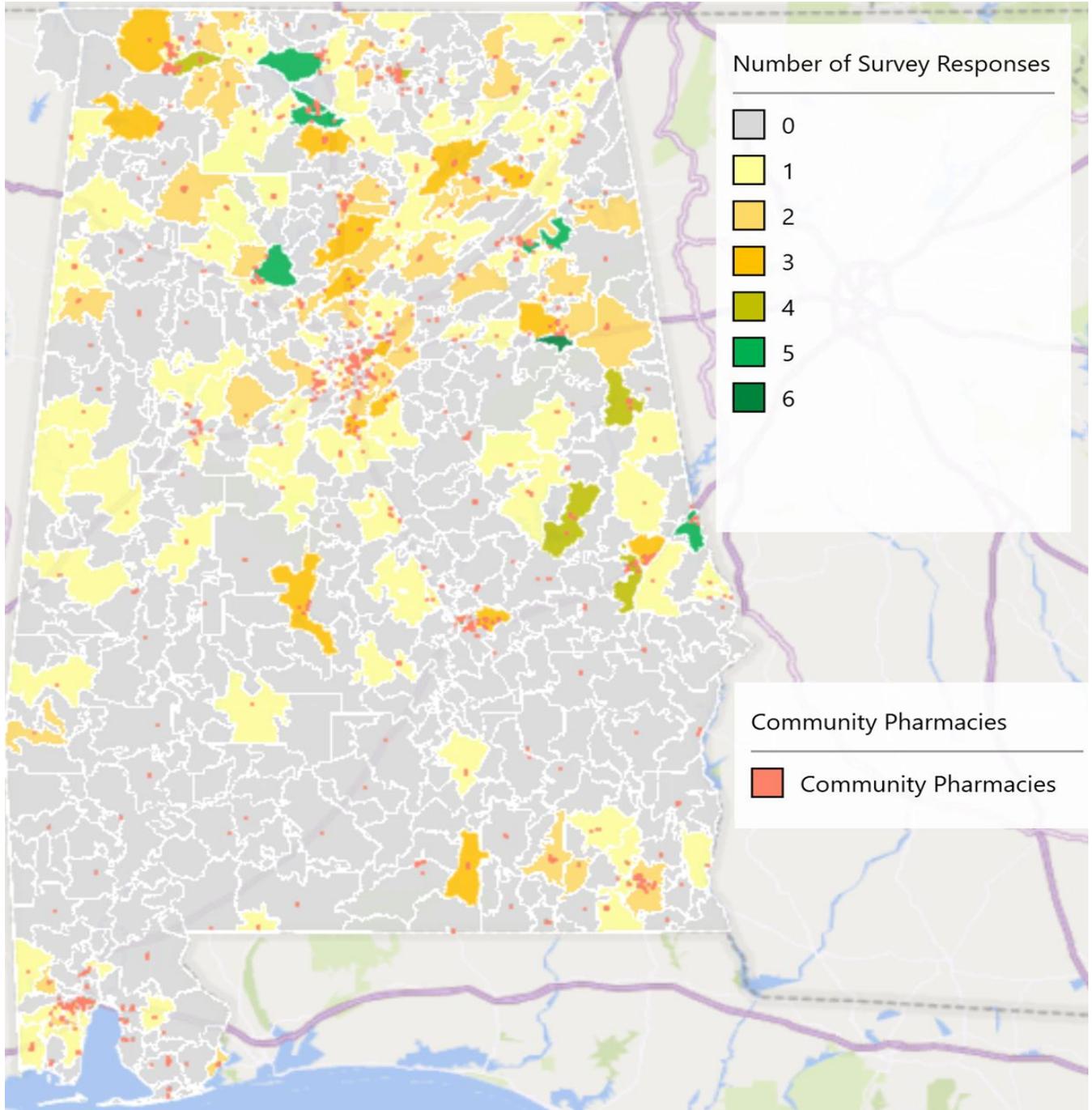
a. Respondent Characteristics

A manual review of responses eliminated six pharmacies estimated to be pharmacies other than community pharmacies, which are required to be accessible by the general public under Alabama statute, providing a final response total of 325.¹ Responses were widely representative across all regions of Alabama, as Figure 8.1 shows below

¹ Note that the Alabama Board of Pharmacy's designation of "community pharmacy" does not consider employees in pharmacies that have locations in other states and are therefore part of a "chain". Hence, we left Avita's response in the analysis, as it has 3 locations in Alabama (Avita has over 60 locations nationally per their website).



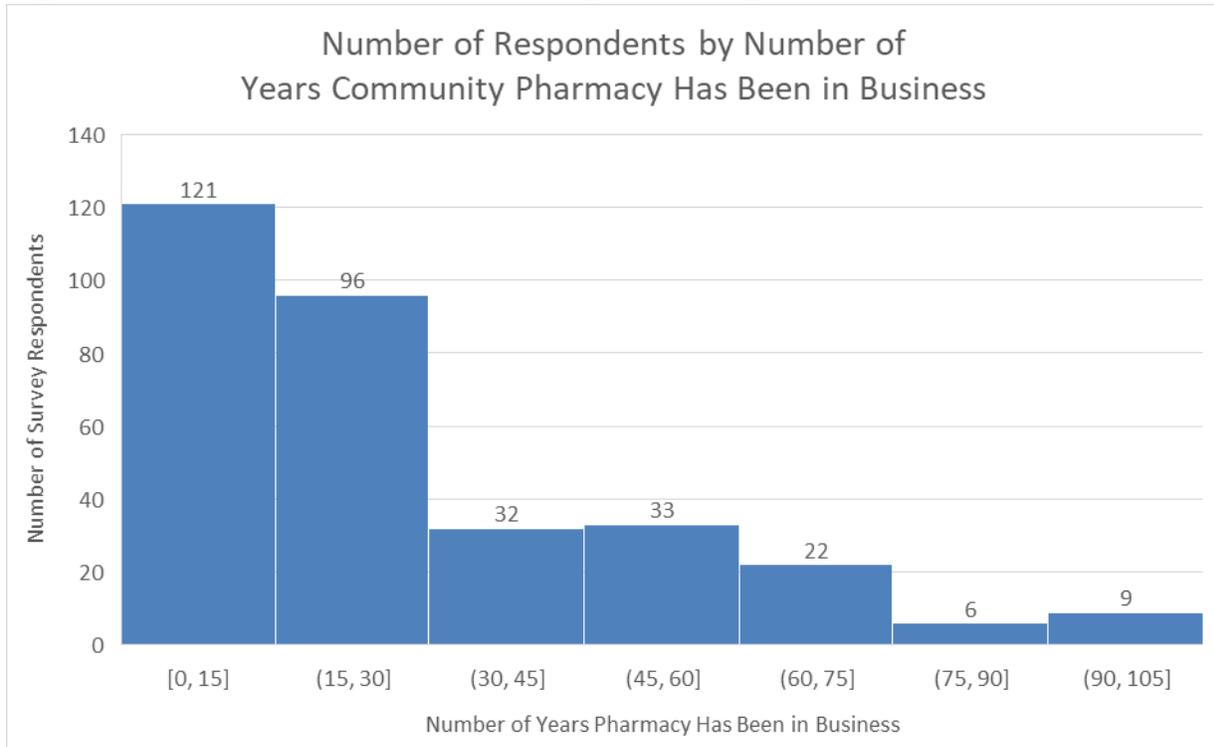
Figure 8.1 Responses by zip code:





More than 60% of respondents have been in business for over 15 years (see Figure 8.2), with 70 in business for over 45 years, demonstrating strong ties and the value of their services in their communities.

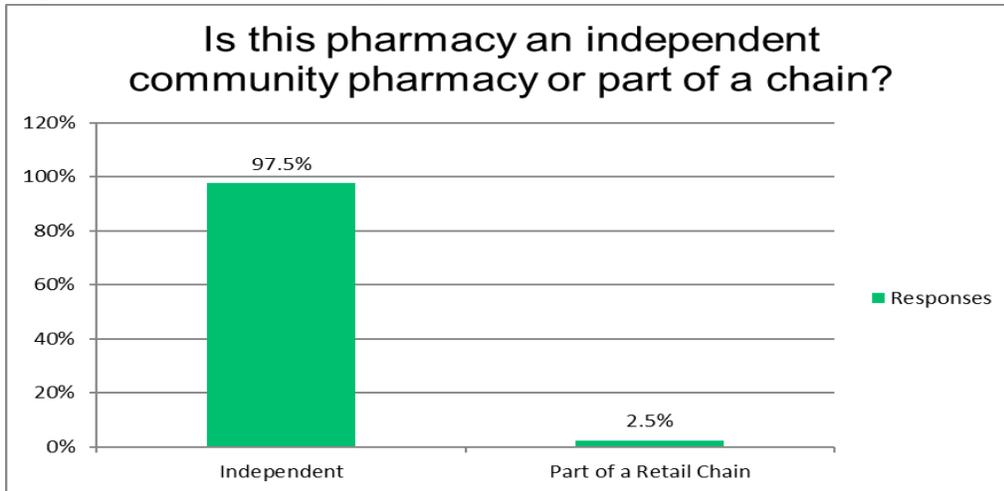
Figure 8.2 Number of Years Community Pharmacy Has Been in Business





While all pharmacies in the survey were licensed as community pharmacies, the majority were independent, while some were either part of a small chain or were part of chains with multiple out-of-state pharmacies, as shown in Figure 8.3. The largest chain observed was a pharmacy with 12 locations.

Figure 8.3 Chain vs Independent



Most respondents had only 1-2 full-time pharmacists at the specific location (Figure 8.4) and the majority who responded were owners or executives in charge (Table 8.2), adding a degree of reliability and credibility to the data provided in the responses.

Figure 8.4 Number of FTE Pharmacists

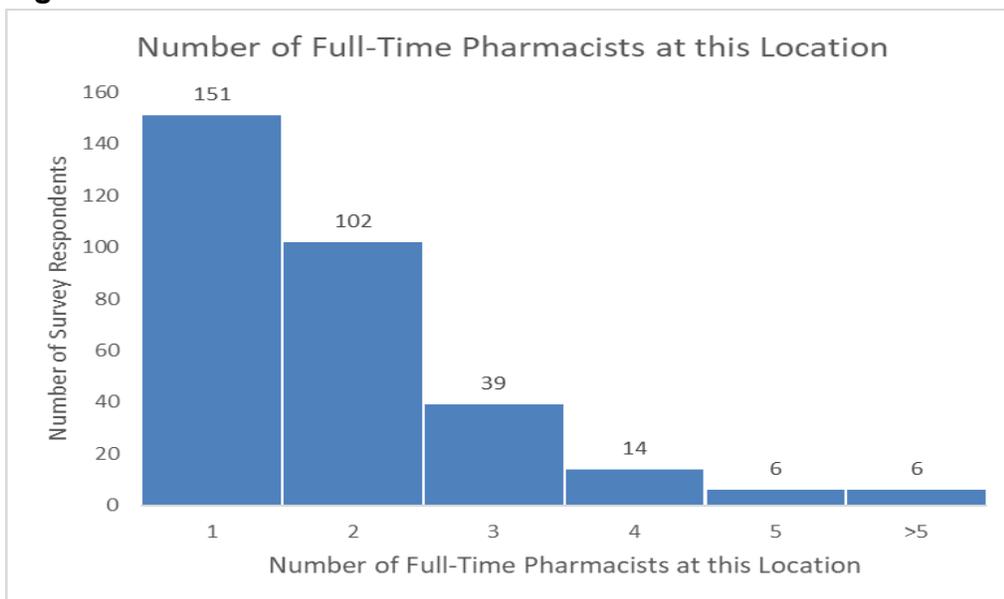




Table 8.2: Summary of Respondent’s Titles

Title	Count	Percent
Owner	158	49%
PIC (Person or Pharmacist in Charge, CEO, President, Office Manager)	74	23%
Pharmacy Director, Supervisor, or Manager	38	12%
Other	50	16%
Total	320	

Nearly half of respondents answering this question were the owner of the pharmacy.

b. Prescription Data by Payer Type

Prescription data from survey respondents provided important insights into differences between urban and rural community pharmacies in average volumes and the type of patients served. Rural pharmacies on average filled 45% fewer prescriptions than their urban counterparts (Table 8.3). This is a significant disadvantage compared to urban pharmacies, as these higher volumes provide urban pharmacies with both operational scale and thus increased margin opportunities, as well as price efficiencies through greater purchasing power.

Table 8.3: Rural vs Urban Pharmacy Differences in Prescription Volume by Payer

Rural Pharmacies	Number of Prescriptions per Pharmacy		
Prescription Type	Average	Minimum	Maximum
Commercial	24,472	5	69,436
Medicaid	5,899	263	28,703
Medicare Part D	24,577	0	78,312
Cash/Private Pay	9,099	236	55,223

Urban Pharmacies	Number of Prescriptions per Pharmacy		
Prescription Type	Average	Minimum	Maximum
Commercial	60,277	335	755,645
Medicaid	7,459	0	33,377
Medicare Part D	34,459	0	399,399
Cash/Private Pay	13,495	20	86,359

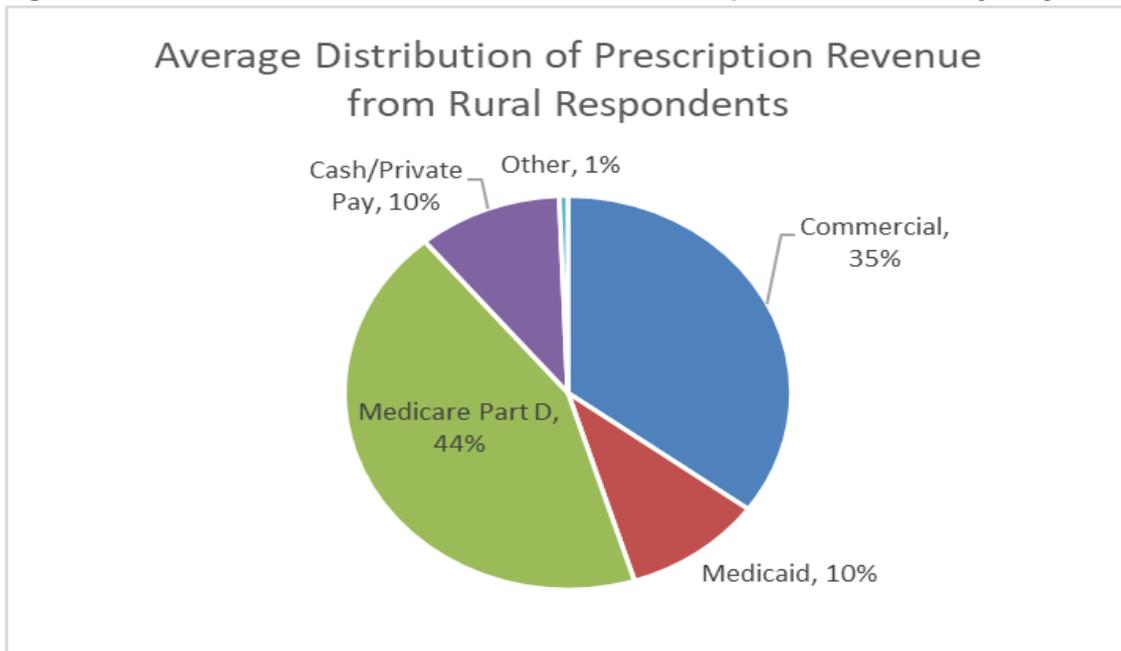


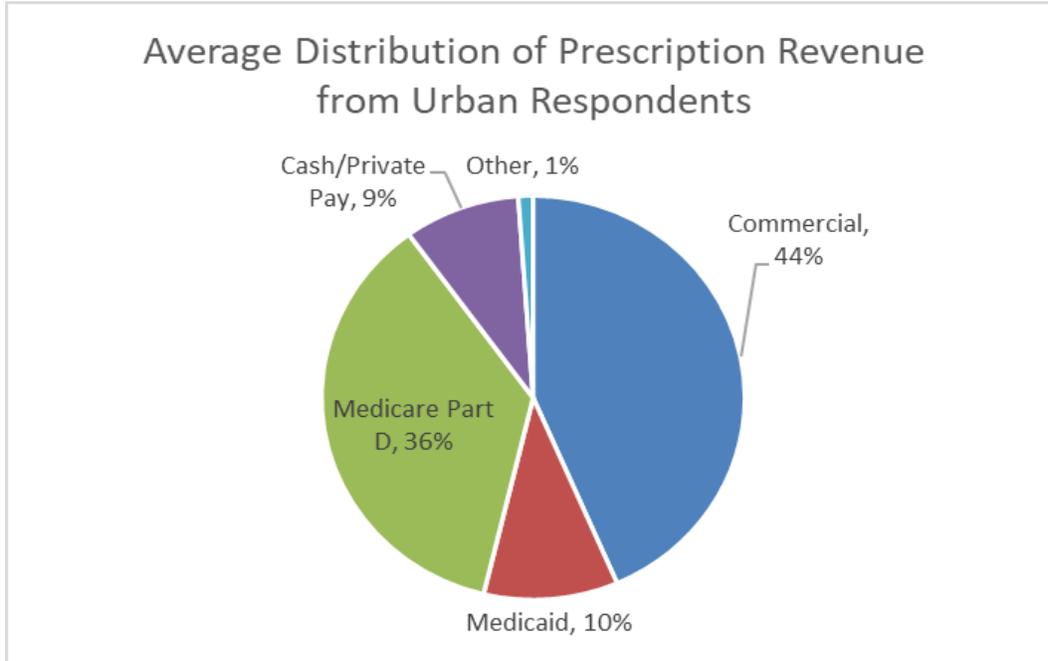
Moreover, 48% of prescription volume in rural pharmacies are for Medicare Part D and Medicaid, compared to just 36% for urban pharmacies. The majority of prescriptions (52%) in urban pharmacies were commercial, compared to just 38% for rural pharmacies. This is expected, given the likely higher proportion of individuals being covered under employer sponsored coverage in urban areas compared to rural areas. However, Medicaid and Medicare Part D prescription drug benefits typically have far greater flexibility and requirements to assure consumer choice and pharmacy access, and closures of community pharmacies in rural areas consequently would be more harmful for individuals under public programs

Also of note, rural pharmacies had a slightly greater proportion of cash/private pay scripts (14%) compared to urban pharmacies (12%).

The distribution of revenue by payer type followed the distribution of prescription volume by payer type (Figure 8.5). Revenue from Medicare Part D and Medicaid comprised 54% of rural pharmacy prescription revenue, compared to 46% for urban pharmacies, while commercial revenue comprised just 35% of rural pharmacy prescription revenue compared to 44% for urban pharmacies.

Figure 8.5: Rural vs Urban Differences in Prescription Revenue by Payer





These marked differences in prescription volume and revenue source become even more telling when looking at profit margins on prescriptions by payer type and by urban vs rural pharmacies. The data in Table 8.4 provides two compelling insights. First, rural pharmacies have significantly lower margins across all payer types, except for cash/private pay, compared to urban pharmacies.

Table 8.4: Rural vs Urban Pharmacy Differences in Prescription Margin by Payer

Rural Pharmacies (N=92)		Gross Profit per Prescription			Number of Pharmacies with Gross Profit > \$0
Prescription Type	Average	Minimum	Maximum		
Commercial	\$7.26	-\$35.46	\$20.00	91	
Medicaid	\$9.20	-\$0.93	\$21.72	89	
Medicare Part D	\$9.21	-\$19.91	\$25.00	89	
Cash/Private Pay	\$18.93	\$0.00	\$126.31	91	
Urban Pharmacies (N=29)		Gross Profit per Prescription			Number of Pharmacies with Gross Profit > \$0
Prescription Type	Average	Minimum	Maximum		
Commercial	\$9.65	-\$24.78	\$61.00	27	
Medicaid	\$15.15	\$0.00	\$94.00	28	
Medicare Part D	\$12.99	\$0.00	\$62.00	28	
Cash/Private Pay	\$15.83	\$0.00	\$45.00	28	



Second, the greatest difference in margins between urban and rural pharmacies are for Medicaid (nearly \$6.00 more per script in urban pharmacies) and Medicare Part D (nearly \$4.00 more per script in urban pharmacies), while commercial prescriptions for both urban and rural provide the lowest margins.

Urban pharmacies, even though community pharmacies, often benefit from larger purchasing volumes, stronger PSAO and wholesaler contracts, and better access to high-volume generic programs, allowing them to acquire medications at lower net cost and widening the spread compared to rural peers.

Moreover, because Alabama Medicaid uses a uniform statewide reimbursement methodology, any difference in acquisition cost disproportionately benefits urban pharmacies, widening the spread compared to rural peers. Rural pharmacies, with smaller volumes and less negotiating leverage, frequently pay meaningfully more for identical NDCs, particularly multisource generics that represent the majority of Medicaid fills.

Urban pharmacies also have a better opportunity to dispense a more margin-favorable mix of medications within Medicaid and Part D due to broader prescriber networks and more diverse patient populations. This results in higher utilization of NDCs where the acquisition cost-to-reimbursement spread is more favorable. Rural pharmacies, by contrast, often serve a narrower prescriber base and older patient populations, leading to a mix that could skew toward lower-margin generics and fewer high-spread opportunities.

When asked to provide any additional comments regarding prescription drug revenue and margins, 48 respondents gave responses, which are summarized below in Table 8.5.

Table 8.5. Respondents Summary Comments on Revenue and Margins

Summary Comment	Number of Responses (Percent of Responses)
Unsustainable or below-cost reimbursement	18 (38%)
PBM practices are the central driver	11 (23%)
Year over year revenue decline	11 (23%)
Community level harm or risk of closure	8 (17%)



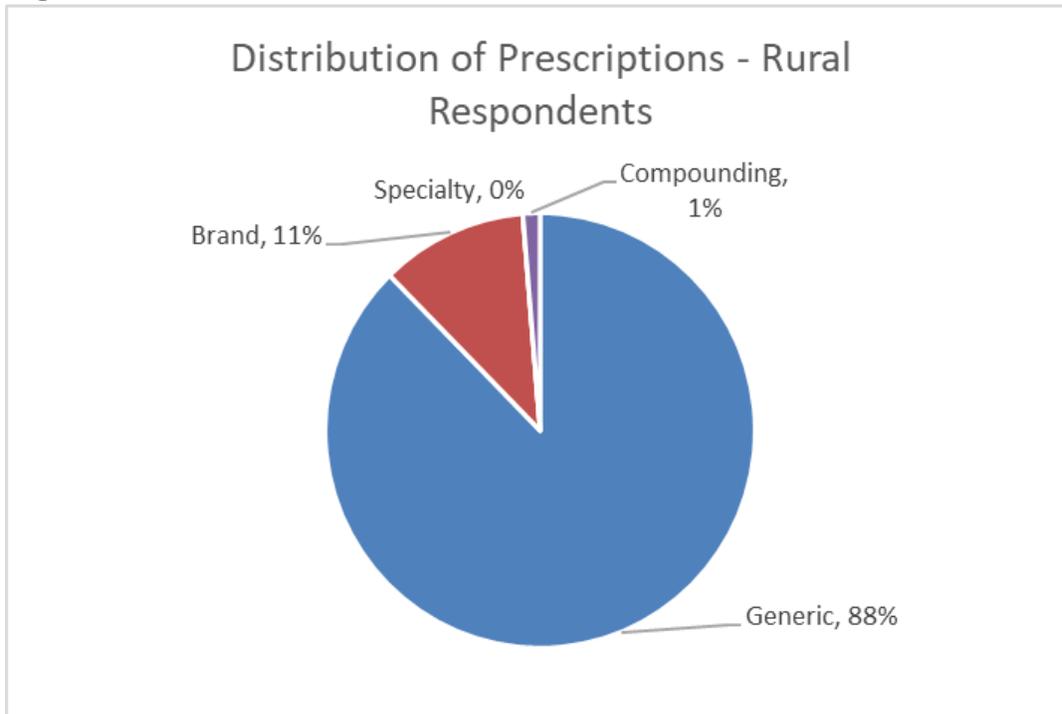
As expected, the sentiment towards PBMs was highly negative with a strong belief that PBMs were the root cause of financial distress. A rather telling, and fairly true comment from one respondent summed up the state of pharmacies as follows:

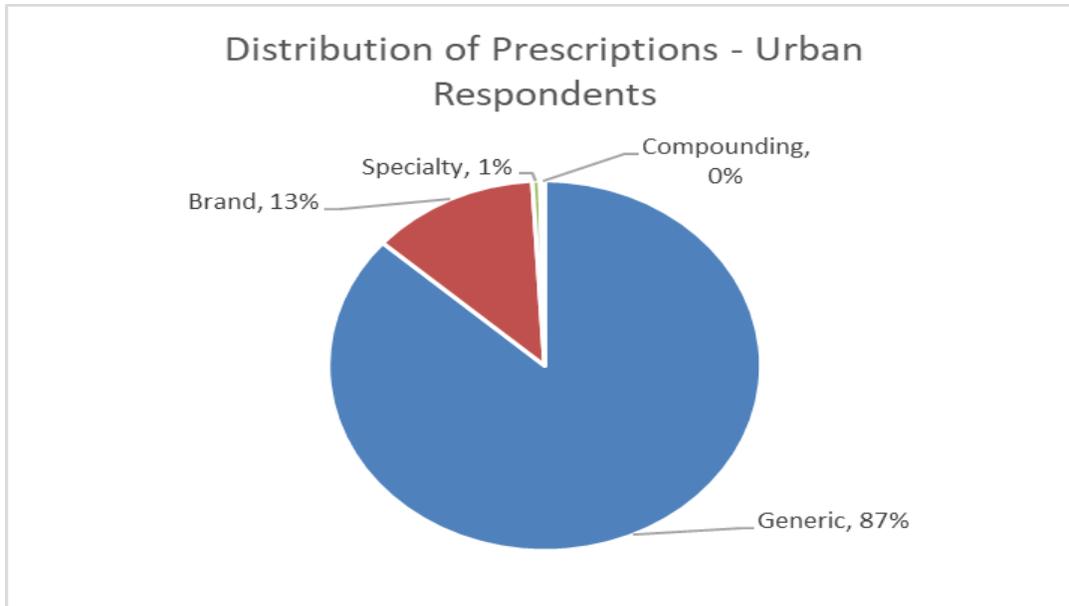
“Pharmacy is the only business that cannot set prices, cannot set contracting, and cannot decide where we buy our products.”

c. Prescription Data by Product Type

While prescription drug revenue and margins varied between rural and urban community pharmacies by payer type, the distribution of prescriptions by generic, brand, specialty, and compounding drugs was fairly similar between rural and urban pharmacies (Figure 8.6).

Figure 8.6: Rural vs Urban Differences in Product Mix





Generics dominated the distribution of all prescription drug products in both rural (88%) and urban (87%) pharmacies, with brand drugs comprising 11% and 13% of all prescriptions for rural and urban pharmacies, respectively. Notably, while specialty and compounding prescriptions were nearly non-existent for both rural (less than 1%) and urban (less than 1%) community pharmacies, nearly 25% of these pharmacies report the ability to provide these prescription products (Table 8.6). The low volumes suggest that prescribers and PBMs are likely to steer specialty and compounding prescriptions to preferred pharmacies.

Table 8.6: Availability of Prescription Types at Community Pharmacies

	Generic	Brand	Specialty	Compounding
Number of Pharmacies (out of 116) that Provide Each Type of Prescription	116	116	24	30
Percent	100%	100%	21%	26%

The distribution of prescriptions by type of product also has significant implications for margins. Pharmacies, including those responding to this survey, often cite low to negative margins on brand drugs. While 15 (14%) community pharmacies reported negative average gross margins for brands, the vast majority (86%) report gross profits per prescription (Table 8.7).

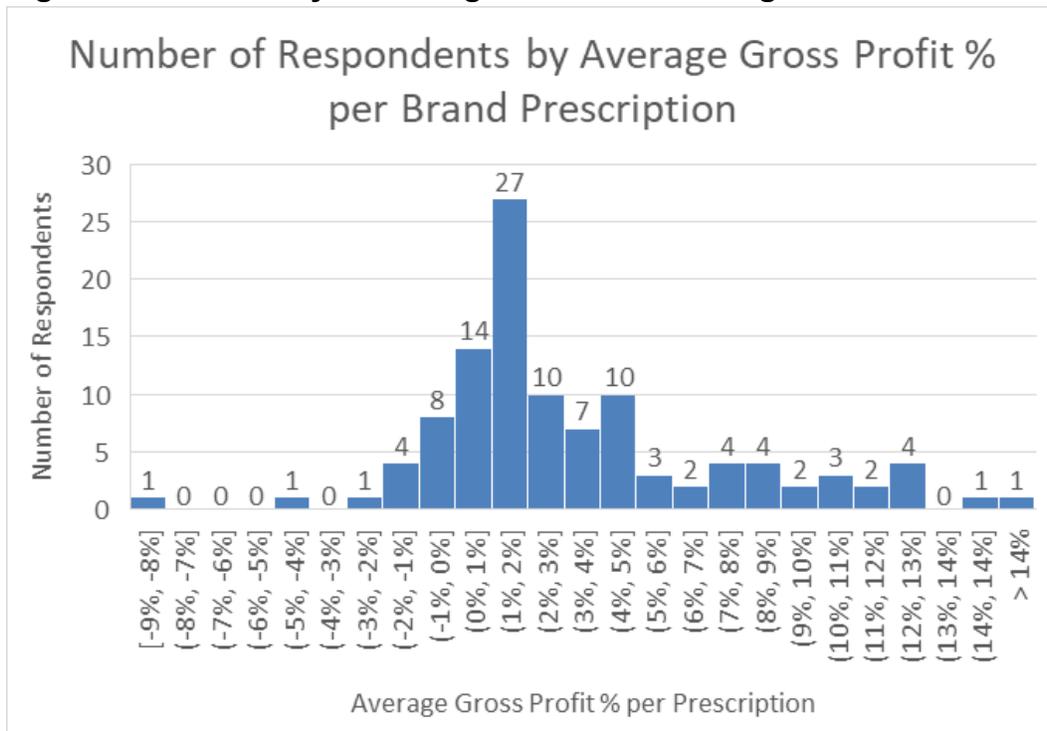


Table 8.7: Pharmacy Margin for Brand Prescriptions

	Number	Percent	Average Percent of Total Prescriptions that are Brand
Pharmacies with Negative Average Gross Profit per Brand Prescription	15	14%	12%
Pharmacies with Zero or Positive Average Gross Profit per Brand Prescription	94	86%	11%

However, even though most pharmacies have positive gross margin on brand prescriptions, Figure 8.7 below shows that the vast majority had average gross margins between -2% and 5% per brand prescription.

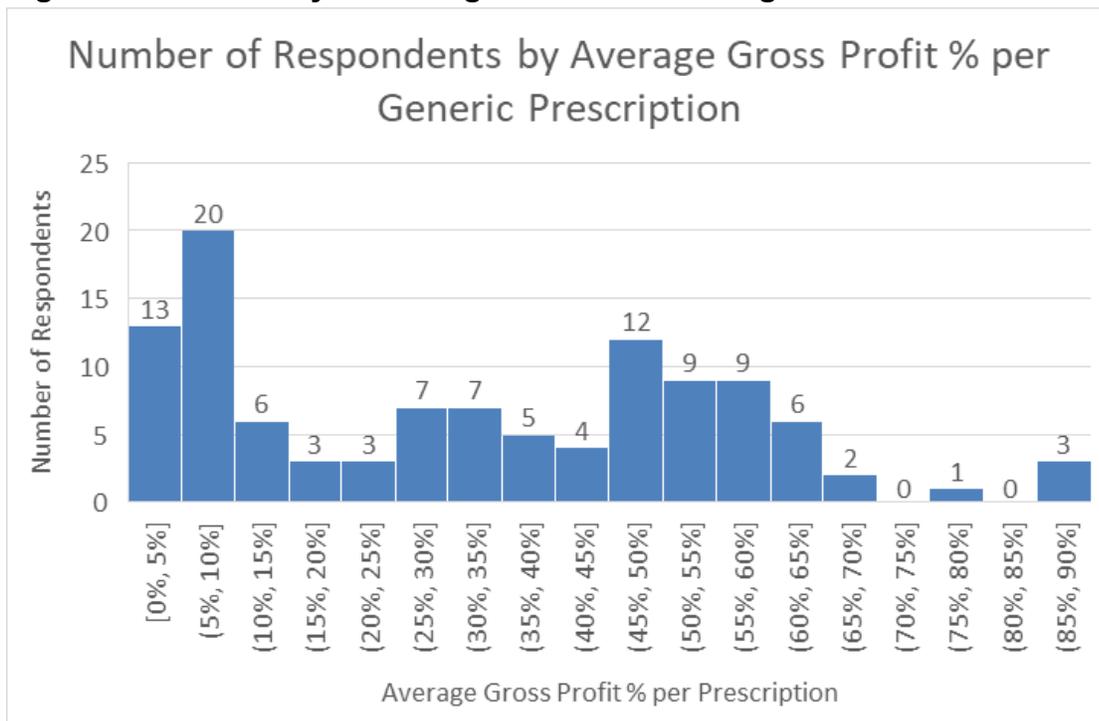
Figure 8.7: Variability in Average Gross Profit Margin Per Brand Prescription





Meanwhile, no community pharmacies reported negative average gross profit per generic prescription (Figure 8.8), with the majority (70%) having average gross margins of greater than 10% per generic prescription, and half of these with average gross margins per prescriptions of over 45%.

Figure 8.8: Variability in Average Gross Profit Margin Per Generic Prescription





While community pharmacies fill fewer specialty and compound prescriptions, Figures 8.9 and 8.10 suggest that average gross margins per specialty prescription are the lowest amongst all product types, whereas average gross margins per compound drug are the highest.

Figure 8.9: Variability in Average Gross Profit Margin Per Specialty Prescription

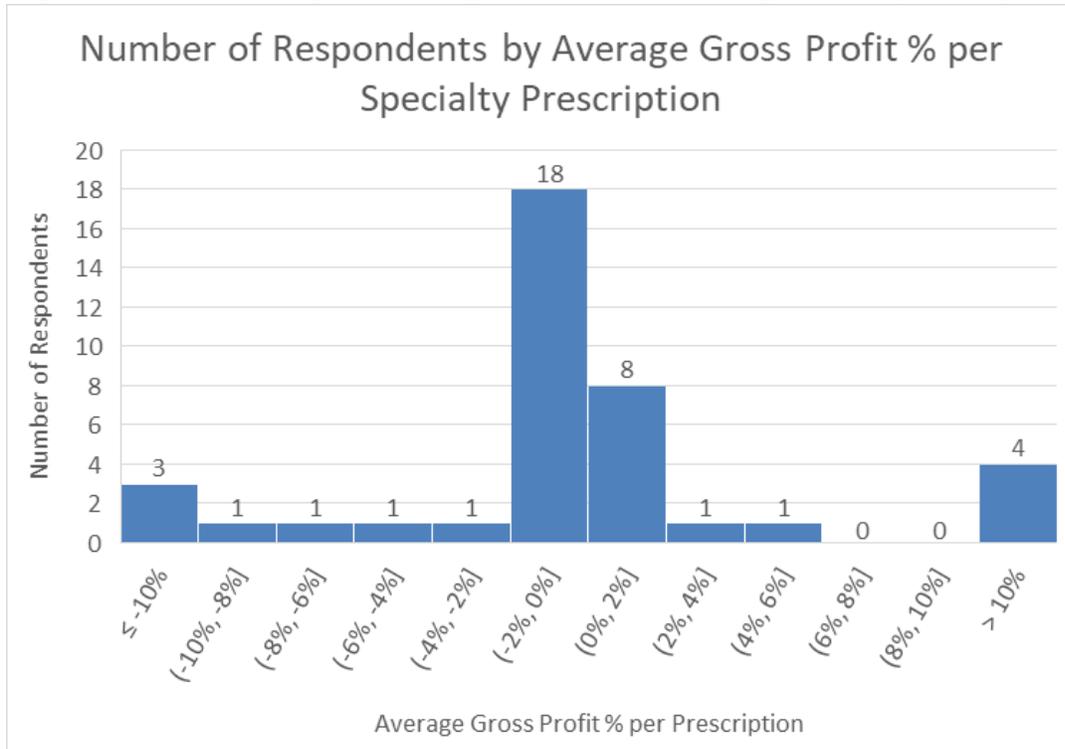
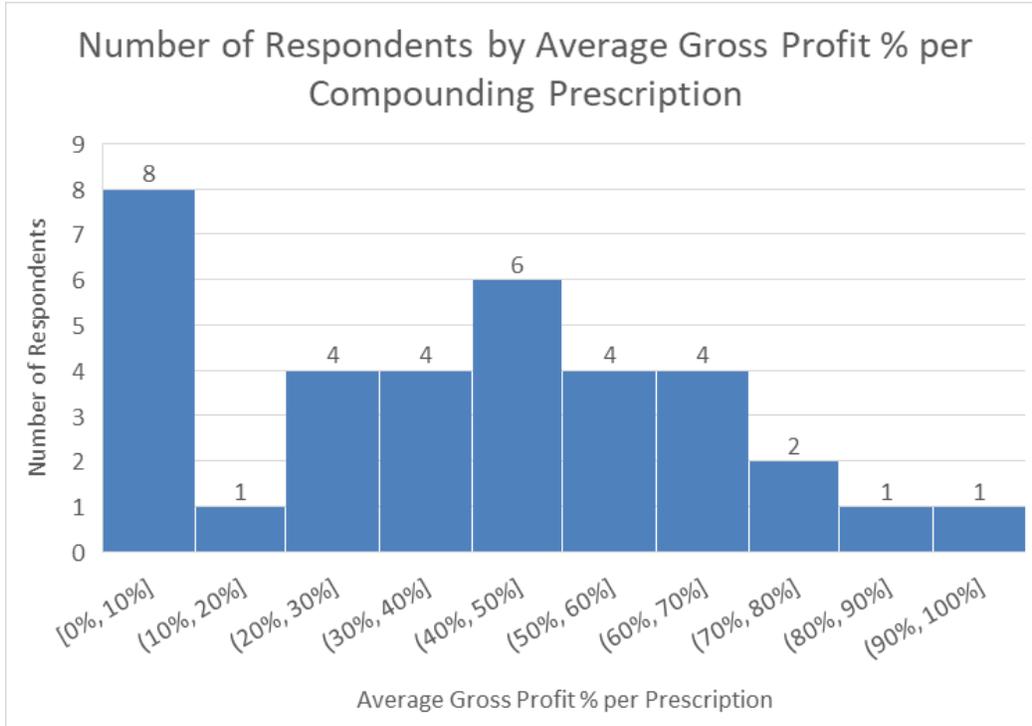




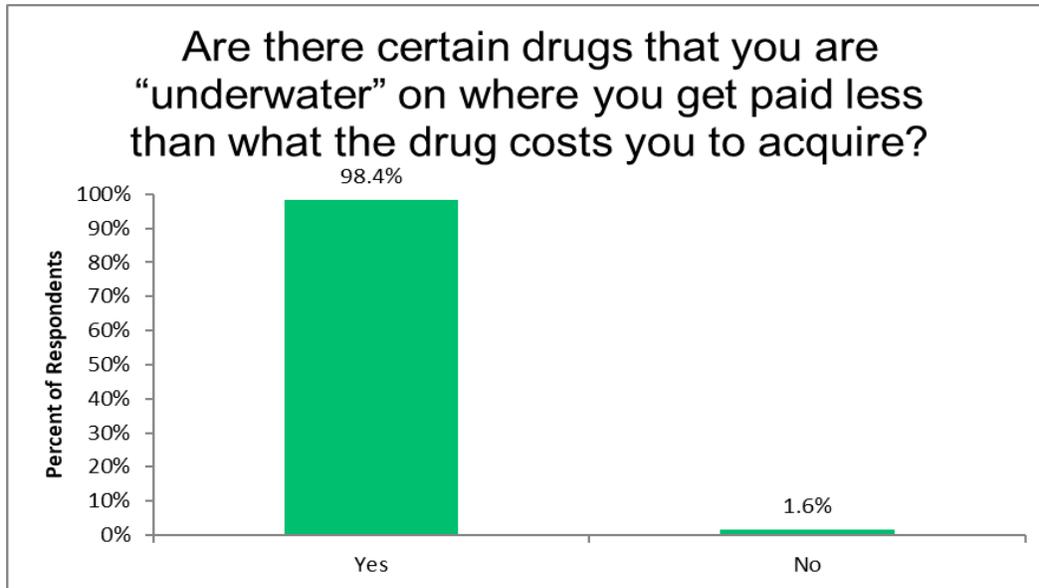
Figure 8.10: Variability in Average Gross Profit Margin Per Compound Prescription





In exploring whether reimbursement is ever below the cost of acquiring drugs, nearly all (98%) community pharmacies responded yes (Figure 8.11).

Figure 8.11: Pharmacy Experience with Reimbursement Lower than Acquisition Cost



A summary of the top medications that pharmacies reported receiving reimbursements that were less than their cost of acquiring the drug are listed in Table 8.8 below.

Table 8.8: Top Prescriptions That Pharmacies Were Underwater On

Drug Name	Count of Pharmacies	Average Reimbursement	Average Acquisition Cost	Average Loss	Smallest Loss	Largest Loss
ELIQUIS	67	\$585.07	\$618.64	\$33.56	-\$290.34	\$627.06
OZEMPIC	56	\$904.24	\$1,003.30	\$99.06	-\$21.00	\$997.59
MOUNJARO	38	\$998.38	\$1,046.23	\$47.86	-\$80.00	\$300.00
FARXIGA	31	\$569.31	\$614.73	\$45.42	-\$12.00	\$600.31
JARDIANCE	25	\$661.83	\$702.23	\$40.40	-\$0.68	\$602.92
REPATHA	8	\$572.07	\$598.54	\$26.46	\$13.00	\$55.00
TRULICITY	7	\$666.11	\$967.74	\$301.63	\$9.66	\$1,007.66
TRELEGY	6	\$663.91	\$673.50	\$9.59	-\$1.33	\$21.27
XARELTO	6	\$586.02	\$604.11	\$18.08	-\$31.05	\$48.00
JANUVIA	4	\$202.62	\$213.03	\$10.41	-\$0.13	\$24.36
VRAYLAR	4	\$1,286.00	\$1,381.94	\$95.94	\$0.00	\$182.32
NOVOLOG	3	\$232.95	\$285.91	\$52.96	\$18.27	\$112.54



All the medications listed in Table 8.8, including all other less frequently reported medications that pharmacies were underwater for, are either brand or specialty medications, helping to explain why average gross profit margins for specialty and brand prescriptions were the lowest.

In fact, nearly 28% (20 of 72 respondents) of community pharmacies reported they are underwater for most brand prescriptions.

Average gross profit margins vary widely by type of prescription (payer and product type), urban vs rural, and even vary substantially within rural and urban community pharmacies. Moreover, with 1000s of drug products available at any given pharmacy, the actual mix of drugs dispensed is unknown, making it difficult to draw any conclusions about the determinants of community pharmacy margins by payer, product type or overall.

Despite that limitation, we can generally conclude from the data that urban pharmacies have higher prescription volumes, correspondingly higher revenue, and higher gross margins per prescription compared to rural community pharmacies, and that rural pharmacies have a higher distribution of Medicare Part D prescriptions compared to urban pharmacies. All pharmacies have several specific drug products that they are underwater for, with the more common ones being GLP-1s and diabetes products.

So how do operating costs to fill a prescription influence ultimate pharmacy profitability? We asked pharmacies what they incurred in costs per prescription before being reimbursed. Costs include preparing, processing, reviewing and dispensing prescriptions, including performing any patient consultation

A summary of respondents' average cost to fill a prescription before any reimbursement is provided below in Table 8.9.

Table 8.9: Cost to Fill a Prescription Before Reimbursement

Pharmacy Type	Average	Minimum	Maximum
All Pharmacies (112 responses)	\$13.31	\$0.80	\$33.00
Rural Pharmacies (84 responses)	\$12.68	\$2.00	\$23.75
Urban Pharmacies (28 responses)	\$15.22	\$0.80	\$33.00
Pharmacies in Top 20% of Prescription Volumes (21 responses)	\$14.22	\$5.00	\$33.00
Pharmacies in Bottom 20% of Prescription Volumes (22 responses)	\$12.62	\$0.80	\$20.35



On average, rural pharmacies appear to be 17% (\$2.54 per prescription) more efficient than their urban counterparts in average cost per prescription prior to reimbursement.

And, the 20% of pharmacies with the lowest prescription volumes also demonstrated greater operational efficiency by 11%, or \$1.60 less in average cost per prescription, compared to the 20% of pharmacies with the highest prescription volumes.

While counterintuitive, the economic pressures facing rural and lower volume pharmacies, which tend to be the same (e.g., lower revenues, lower margins compared to urban, higher volume pharmacies) (generally both the same as observed earlier) likely force them to be more efficient. Moreover, rural pharmacies may have a lower cost labor market compared to urban pharmacies.

Looking at average gross profit per prescription less the average cost per prescription, we see that both urban and rural pharmacies lose money on average per script (Table 8.10), with urban community pharmacies faring slightly better than rural pharmacies.

Table 8.10: Rural vs Urban Pharmacy Differences in Gross Margin and Cost Per Prescription

	Rural	Urban
Average Gross Profit per Prescription	\$9.39	\$12.68
Average Cost per Prescription	\$12.68	\$15.22
Gross Profit Less Cost Per Prescription	-\$3.29	-\$2.54

With the recent implementation of AL SB252 Community Pharmacy Relief Act “fair pay clause” provision, which sets the Medicaid dispensing fee of \$10.64 as the baseline dispensing fee that independent pharmacies should get from PBMs under commercial plans, both rural and urban pharmacies would see substantial economic relief, particularly since average gross margins are the worst for commercial prescriptions.

Urban pharmacies would see a greater benefit given 44% of prescriptions filled are commercial, compared to 35% for rural pharmacies, assuming reimbursement is not lowered, or operating costs increase.

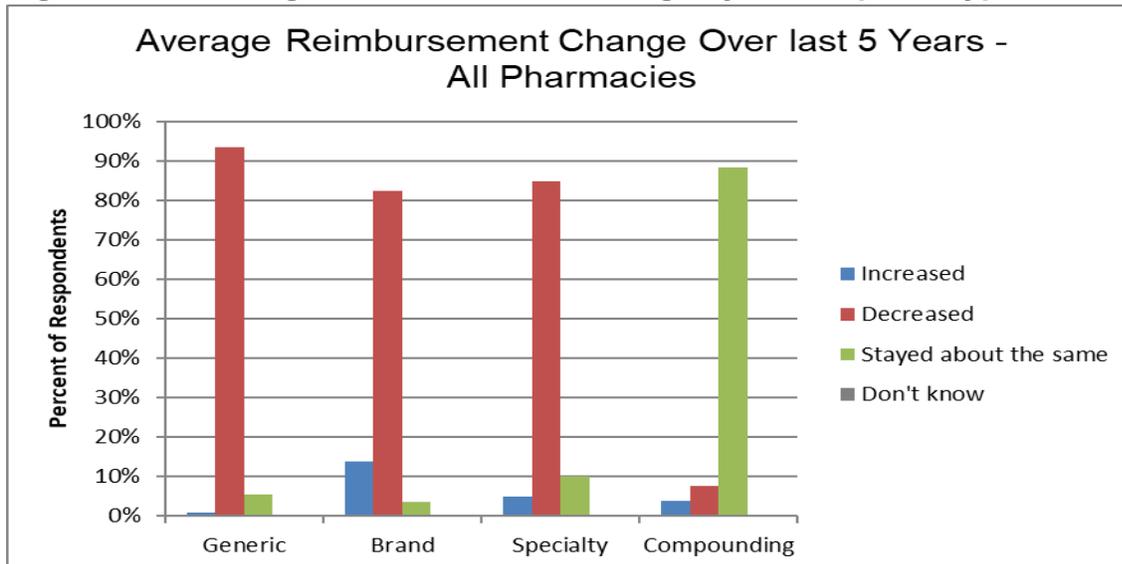


d. Prescription Reimbursement and Margin Trends

The community pharmacy survey also examined trends in reimbursement and margins. Trend data provided by respondents were typically self-reported, whereas the prescription volumes, gross margins and costs per fill reported in the previous section typically came from pharmacy billing/practice systems. Nevertheless, because most of the respondents were owners or managers of their pharmacy, self-reported trend data still has some validity and is important to understand particularly if these trends continue into the near future.

Table 8.12 shows that more than 80% of respondents say that reimbursement have declined over the last five years for generic, brand and specialty drugs, with over 90% reporting declines for generic drugs. Only compound drugs were reported to be relatively the same reimbursement over the last five years.

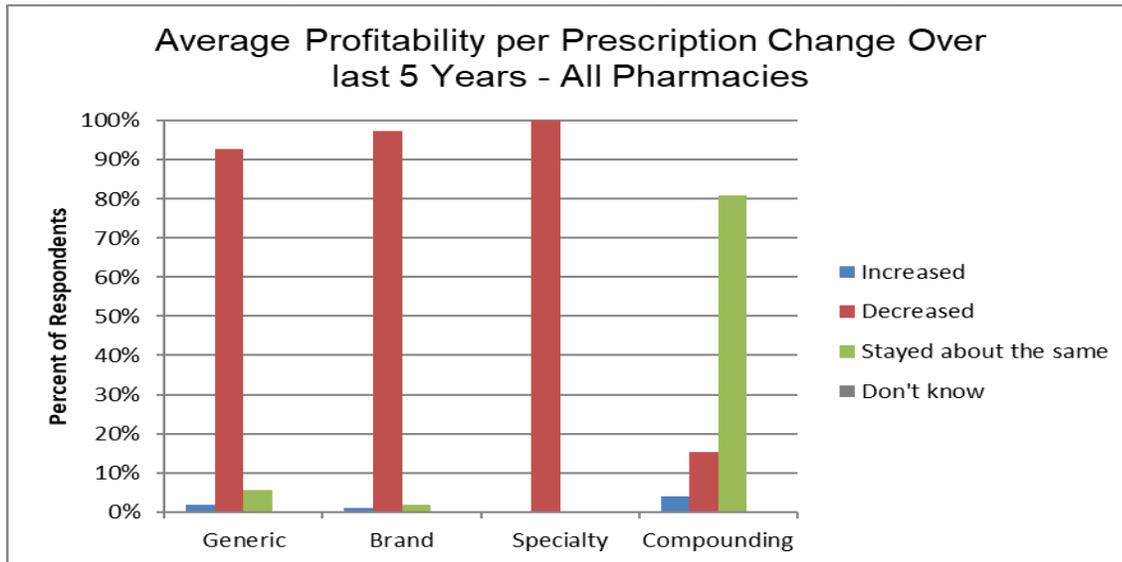
Figure 8.12: Average Reimbursement Change by Prescription Type





Over 90% of respondents reported declining profitability for generic, brand and specialty drugs, with compound drugs mostly reported to have the same margins (Figure 8.13).

Figure 8.13: Average Profitability Change by Prescription Type



For brand drugs, 14% of respondents said that reimbursements increased, but 97% said that profitability decreased.

These trends follow nationally reported data, and are concerning, particularly since community pharmacies have few levers to reduce operating costs in order to maintain margins.

e. Other Services

So how do pharmacies attempt to address this dilemma? One of the ways is to add and promote other goods and services. Nearly 100% of respondents offer over the counter medications, more than 80% offer vaccinations, and more than 60% say they offer health and beauty products, gifts and greeting cards (Figure 8.14). As expected, few community pharmacies (less than 10%) offer groceries.



Figure 8.14: Other Good and Services Offered



These services added marginal revenue benefit for pharmacies but were far more profitable than prescriptions (Table 8.11). The responses were similar for both urban and rural community pharmacies.

Table 8.11: Revenue and Margin Contribution from Other Good and Services

	Average Percent	Number of Valid Responses
All Pharmacies		
Percent of total store revenue from prescriptions:	96%	106
Average gross profit for prescriptions:	14%	65
Percent of total store revenue from other goods and services:	4%	102
Average gross profit for other goods and services:	24%	58

Respondents elaborated on the revenue and profit impact of providing other goods and services compared to prescription drugs at their pharmacies with notable comments, including:

“It is virtually impossible for a prescription oriented pharmacy to offset losses inflicted by PBMs with other lines of business in an economically depressed area such as Gadsden, Alabama.”



“Within the prescription category, we administered 4,075 vaccines in 2024, generating \$175,924.37 in gross margin. This represents ~38% of total prescription gross profit and ~13% of overall store gross profit. Vaccination services are generally not underwater and is part of the reason for our positive average overall.”

“As professionals, we should not have to expect our front end (Gift sales) to cover for the poor reimbursement by PBMs”

The comment on vaccinations, including the profitability of those services, suggest potentially adding other health and wellness services may be a key strategy employed by community pharmacies. The Alabama State Board of Pharmacy provides certifications for pharmacies to provide more clinically oriented services, often in partnership with local physicians, which are reimbursable by various insurers and drug benefit plans/PBMs. However, only three pharmacies reported having Collaborative Practice Agreement certifications (see Figure 8.15) and four reported being reimbursed for those services (Figure 8.16). The Alabama State Board of Pharmacy confirmed that only eight certifications had been issued.

Figure 8.15: Pharmacy Certifications for Clinical Services by Board of Pharmacy

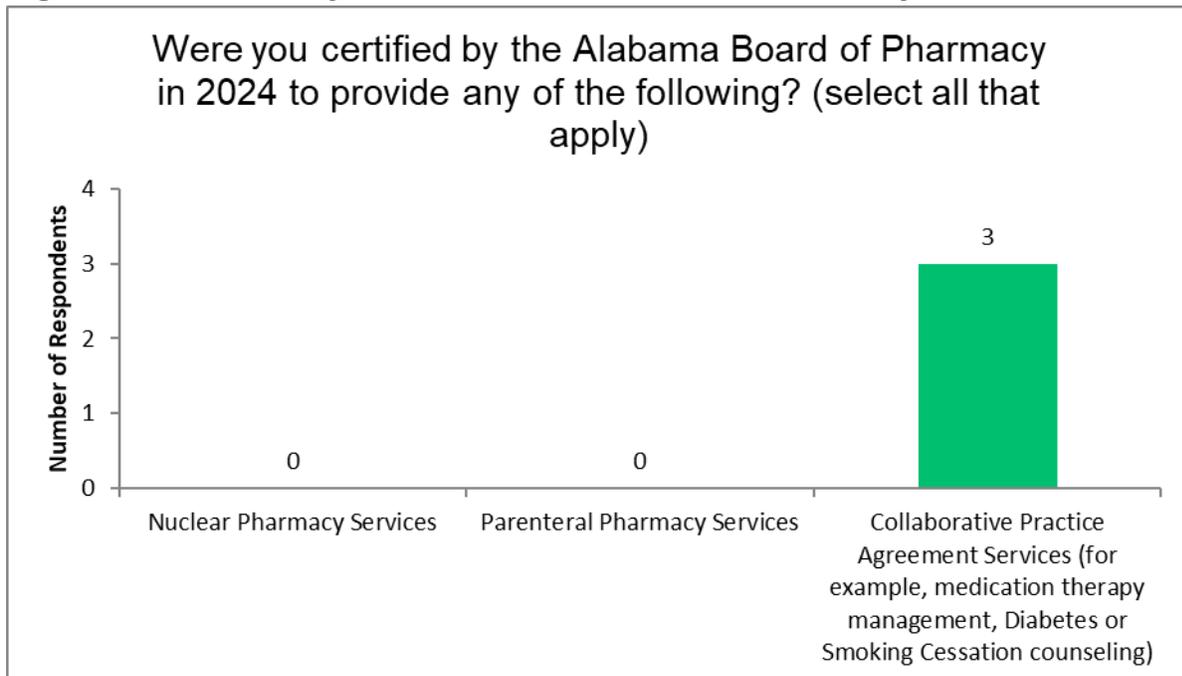
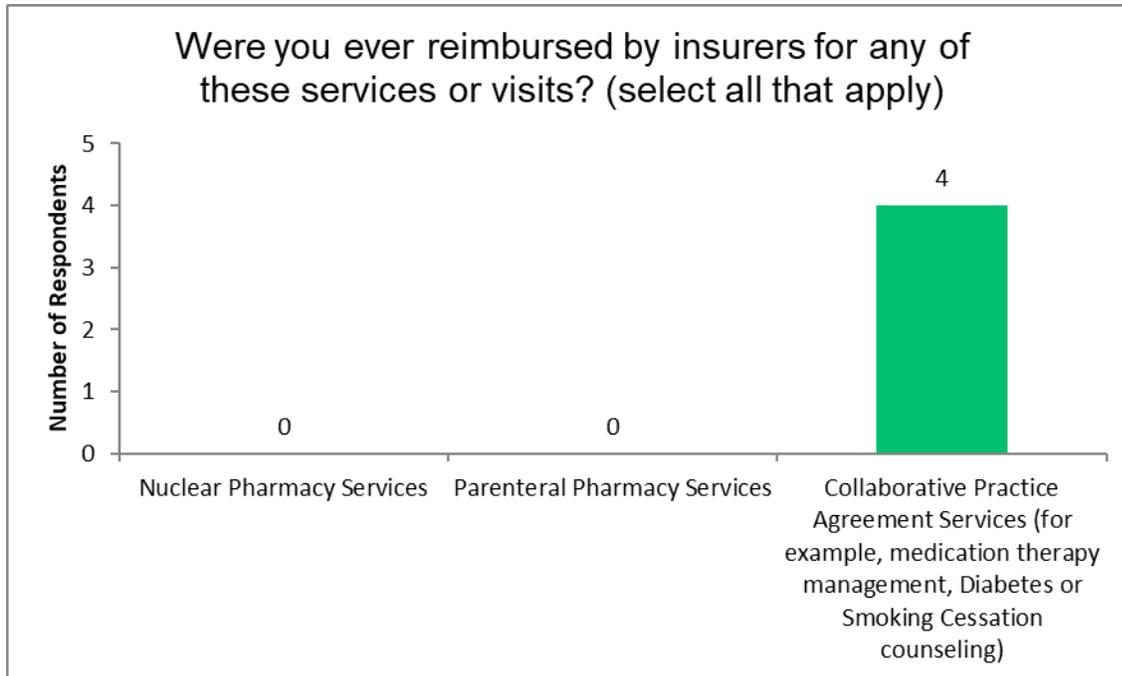




Figure 8.16: Pharmacy Reimbursement for Clinical Services



It is unclear as to why community pharmacies are not actively pursuing certifications for these services, particularly given they are reimbursable either under medical benefit or through PBMs under drug benefit plans. On large insurer we spoke to (see Stakeholder Interviews Section) commented that their PBM offered reimbursement for providing varied clinical services, but no community pharmacies participated, but grocery chain pharmacies were more than willing to.

There are also regional and national pharmacy clinically integrated networks that support pharmacies interested in providing various clinical, health and wellness services and assist with resources and the promotion of pharmacies to insurers/PBMs to be included in networks that accept referrals and reimbursement for these services. It may be that Alabama community pharmacies find it easier and/or more beneficial to participate in these other networks. Notable amongst these is CPESN, a national collaborative of over 2500 pharmacies sponsored by the NCPA, C.A.R.E.S Pharmacy Network, which lists 37 Alabama community pharmacies as participants, and Rural Research Alliance of Community Pharmacies, or RURAL-CP, a collaborative across five southeastern states through their university affiliated schools of pharmacy to promote best practices among rural pharmacies for patient care. Only CPESN appears to position pharmacies for services that can be directly reimbursed by insurers and PBMs.



The gap in participation of Alabama community pharmacies in networks and certification programs that offer an opportunity for additional reimbursement, support for providing enhanced patient care, and promotional ability to better position themselves in the community and with insurers and PBMs is even more telling when community pharmacies report they already provide many of these services for free (Figures 8.17 and 8.18).

Nearly 70% of both rural and urban pharmacies provide guidance on medication use and side effects, either required or considered as part of the prescription dispensing and reimbursement process.

Approximately 30% of urban pharmacies tend to provide other guidance and services such as understanding and preventing disease, diabetes prevention and maintenance, blood pressure monitoring and healthy lifestyle management, whereas less than 10% of rural pharmacies report providing these same services.

Figure 8.17: Health and Wellness Services Provided by Rural Pharmacies

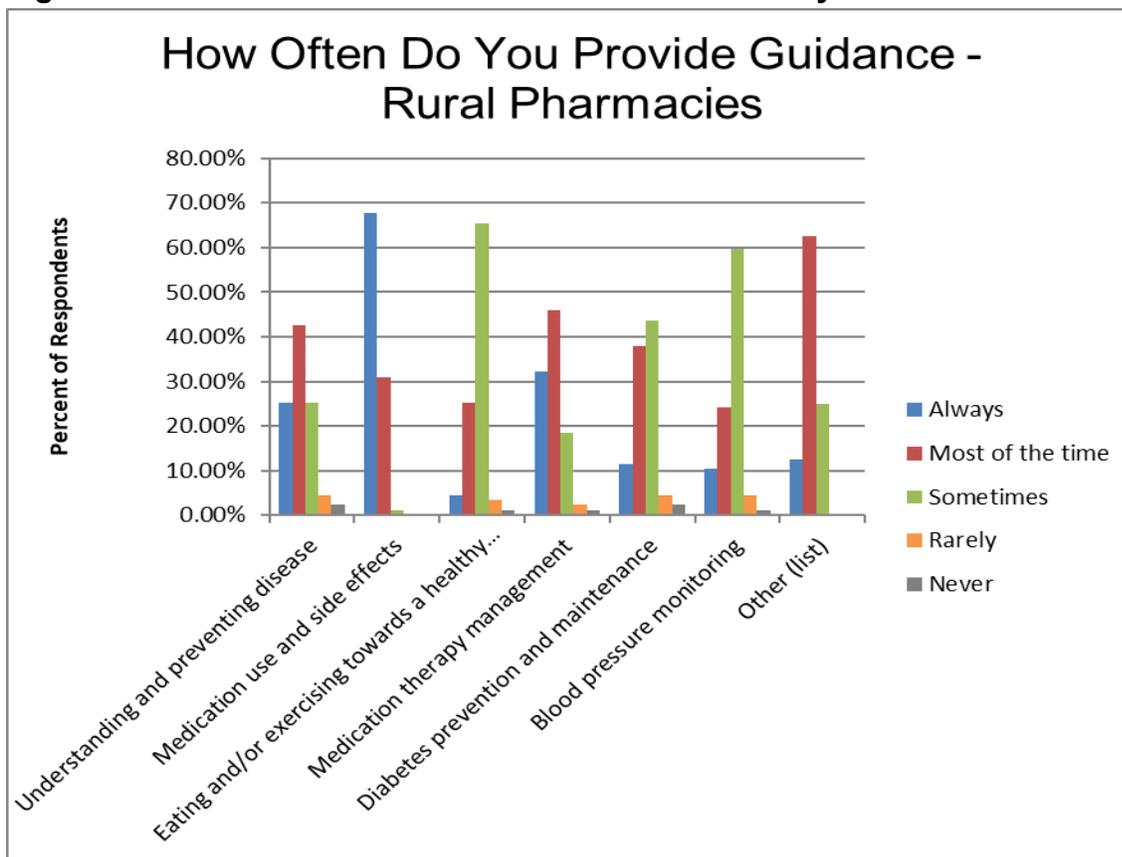
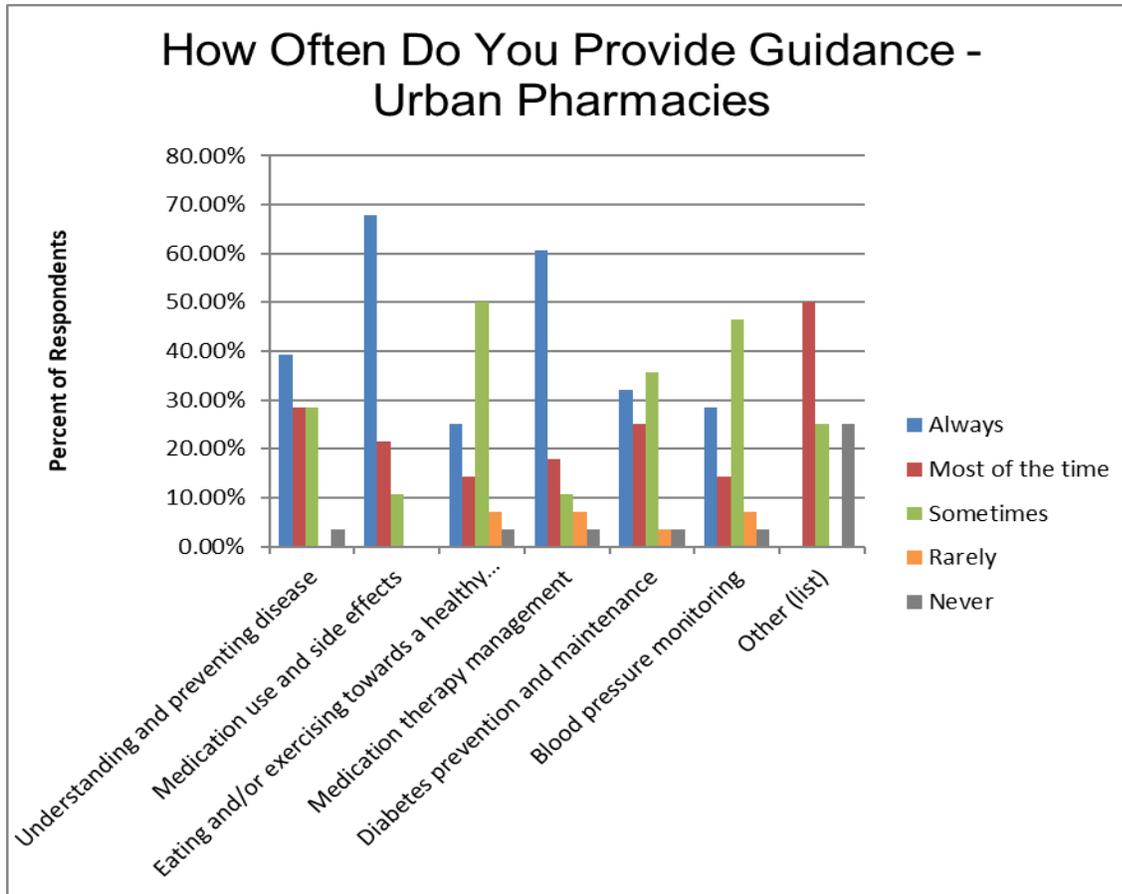




Figure 8.18 Health and Wellness Services Provided by Urban Pharmacies



Medication therapy management is provided by 60% of urban pharmacies and only 30% of rural pharmacies. This service is available by commercial entities and often paid for by insurers and PBMs but typically requires formal documentation and care management platforms to track, manage and engage enrolled members. Community pharmacies may not be incented to implement these kinds of technologies/platforms (as physicians were for electronic health records), or have the administrative time to do so, but a community pharmacist with the right tools, training and incentives would be the ideal stakeholder to conduct formal medication therapy management services.

As discussed earlier, community pharmacies are often the sole or one of a few care providers in their community. In asking for further comments about their role in providing additional guidance to patients, some notable responses were captured:

“Our patients rely on us for health, lifestyle, medication, dietary and diabetes education. many of them would have great difficulty navigating the health care



system without assistance from their pharmacy. we are the best qualified and most accessible health care provider in their lives.”

“Pharmacists are the most accessible healthcare professional. Anyone can pick up a phone and talk to a pharmacist at any time of the day for free. What other professional occupation is expected and/or required to provide professional education for free? All the more reason we need to be adequately reimbursed for RX's including an administrative cost (dispensing fee) that is commensurate of our time and expertise.”

“Insurance assistance! I spend more time helping patients with their insurance issues (PA/non-form/therapeutic interchange/co-pay assistance) than I do providing health care assistance. And then get paid below cost for it. I'm sick of it”

“Our pharmacy is accessible and available to our patients and convenient. We are the only option for delivery and available for after hours emergencies.”

f. PBM Network Contracting and Participation

Community pharmacies, and particularly those in rural parts of Alabama, clearly struggle with economic pressures of declining reimbursement and margins for prescriptions, awareness or ability in delivering value-add services that are reimbursable by insurers/PBMs, and the speed and effectiveness of strategies and tools to lower operating costs, including reducing the acquisition costs of drugs sufficiently enough to compete.

Pharmacy Services Administrative Organizations (PSAOs), entities that community pharmacies contract with to potentially help with these issues, appear to have mixed results for Alabama community pharmacies.



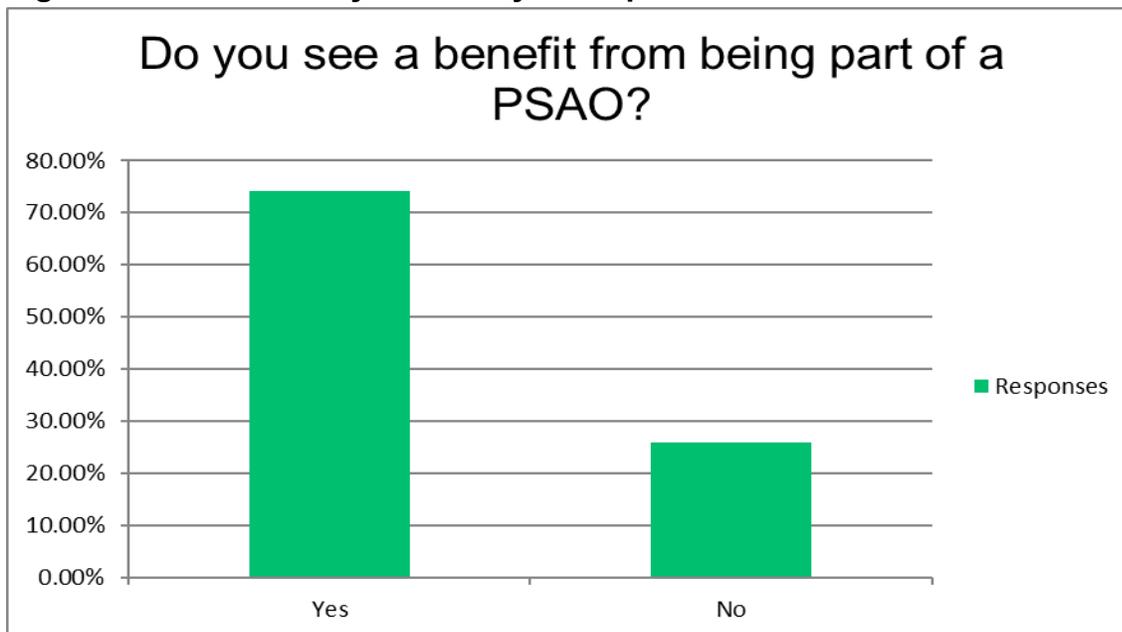
Nearly all (over 90%) community pharmacies responded that they use a PSAO. The leading PSAOs used are shown in Table 8.11 below.

Table 8.11: Top PSAOs Used by Community Pharmacies

PSAO	Count of Pharmacies using
Healthmart Atlas	64
AlignRx	19
APCI	14
Leadernet	11
Elevate	2
Epic	2
AAP	1
Cardinal Health AAP	1
Smartfill	1

Pharmacies can use more than one PSAO, particularly for different services such as drug purchasing vs PBM network contracting and participation. When asked if they perceived getting value from their PSAO, nearly 75% responded yes, while 25% said no (Figure 8.19).

Figure 8.19: Community Pharmacy Perception of PSAO Benefits





The most common perceived benefit (65% of all respondents) was PBM contracting and network access (Table 8.12). Surprisingly all other PSAO benefits were ranked substantially lower, with none receiving more than 12% of all respondents perceived benefits comments. Only six (7%) said better reimbursement was a benefit. Also notable is that only 7 respondents (8%) viewed group purchasing and lower cost of goods as a perceived benefit from their PSAOs. This may be in part due to some community pharmacies contracting separately with GPOs for purchasing, rather than with PSAOs.

Table 8.12: Summary of Top PSAO Benefits Perceived by Community Pharmacies

PSAO Perceived Benefit	# of Respondents	% of All Respondents
Contracting and Network Access	56	65.9%
Central Pay, Reconciliation and Payment Operations	10	11.8%
Industry Intelligence, Benchmarks and Updates	9	10.6%
Credentialing, OIG and Compliance Administration	7	8.2%
Group Purchasing and Lower Cost of Goods	7	8.2%
Reimbursement Strategy and Contract Guidance	6	7.1%
Better Reimbursement / Rates	6	7.1%
Reimbursement Enforcement (MAC/Appeals/Recovery)	4	4.7%
Advocacy and Representation	2	2.4%
General Support / Point of Contact	1	1.2%



Despite the majority of community pharmacy respondents saying they see a benefit from PSAOs on PBM contracting and network participation, nearly 65% still experience PBM network restrictions after having met all contractual terms and conditions (Figure 8.20)

Figure 8.20: PBM Network Restrictions After Meeting Contract Terms

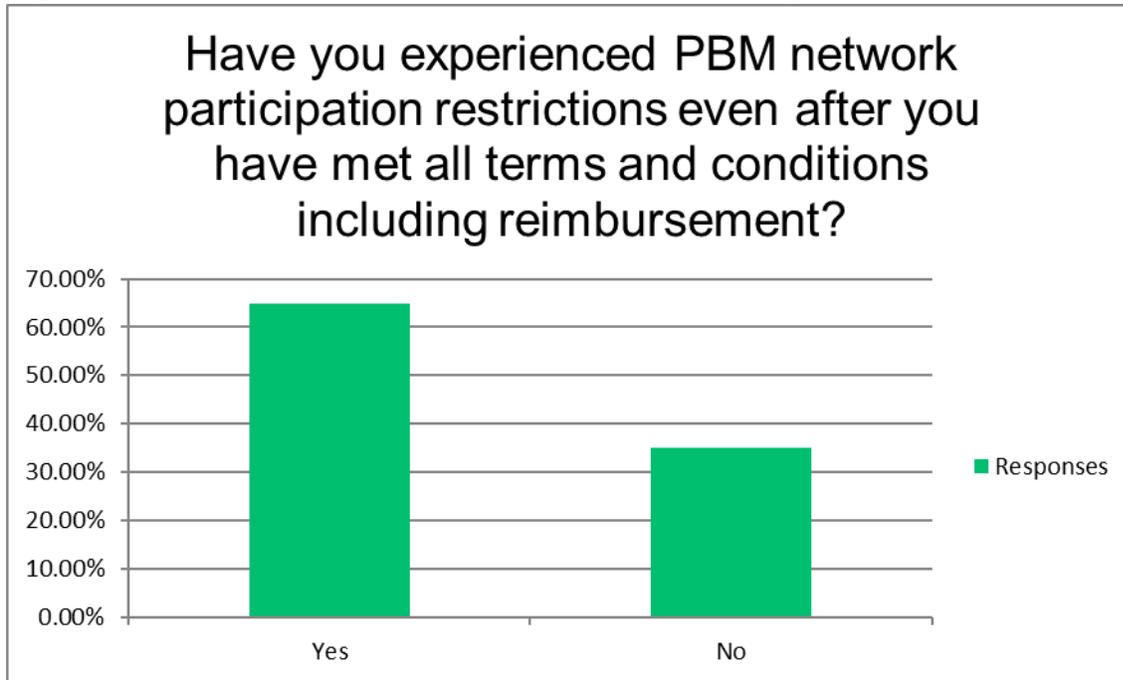


Table 8.13 summarizes the top network restrictions/issues identified by community pharmacies, after meeting contractual terms and conditions. Without access to PSAO or PBM contracts, it is hard to know with certainty whether the restrictions/issues listed in Table 8.13 are not specified / known in the contracts. Nevertheless, these are real issues that primarily affect the participation and referral of prescriptions to community pharmacies. Network status that is on par with other pharmacies remains the number one challenge for community pharmacies, with 34 respondents (50%) identifying problems with limited or closed networks, exclusions (e.g., TRICARE), inability to be listed as preferred, specialty exclusion even if accredited, or misleading or erroneous letters to members listing the pharmacy as non-network, terminated, or non-preferred.

Another 34% of community pharmacies identified steerage to PBM-owned chain pharmacies and mail order as the second most challenging issue with network participation.



Table 8.13 Top PBM Network Restrictions

PBM Network Restriction	# of Responses	% of Total Responses
Patient Steering / Mandatory Mail Order	23	34.3%
Closed / Limited Network / Denial of Contracting	15	22.4%
TRICARE Exclusion	6	9.0%
Specialty Network Exclusion even with Accreditation	6	9.0%
Misleading Letters to Members about Pharmacy Network Status	4	6.0%
Administrative Barriers, Additional Fees, Waiting Periods	4	6.0%
Not on Preferred Networks which have Low Reimbursements	3	4.5%
Audits, Claim Rejections Long After Dispensing	2	3.0%

These responses are somewhat surprising, given AL SB 252 and prior legislation including the Alabama PBM Licensure & Regulation Act addresses / prohibits nearly most of the restrictions identified by community pharmacies.

Expanding on PBM network challenges, we specifically asked community pharmacies to identify key provisions of network participation agreements that are burdensome. Over 80% of community pharmacies agreed there were burdensome requirements in their network participation agreement, with the top responses identified in Table 8.14.

Table 8.14: Top Burdensome Network Participation Requirements

Participation Agreement Burden	# of Responses	% of Total Responses
Low Reimbursement Rates, DIR and Clawbacks	68	30.9%
Excessive, Duplicative Audits % Clerical Error Recoupments	40	18.2%
Credentialing and Re-Credentialing	23	10.5%
Network Participation and Renewal Fees	19	8.6%
One Sided Take it or Leave it Contracts	17	7.7%
Heavy Data, Documentation and Reporting Workload	13	5.9%
PA and Formulary Restrictions such as Mandatory 90 Day or Brand Fills	12	5.5%
Gag Clauses Preventing Discussion of Costs & Alternatives	8	3.6%

Similar to Table 8.13, many of the responses provided in Table 8.14 are addressed / prohibited under AL SB 252 or prior legislation.



g. Preliminary Assessment of SB252 Impact on Community Pharmacies

Some of the responses in Tables 8.13 and 8.14 suggest that community pharmacies may not be fully aware of the details and benefits of AL SB 252, particularly since it was enacted in April 2025 with some components of the legislation effective October 1, 2025, and this survey was conducted in August and September 2025. We probed community pharmacies about their awareness of SB 252 and if they were, whether they are seeing any early impacts of the legislation.

From Table 8.15 below, it appears most community pharmacies are aware of the legislation, with 70-95% of respondents providing an opinion of whether a particular PBM practice has gotten better or worse for their community pharmacy since the legislation.

Table 8.15: Preliminary Impact Analysis of SB252 on Community Pharmacies

	Better		Worse		No Change		Don't Know	
Gag clause on prices	51.3%	58	6.2%	7	32.7%	37	9.7%	11
DIR Fees	15.0%	17	10.6%	12	61.9%	70	12.4%	14
GDR requirement	2.7%	3	11.8%	13	53.6%	59	31.8%	35
Clawbacks	15.9%	18	22.1%	25	47.8%	54	14.2%	16
Steerage to Mail Order pharmacy	3.5%	4	41.2%	47	44.7%	51	10.5%	12
Steerage to another pharmacy	3.5%	4	38.1%	43	46.9%	53	11.5%	13
Network Participation Fee	2.63%	3	14.91%	17	55.26%	63	27.19%	31
Drug Reimbursement	4.39%	5	72.81%	83	19.30%	22	3.51%	4
Dispensing fee	6.14%	7	42.98%	49	45.61%	52	5.26%	6
Audit	1.77%	2	36.28%	41	52.21%	59	9.73%	11

The only practice that the majority of respondents (51%) said got better was gag clauses (which the legislation prohibits). Meanwhile, an overwhelming majority (73%) of respondents said pharmacy reimbursements got worse as opposed to 4% who said they improved. While these responses are self-reported and there is a general negative perception and bias against PBMs, having this many pharmacies (83) respond that reimbursements got worse indicates some validity to this practice. If so, it suggests that PBMs may have lowered drug reimbursements in order to accommodate the increase dispensing fee requirement beginning October 1, 2025. While an unintended consequence of the law, this behavior is supported by economic theory, and also by a stakeholder who was interviewed and admitted this practice was occurring.



It would be relatively easy to confirm this practice with a review of PBM claims for commercial payers in Alabama.

In addition, 43% said dispensing fees were reduced, as opposed to 6% who said they increased. Further, 41% responded that steerage to mail order got worse, compared to 3.5% who said it got better, and similarly, 38% said steerage to other pharmacies got worse compared to 3.5% who said that practice improved.

Open ended comments by community pharmacies on how they perceived PBM practices have changed since the passage of SB 252 also reveals additional concerns, including the following:

“everything has gotten worse because there is no recourse or enforcement of the law”

“We are praying that SB252 will be enforced in order to eliminate under water claims”

“Since the passage of the Community Pharmacy Relief Act, we have continued to see PBMs disregard the law’s requirements. When we have alerted PBMs that their practices were not compliant, several have responded with a ‘take it or leave it’ stance and threatened network exclusion rather than correcting the violation. This creates an environment of intimidation and discourages pharmacies from holding PBMs accountable to the law.”

“Hoping that in October, the PBMs will follow SB252 and pay ingredient cost plus a fee. So much more needs to be done to regulate PBMs, but simply reimbursing a minimal above cost fee will allow us to survive to serve the patients of Alabama and fight another day for more reasonable PBM reform. Thank you so much for rallying to our cause in serving the health care needs of Alabamians.”

A concern over enforcement of the law, recourse and escalation available to pharmacies, and generally deteriorating relationship between PBMs and pharmacies was also evident among the comments provided by respondents.

A key feature in SB 252 is to increase dispensing fees equal to that of Alabama Medicaid for prescriptions filled by independent community pharmacies under



commercial plans, to an amount equal to \$10.64, effective October 1, 2025. This represents an estimated increase of \$8-\$10 in dispensing fees to pharmacies.

For an independent community pharmacy, using the average commercial prescription volumes identified in Table 8.3 above¹, this represents an increase of between \$390,000 - \$490,000 in revenue per independent community pharmacy in a rural area, and between \$758,000 - \$947,000 per independent community pharmacy in an urban area. These amounts are significant and support the economic behavior of PBMs in attempting to offset these additional payments through lower reimbursement or other means. If instead PBMs absorb these increased payments or pass on these increases through higher premiums or patient copays or any combination of these, community pharmacies should see significant relief, with these payments equating to 63-78% of the average cost to fill at a rural pharmacy, and 53-66% of the average cost to fill a prescription at an urban pharmacy (see Table 8.10 for average cost to fill for rural and urban pharmacies).

If these increased dispensing fees are passed on to PBM customers, the impact on premiums, and potential patient copayments, could be significant, and harm access in a different way. This unintended consequence should be evaluated for policy makers as other options are considered for PBM reform.

How do community pharmacies see the economic benefits of increased dispensing fees? The majority of respondents (66%) believe it will be helpful but would still struggle, while 19% believe it will allow them to have a viable business (Table 8.16).

Only two respondents said the increase would not make a dent either way to their bottom line, while 11 respondents (9%) either don't know yet or have some concerns about what PBMs might do, including lowering reimbursement.

¹ The State of AL Legislative Services Agency intention is that both commercial prescriptions and Medicare Part D prescriptions, which are administered by a commercial plan, would be eligible for the increased dispensing fees.



These responses show significant perceived value of SB 252’s provision of increased dispensing fees, in line with the actual data collected and analyzed above.

Table 8.16: Perceived Impact of Increased Dispensing Fees on Pharmacy Viability

How Will Increased Dispensing Fee Impact You?	# of Response	% of Responses
Will allow me to have a viable business entity	23	19.3%
Helpful, but I will still struggle to maintain a viable business	79	66.4%
Will not make a dent either way to my pharmacy’s bottom line	2	1.7%
Don’t know	8	6.7%
Depends/concerned that PBMs will try to recover the increase dispensing fee through other way	3	2.5%
Other	4	3.4%

h. General Outlook

Community pharmacies in Alabama have been resilient; many having been in business for over 45 years. But nationally, and in Alabama, reimbursements and profitability have been declining steadily over the last few years, and in Alabama, there has been a net decline of one community pharmacy per month over the last six years. As a result, community pharmacies are trying a variety of strategies over the next year to improve their financial performance (Table 8.17).

Table 8.17: Community Pharmacy Strategies to Improve Profitability and Growth in the Next Year

Strategy for Improving Profitability and Growth	# of Responses	% of Total Responses
Monetize service-based offerings such as LTC at home, vaccines, wellness screenings, OTC medications, price shopping, etc.	23	24.5%
Closure or no plan / at a loss	21	22.3%
Cost control such as inventory, labor, expenses	12	12.8%
Drop/refuse plans or claims that are not profitable	11	11.7%
Bill enforcement / future PBM reform / legislative relief	9	9.6%
Add front end retail such as gift shop and non-Rx sales such as photo kiosk	5	5.3%
Central fill / better acquisition cost terms with wholesalers	4	4.3%



The responses provided showed sharp economic observations and strategies being employed. Over 30% of responding pharmacies plan to add / increase other services besides prescriptions, such as OTC medications, vaccinations, wellness screenings, front end gift and other retail products, and even LTC at home services. This strategy makes sense given earlier data which showed some of these services are not only very profitable but can add \$100,000's of top line revenue. Another 12% said they will modify payer / product mix to only accept prescriptions that are profitable. While this makes economic sense, community pharmacies, particularly in rural areas, will have to balance access concerns and impacts to patient retention.

An additional 7% of respondents said they would focus on costs such as labor and inventory, including securing better terms with wholesalers/GPOs for drug acquisition costs, or moving to central fill arrangements for greater cost efficiencies.

While these responses by community pharmacies show resolve and a sharp understanding of the economics of their business, 22% of respondents did admit that they have no plan or are contemplating closure. This is of significant concern, and to validate this response, we specifically asked if pharmacies plan to stay in business in the near future.



Of rural community pharmacy responses (Figure 8.21), 5,6% said they do not plan to stay in business in the near future, while 3.4% of urban community pharmacies (Figure 8.22) said they do not plan to stay in business.

Figure 8.21: Rural Community Pharmacies Intention to Stay in Business

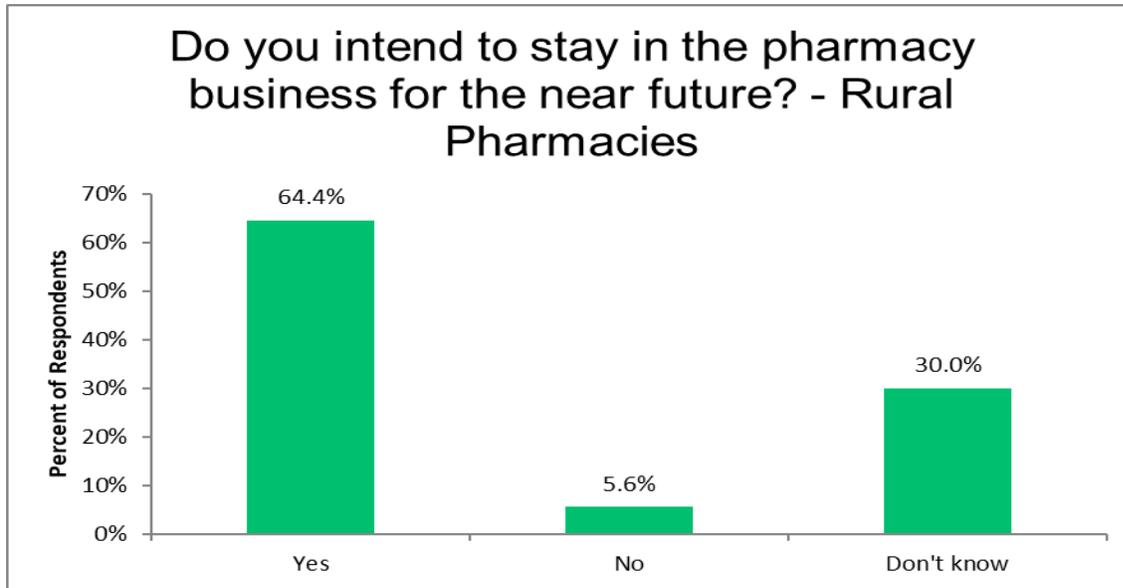
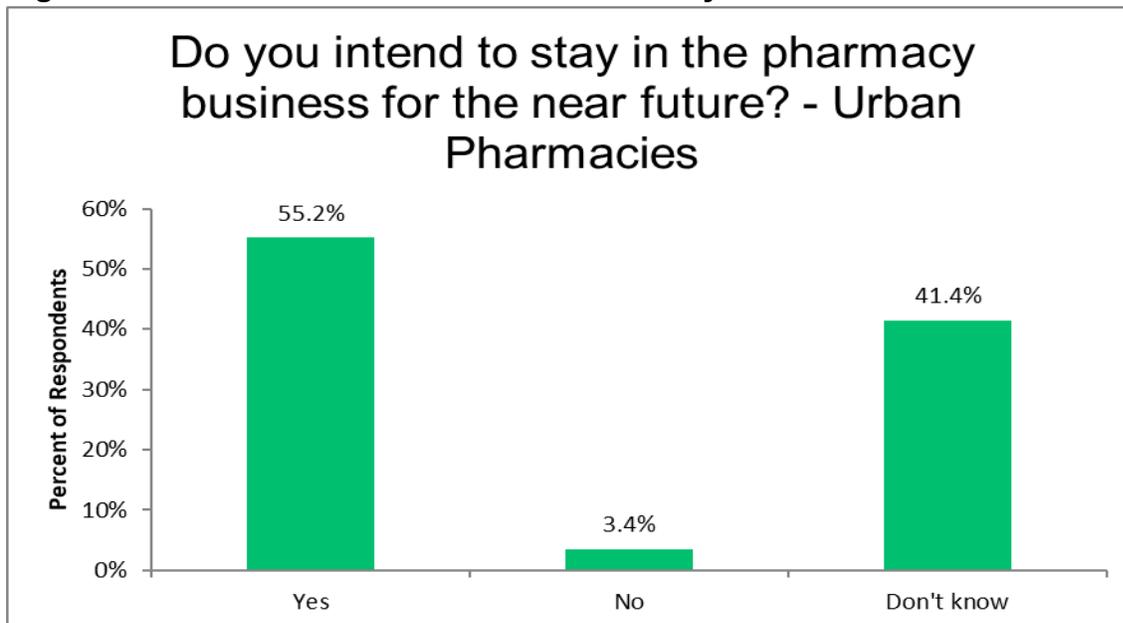


Figure 8.22 Urban Pharmacies Intention to Stay in Business





This data suggests that community pharmacy closures in Alabama in 2026 may equal that of 2023, the worst year in the last six years, when nearly 6% of community pharmacies closed.



9. Regulatory Review and Summary Analysis

Alabama is not unique when it comes to economic pressures, inefficiencies and opacity in the vertical chain of prescription drug benefit, distribution and management. States across the country have been active in developing legislation and regulations primarily aimed at PBM practices, but other stakeholders as well, in attempting to create a more level playing field, solve persistent problems that the market has not been able to, and bring greater transparency.

We reviewed regulations in all 50 states that dealt with PBMs and prescription drug costs and access and identified 1,070 distinct regulations. To understand these regulations more effectively and practically, we mapped each of the 1,070 regulations into one of five categories that they primarily addressed. The purpose of this exercise was to find unique and innovative regulations and enhance the ability to identify the type of regulatory activity of interest more efficiently.

The five categories developed and their general description were as follows:

- Drug Prices – Regulations that should have an impact on drug prices, including those that address transparency or patient cost-sharing caps, those that prohibit PBMs from restricting pharmacists' ability to disclose lower-cost alternatives, preventing PBMs from charging cost-sharing amounts that exceed the pharmacy's actual cost for the drug, etc.
- Patient Access – Regulations that enhance patient choice of pharmacy and that enhance patients' access to information (drug costs, etc.)
- Pharmacies (Solvency/Access) – These regulations discuss pharmacy audit standards and appeals, dispensing fees, minimum reimbursements, PBMs' steering toward affiliated pharmacies, limits on restricting delivery options, 340B protections, etc.
- PBM Administration – These regulations prohibited PBMs from restricting pharmacies in various ways, required PBM transparency and reporting, prohibited PBMs from charging retroactive fees, utilizing spread pricing, etc.
- Drug Acquisition Costs – These regulations require a pharmaceutical manufacturer or a wholesale pharmacy distributor that sells or distributes insulin to offer entities in the state the lowest wholesale price for insulin, require State



Affordability boards to identify drugs with wholesale acquisition costs above certain thresholds or instances of price gouging, set upper payment limits, prohibits PBMs from providing reimbursement rates for 340B drugs that are less than the national average drug acquisition cost, etc.

a. Summary Analysis

A summary of the categories and the distribution of regulations by each category is shown in Table 9.1 below.

Table 9.1: Total Regulations by Category of Regulatory Activity

Number of Regulations by Category*	
Drug Prices	236
Patient Access	20
Pharmacies (e.g. solvency, access)	98
PBM Administration	847
Drug Acquisition Costs	66

*A regulation can be in more than one category, and some regulations did not fall into these categories.

Expectedly, the vast majority of regulations addressed PBM administration (847), followed by drug prices (236). In contrast, there was significantly less regulatory activity around patient access (20) and drug acquisition costs (66).



We also mapped regulatory activity by state and by category, as shown in Table 9.2.

Table 9.2 Regulatory Activity by State and Type*

	Total	Drug Prices	Patient Access	Pharmacies (e.g. solvency, access)	PBM Administration	Drug Acquisition Costs
Alabama	10	1	2	3	8	1
Alaska	10	2	1	3	10	0
Arizona	18	5	1	4	16	0
Arkansas	32	5	0	5	27	2
California	23	10	1	2	15	1
Colorado	38	12	0	2	27	4
Connecticut	14	5	0	1	10	1
Delaware	26	9	0	2	19	1
Florida	16	3	0	2	9	0
Georgia	18	4	0	2	16	1
Hawaii	10	1	1	1	8	2
Idaho	6	2	0	0	4	1
Illinois	15	4	1	0	11	2
Indiana	26	6	0	2	21	2
Iowa	15	3	0	1	15	1
Kansas	6	0	1	1	6	0
Kentucky	26	3	0	4	23	0
Louisiana	39	7	1	3	35	0
Maine	23	12	1	1	9	1
Maryland	39	10	0	2	31	5
Massachusetts	7	1	1	0	5	1
Michigan	22	4	0	1	21	3
Minnesota	20	6	0	0	15	4
Mississippi	13	3	0	2	11	1
Missouri	6	1	0	2	6	0
Montana	19	1	0	2	19	1
Nebraska	16	2	0	2	14	2
Nevada	16	5	0	0	9	2
New Hampshire	22	4	0	2	17	1
New Jersey	35	4	1	2	29	0
New Mexico	9	4	0	1	2	1
New York	37	12	2	2	23	2
North Carolina	16	1	0	1	16	1
North Dakota	27	8	0	3	19	2



	Total	Drug Prices	Patient Access	Pharmacies (e.g. solvency, access)	PBM Administration	Drug Acquisition Costs
Ohio	19	1	0	1	19	1
Oklahoma	32	5	2	6	27	1
Oregon	33	11	0	4	21	5
Pennsylvania	15	2	0	2	15	1
Rhode Island	11	3	1	2	9	1
South Carolina	14	1	0	2	14	0
South Dakota	36	5	2	4	32	1
Tennessee	22	2	0	3	19	1
Texas	52	8	1	5	42	0
Utah	21	4	0	2	16	2
Vermont	32	10	0	1	23	3
Virginia	32	4	0	1	28	1
Washington	27	9	0	1	18	2
West Virginia	25	7	0	2	18	1
Wisconsin	14	2	0	1	12	0
Wyoming	10	2	0	0	8	0

*A regulation can be in more than one category, and some regulations did not fall into these categories.

A summary of the most active states by regulatory category is shown in Table 9.3 below.

Table 9.3: States with the Most Regulations by Category*

Category	State	Number of Regulations
Drug Prices	Colorado, Maine, New York	12
Patient Access	Alabama, New York, Oklahoma, South Dakota	2
Pharmacies (e.g. solvency, access)	Oklahoma	6
PBM Administration	Texas	42
Drug Acquisition Costs	Maryland, Oregon	5
Total	Texas	52

* A regulation can be in more than one category, and some regulations did not fall into these categories



b. Detailed Analysis

To better understand the breadth and depth of regulations, a more detailed assessment of some of the key regulatory initiatives under each of the five categories, along with identification of the states implementing this type of regulatory activity, is provided below.

i. Drug Price

- a. Prevents or prohibits spread pricing. Prohibits a PBM from charging a health plan for a drug a different amount than that paid to the pharmacy for filling the prescription and/or requires PBM disclosure of spread pricing practices. States: AR, CO, DE, FL, ID, IL, IN, LA, MD, MI, MN, VA, VT, WA, WV:^{73,74}
- b. Patient cost-sharing caps. Caps the total amount that a carrier can require from certain covered patients. States: AL, AZ, CA, CO, CT, DE, FL, IL, IN, KY, LA, ME, MD, MN, NJ, NM, NY, ND, OK, OR, RI, TX, UT, VT, VA, WA, WV.
- c. Requires PBMs to report rebate or other information to the state. Requires a PBM to report information, including aggregate rebates, to certain state departments, most often to the Insurance Commissioner. States: AL, AR, CA, CO, CT, IA, ID, IN, KY, LA, ME, MI, MN, MT, ND, NH, NJ, NM, NV, NY, OR, UT, VA, WA, WI, WV:^{75,76}
- d. Requires PBMs to share rebate or other information to health plans. Requires PBMs to share with health plans information such as total/aggregate rebates negotiated with manufacturers; amounts retained or passed to patients; and amounts paid by an insurer to a PBM for pharmacy services. States: AK, AL, CA, GA, ID, MA, MN, NY, SD, VT, WV:^{77,78}
- e. Gag-clause and clawback prohibitions. Prohibits PBMs from prohibiting pharmacies and pharmacists from informing patients about lower-cost alternatives or selling them when available. Also prohibits PBMs or insurers from pocketing the difference between a patient's copay and the drug's actual cost when the copay is higher. States: AK, AZ, AR, CA, CO, CT, DE, FL, GA, HI, IN, IA, KY, LA, ME, MD, MI, MN, MS, MO, MT, NE, NC, ND, OK, OR, PA, RI, SC, SD, TN, TX, VT, VA, WV, WI.
- f. Establishes Maximum Allowable Cost (MAC) list requirements. MAC list requirements include (i) Establishing requirements for placing drugs



on a MAC list (e.g. therapeutically equivalent generics must be rated 'A', 'B', or 'AB' in the FDA's green or orange book); (ii) Requiring PBMs to provide to a pharmacy, at the beginning of each contract or upon renewal, the sources utilized to determine the MAC list used by the PBM; (iii) MAC lists must be updated every 'X' days, noting changes from the previous list and PBMs must allow "reasonable" appeals processes for challenging changes to a MAC list. States: AK, AR, AZ, DE, GA, IA, ID, IL, IN, KS, LA, MD, ME, MI, MN, NE, NH, NM, OR, SC, SD, TX, VT, WV: ^{79,80}

- g. Formulary/rebate guardrails. Curbs exclusionary rebate deals that can raise effective prices. States: Multi-state (national):^{81,82}
- h. Affordability boards. Establishes or amends state affordability boards and outlines their responsibilities pertaining to high-cost drug identification and review. States: CO, ME, MD, MN, NH, OR, VT, WA.
- i. Price gouging prohibitions. Prohibits a manufacturer or wholesale drug distributor from engaging in price gouging. States: IL, MA, MN, NY.
- j. Average Wholesale Price. Requires insurers of different sizes to report on a specified number of most frequently prescribed drugs by average wholesale price for each drug. States: VT.

ii. Patient Access

- a. Establishes pharmacy network requirements. Prohibits PBMs from restricting networks to affiliated pharmacies or requiring mail-order use and/or establishes network adequacy requirements for PBM pharmacy networks. States: ID, KY, ND, OR, PA, UT, VA, WA:^{83,84}
- b. Cost-sharing caps. Caps the total amount that a carrier can require from patients. States: ME, NJ.
- c. Prohibits steerage away from and discrimination against non-affiliated pharmacies. Prohibits a PBM from reimbursing a non-affiliated pharmacy less than an affiliate; prohibits refusal to contract with, or imposing more restrictive terms on, a non-affiliate. States: AL, AR, CO, DE, GA, IA, IN, KY, LA, MD, MI, MN, ND, NM, PA, SC, SD, TN, TX, UT, VA, VT, WA, WV:^{85,86,87}
- d. Prohibits discrimination against 340B-covered entities. Prohibits a PBM from reimbursing a 340B-covered entity/contract pharmacy less than non-340B network pharmacies; prohibits refusal to contract or more restrictive terms for 340B entities/contract pharmacies. States: AR, CO, CT, DE, GA, IA, IL, IN, MD, MI, MN, MS, MT, NC, ND, NE, NH, NV, OH, OR, SD, TN, UT, VA, VT, WV:^{88,89,90}



iii. Pharmacy solvency/access

- a. Pharmacy audit standards and appeals. Establishes PBM audit standards for pharmacies, including notice, scope, and appeals. States: AL, AZ, AR, CO, CT, DE, FL, GA, IN, IA, KS, KY, LA, ME, MD, MI, MS, MO, MY, NE, NH, NJ, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, WA, WV, WI.
- b. Prohibits clawbacks/retroactive denials. Prohibits PBMs from retroactively reducing payment on a clean claim after point of sale, except due to audit/adjudication. States: AL, AR, CO, GA, IA, ID, IN, KY, LA, MD, ME, MI, MN, ND, OK, PA, SC, SD, UT, WA, WI, WV:⁹¹
- c. Establishes reimbursement requirements. May include allowing Medicaid to change PBM–pharmacy reimbursement rates; prohibiting PBMs from paying below NADAC or WAC; and establishing appeals processes for MAC/reimbursement disputes. States: AL, AR, CO, GA, KY, LA, MD, NM, NY, OK, OR, TN, UT, VA, WA, WV:^{92,93}
- d. Establishes Maximum Allowable Cost (MAC) list requirements. Maximum Allowable Cost (MAC) list requirements significantly affect pharmacy solvency by directly impacting reimbursement rates and patient access by potentially causing pharmacies to stop stocking “underwater” medications or, in extreme cases, close down. Pharmacies need updated MAC pricing lists. MAC list requirements include:
 - i. Establishing requirements for placing drugs on a MAC list (e.g. therapeutically equivalent generics must be rated ‘A’, ‘B’, or ‘AB’ in the FDA’s green or orange book);
 - ii. Requiring PBMs to provide to a pharmacy, at the beginning of each contract or upon renewal, the sources utilized to determine the MAC list used by the PBM;
 - iii. MAC lists must be updated every ‘X’ days, noting changes from the previous list and PBMs must allow “reasonable” appeals processes for challenging changes to a MAC list.
 - i. States: AK, AR, AZ, DE, GA, IA, ID, IL, IN, KS, LA, MD, ME, MI, MN, NE, NH, NM, OR, SC, SD, TX, VT, WV
Sources:^{94, 95}



iv. PBM Administration

- b. Transparency and anti-gag clauses. Prohibits pharmacy benefit managers (PBMs) from restricting pharmacies and pharmacists from disclosing cost information to patients about alternative drugs or other services and costs. May also require that PBMs provide an annual report (aggregate rebates, amounts not passed through, and spread-pricing differentials) and notify clients that the report is available. States: AL, AK, AZ, AR, CA, CO, CT, DE, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VI, WA, WV, WI, WY.
- c. Maximum allowable cost (MAC) pricing and transparency requirements. Requires PBMs to make available their MAC list, requires PBMs to share with pharmacies the sources used to determine MAC pricing, or requires PBMs to establish an appeals process by which pharmacies can appeal MAC pricing reimbursement. States: AK, AZ, AR, DE, GA, ID, IL, IN, KS, MD, MN, NJ, NC, ND, OR, SD, TX, UT, VT, VI, WA, WV, WI, WY.
- d. Spread pricing. Prohibits PBM spread pricing (charging a health plan more for a drug than it pays the pharmacy for that same drug). States: AZ, AR, CA, CO, CT, DE, FL, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MY, NE, NH, NJ, NY, NC, ND, OH, OK, OR, PA, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI.
- e. Creates regulations for the state or a contracted party's audit of a PBM. Allows a party in contract with a PBM to audit for contract compliance (often including manufacturer rebate amounts). States: AL, AR, CT, IN, MI, PA, SD, TX, VA, WI:⁹⁶
- f. Creates regulations for a PBM's audit of a pharmacy. Requires notice before audit; the same standards for affiliates and non-affiliates; and specific requirements for recoupment/chargebacks. States: AK, AZ, IN, MI, MN, NE, OK, WI, WV:⁹⁷
- g. Requires PBM licensure/registration. Requires a PBM to be licensed, registered, or to have obtained a certificate with the state before operating or conducting business as a PBM. Typically requires renewal of licensing every one to three years. States: AK, AL, AR, AZ, DE, FL, HI, ID, IL, IN, KS, LA, MD, ME, MI, MN, MT, NC, NE, NH, NJ, NM, NY, OR, SC, SD, TN, UT, VA, VT, WA, WI, WV:^{98, 99}



- h. Requires PBMs to report rebate or other information to the state. Requires a PBM to report information, including aggregate rebates, to certain state departments, most often to the Insurance Commissioner. States: AL, AR, CA, CO, CT, IA, ID, IN, KY, LA, ME, MI, MN, MT, ND, NH, NJ, NM, NV, NY, OR, UT, VA, WA, WI, WV:^{100,101}

v. Drug Acquisition Costs

- i. 340B carve-outs and anti-discrimination. Prohibits a PBM from imposing any requirements, conditions, or exclusions that discriminate against a provider or pharmacy registered with the 340B discount drug purchasing program. Discrimination includes but is not limited to: payment terms, reimbursement methodologies, or other terms distinguishing between covered drugs and other drugs accounting for the availability of discounts under the 340B drug program; requiring a 340B covered entity or 340B specified pharmacy to identify covered drugs or their costs; refusing to contract or terminating a contract with a 340B covered entity; interfering with an individual's choice to receive a drug from a 340B covered entity; or restricting or prohibiting a 340B covered entity from raising a grievance or speaking publicly about any payer violating the provisions of this measure. States: AL, AR, CA, CO, DE, HI, ID, IL, IN, IA, ME, MD, MI, MN, MS, MT, NE, NV, NH, NM, NY, ND, OH, OK, OR, RI, SD, TN, UT, VT, VA, WA, WV.
- j. MAC pricing and appeals. Requires PBMs to disclose methods for MAC appeals or provide pharmacies with a MAC list. States: GA, MD, MA, MN, NE, NC, OR, VT.
- k. Affordability Boards. Establishes or amends State Affordability Boards and outlines their responsibilities pertaining to high-cost drug identification and review. States: CO, MD, MN, OR, WA.

c. Studies of the Impacts of Regulations

- i. Studies showing the impact of MAC list requirements and transparency

There aren't many rigorous, causal empirical research studies (e.g., difference-in-differences) on the impact of MAC-list regulation / transparency, but there are some relevant evaluations, descriptive studies, and policy analyses. The available studies / reports show the following:

- a. Evaluation of the Maximum Allowable Cost program (older academic study)



- There is a peer-reviewed (or at least academic) evaluation that looked at MAC programs in *five states*. It estimated “MAC-related reimbursement savings” in Medicaid – for their initial set of MAC product-dosage forms, the study found total savings of about \$926,000/year across those states, (~0.5–1.4% of total Medicaid drug reimbursements depending on the state).¹⁰²
- Implication: MAC programs *do* generate savings for payers (at least per this older evaluation), but the scale for just a handful of MAC’d drugs is relatively modest compared to total spend.
- Limitation: This study is old (or at least not reflecting today’s PBM setup); it does *not* directly analyze the effect of MAC-list transparency or state transparency requirements on pharmacies (margins, closures, negotiation, etc.).

b. GAO report on PBM regulation (2024)

- The GAO’s Selected States’ Regulation of PBMs report notes that four states explicitly regulate how PBMs build or maintain MAC lists. For example, Louisiana requires PBMs to provide pharmacies with a full list of the drugs on their MAC list and disclose the “sources used to obtain drug price data.”¹⁰³
- The GAO also reports stakeholder evidence (from pharmacy associations) that MAC-transparency laws have, in at least some cases, led to increased reimbursements: “they have seen increased pharmacy reimbursements ... following the enactment of MAC list pricing legislation.”¹⁰⁴
- Implication: There is qualitative / stakeholder-reported evidence that transparency requirements help pharmacies challenge unfair MAC rates.
- Limitation: The GAO report is descriptive and based on interviews / stakeholder feedback — not a rigorous econometric causal evaluation.



ii. Studies showing the impact of non-steerage laws

There is very limited rigorous empirical research that measures the direct impact of non-steerage (anti-steering) laws on outcomes like pharmacy survival, costs, or access. However, there is some related work, plus important gaps.

a. JAMA Health Forum study on steering in Medicare Part D

- A recent study (Kakani et al.) looked at Medicare Part D claims and found that insurer/PBM-owned pharmacies captured a large share of fills and that there is evidence of steering toward those pharmacies.¹⁰⁵
- The authors note that despite Medicare’s “any willing pharmacy” protections (which limit exclusion), insurer-PBMs may still use preferred-network designs, marketing, or other levers to steer patients.
- Implication for non-steerage laws: This provides indirect evidence that steering is happening and that “any willing pharmacy” policies may blunt it somewhat, but it does *not* measure the effects of a newly enacted non-steering law on outcomes like pharmacy closures or patient costs.

b. Scoping review on PBM impact on community pharmacies

- A systematic (scoping) review examined literature from 2010–2022 about PBM effects on community pharmacy finances.¹⁰⁶
- The review found *very few* studies that quantify the financial impact of PBMs; importantly, none of the identified studies rigorously estimate the effects of steering or non-steering laws.
- Implication: There’s a major evidence gap in terms of financial / business-model outcomes tied to steering regulation and recommendation for more empirical work including how non-steering rule change the business environment.¹⁰⁷



iii. Studies showing the impact of states mandating increases in dispensing fees

There are few rigorous, causal “impact” studies that evaluate what happens after states mandate higher dispensing fees (for example, requiring commercial plans or PBMs to pay dispensing fees at least equal to the state Medicaid dispensing fee). What does exist is mostly (1) state “cost-of-dispensing” (COD) studies and surveys used to set fees, (2) descriptive/state-policy compilations that list which states mandate fees, and (3) policy/advocacy modeling that projects spending impacts.

- a. NACDS / NCPA / NASP — National Cost of Dispensing (COD) studies (2018 / 2020 survey reports). These industry-sponsored COD reports estimate the per-prescription cost to dispense (e.g., mean COD \approx \$12.4 in the national survey). Policymakers often cite these when setting Medicaid dispensing fees or arguing for parity. They document that many state Medicaid fees are below estimated COD. (See NACDS COD report).¹⁰⁸
- b. State COD / survey reports (example: Maryland 2018 COD report; Virginia DMAS 2019 survey cited locally). Several states have performed their own COD reviews or contractor surveys to justify fee levels; Maryland’s 2018/2019 COD report and Virginia’s DMAS survey (cited in reporting) conclude that a \$10–\$11 dispensing fee would more closely approximate costs for Medicaid prescriptions in those states. These are descriptive cost studies, not impact evaluations.^{109,110}

iv. Studies showing the impact of states mandating the reporting and transparency of PBMs

There are some studies and reports, but rigorous, causal outcomes are still limited.

- a. The main econometric / outcomes study: Scanlon on PBM disclosure laws.¹¹¹ Uses a large claims dataset and a panel of state-level PBM disclosure laws, broken into:



- Inter-firm disclosure: PBMs must disclose pricing / rebate information to *other firms* (e.g., plan sponsors/insurers, possibly manufacturers). Key findings:
 - Decreases patient out-of-pocket costs at the pharmacy counter.
 - Increases health plan spending on drugs.
 - Effects differ by market structure:
 - For monopoly drugs, disclosure tends to reduce total costs.
 - For competitive generics, disclosure can increase plan costs.
- Regulatory disclosure: PBMs must report information to state regulators.
 - On average, there is no large overall effect on drug costs across all markets.
 - But in markets/segments where the author infers greater regulator attention, there is evidence of reduced drug costs after regulatory disclosure rules go into effect.
- Implication: transparency/ reporting rules *do* change behavior, but the direction and magnitude depend heavily on who sees the data (regulators vs plans), whether the drug market is competitive vs concentrated, and how actively regulators use the information.

b. Descriptive / qualitative evidence from state experience. ¹¹²

- A federal evaluation of five states with relatively robust PBM regulatory frameworks (licensure, reporting, transparency, network rules, etc.) and clear reporting requirements and definition reported:
 - Better ability to monitor PBM compliance.



- More consistent enforcement.
- Easier identification of problematic practices (e.g., spread pricing, unexplained fees).
- Pharmacy associations reported that after some states implemented transparency/reporting rules (including MAC-list transparency), they observed increases in pharmacy reimbursements in at least some cases.
- Limitations: Not a causal study, but it directly addresses the impact of reporting and transparency requirements on regulators' ability to oversee PBMs. Does not provide formal estimates of changes in drug prices, plan spending, or pharmacy closures.

d. Summary analysis

We found 1070 state regulations across the US that impact various aspects of the pharmacy environment. The regulations were assessed for their impact on five categories: drug prices, patient access, pharmacy viability, PBM administrative requirements, and drug acquisition costs. States overwhelmingly focus regulatory activity on PBM administrative requirements followed by drug prices.

Formal impact assessments of regulatory activity, let alone causal analyses, are quite rare, and the few that exist often have mixed results. This confirms the complexity of the pharmacy benefit, distribution and management landscape, the stakeholders involved, and the many ways in which they can circumvent the intended effect of regulatory actions. It also encourages continued debate and controversy over regulatory activity and their intended impacts.



10. Stakeholder Interviews

a. Overview

Alabama’s 2025 healthcare policy landscape is defined by legislative focus on community pharmacy viability and PBM reform, particularly under SB 252, which introduces expanded oversight into PBM contracting, reimbursement mechanisms, patient access and audit rights.

This effort reflects growing concerns about declining independent pharmacy viability, escalating patient costs, and the need for transparency in rebate and network structures. Stakeholders in the pharmacy benefit and management vertical chain operate within an environment where cost containment, access, and compliance pressures converge.

To support this study’s objectives, analysis, and conclusions, as well as gain new insights generally not publicly available or studied, and to identify stakeholders’ views on SB 252 and prescription drug reimbursement, transparency, and community pharmacy stability, we conducted interviews with key stakeholders in Alabama.

This summary consolidates findings from those stakeholder interviews conducted in September–October 2025. Participants included pharmacy trade groups, PBMs, health insurers, plan sponsors, legislators, and consultants (Table 10.1).

Table 10.1: Stakeholder Participation by Category

Stakeholder Category	Interviewed	Declined	No Response
Broker			2
Business Trade Group	1		1
Chain Pharmacy	1		
Consultant		1	1
Health Insurer	1		
Independent Pharmacy			3
Large PBM			1
Legislators	2		1
PBM National	1	1	
PBM Trade Group			1
Pharmacy Trade Group	2		1
Plan Sponsor	2		
PSAO (Pharmacy Services Admin Org)			1
Totals	10	2	12



Independent / community pharmacies mostly opted out as they participated in the Community Pharmacy Survey.

b. Stakeholder Summary

Across stakeholder groups, several recurring themes emerged regarding the Alabama pharmacy and PBM landscape:

- **PBM and Trade Groups:** Expressed the need for consistent definitions of ‘aberrant’ pricing behavior and support for maintaining rebate transparency. They noted that national PBMs are being pressured to disclose pricing structures, which could alter how smaller PBMs and PSAOs operate regionally.
- **Chain Pharmacies:** Emphasized growing strain on reimbursements, particularly in rural areas, and concern over post-adjudication fees and low MAC pricing. Chain Pharmacy cited difficulty participating in preferred networks under SB 252 rules and called for clearer guidance on appeals and payment parity.
- **Plan Sponsors and Insurers:** Acknowledged awareness of access issues but stressed the importance of cost containment. They highlighted challenges in balancing formulary open access with formulary control.
- **Legislators and Policy Makers:** Focused on improving access and monitoring PBM conduct. They referenced ongoing legislative reviews of pharmacy deserts and PBM audit authority.

c. Individual Stakeholder Key Responses

Great Southern Wood

- Concerned about how SB 252 will affect local pharmacy viability.
- Emphasized reliance on community pharmacies for employee access.
- “How SB 252 may influence pharmacy viability, reimbursement structures, and access for small-town employees remains a significant concern.”
- Designed a highly innovative approach to carve out PBM and create differential reimbursement to “mom and pop” pharmacies, structure flat fees to its broker, integrate importation, and have employees participate in any savings through improved compensation/benefits or profit sharing.



Adam Drugs Chain Pharmacy

- Identified reimbursement rates and PBM pressure as major obstacles.
- Noted that independent pharmacies are strained by administrative burden from PBMs.
- “The biggest obstacle for independents is getting reimbursed fairly and dealing with PBM audits that take time away from patients.”

BCBS Alabama

- Stressed the need for balanced pharmacy access and cost controls.
- Discussed Prime’s leading role in managing network and reimbursement.
- “Prime has managed all network and reimbursement changes, and we continue to monitor impacts to ensure patient access isn’t compromised.”
- Identified drug acquisition costs as a key area of focus in SB 252 that is missing
- Attempted differential reimbursement to community pharmacies for improving STAR ratings, but they did not participate, whereas grocery pharmacy outlets willingly did so.

Legislator - Representative

- Acknowledged SB 252’s positive intent but noted implementation challenges.
- Focused on maintaining fair access without disrupting current networks.
- “The impact to plan design must be measured carefully — we support protecting pharmacy access but must avoid unintended cost inflation.”

Legislator - Senator

- Staunch support for protecting reimbursement and transparency.
- Advocated parity between Medicaid and commercial reimbursement rates.
- “Reimbursement should be no less than Medicaid, and PBMs should be prohibited from steering patients to owned pharmacies.”

LucyRx (PBM)

- Reported minimal operational impact so far.
- Believes bill compliance processes are already in place.
- “We haven’t seen any measurable impacts yet, since reimbursements already meet the transparency and access standards required.”

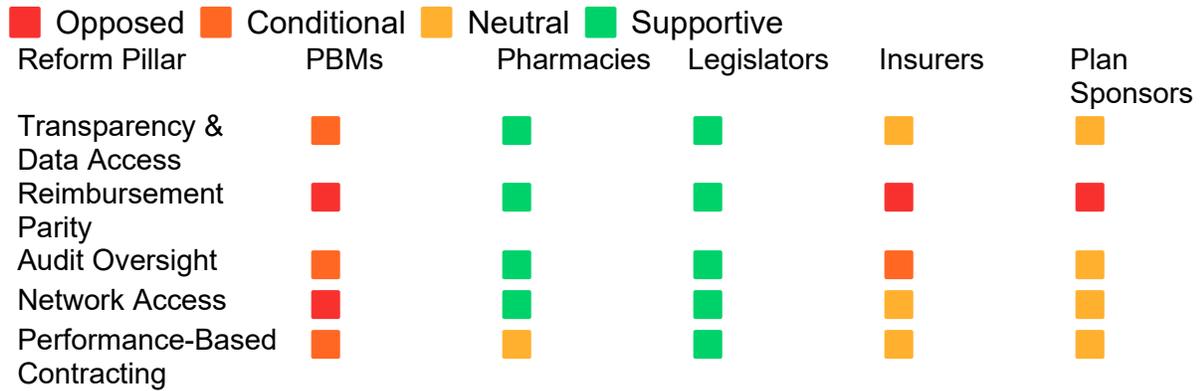
Overall, stakeholders agreed that transparency, fair reimbursement, and data sharing remain central to reform efforts. While opinions varied on the role of PBMs, there was broad recognition that Alabama’s evolving legislative environment requires balanced oversight to preserve access while maintaining fiscal accountability and affordability.



d. Influence and Alignment Insights

Analysis indicates strong alignment among legislators and pharmacies supporting reform goals, while insurers and plan sponsors remain cautious, emphasizing cost containment. PBMs acknowledge data-sharing pressures but resist reimbursement parity mandates. The Chain Pharmacies echoed calls for transparent MAC practices. A Stakeholder Alignment map is shown below in Figure 10.1.

Figure 10.1: Stakeholder Alignment Heat Map





11. Business Tax Incentives in Alabama

The prior analysis on regulatory initiatives provides analysis on one approach to create a more level playing field and correct market deficiencies – mandates of one kind or another. Incentives are another approach. While they typically require regulatory action, incentives are voluntary choices by business. Incentives also offer an opportunity to laser in on key deficiencies or areas of focus while still spreading the cost of those incentives across a wider base, especially when administered through the tax code.

Any consideration of business incentives by the Alabama Legislature is best served by first understanding what current business incentives are available, and their general application, and evaluating if they can be efficiently extended to solve specific problems.

In this section, we provide an overview and analysis of Alabama’s current business incentives. ^{113,114,115,116,117,118,119,120,121,122,123}

Jobs Credit (Alabama Jobs Act)

- What it offers: A cash rebate of up to 3% of the previous year’s gross payroll for up to 10 years.
- Amounts are paid as refunds of taxes for utility services.
- There is no job minimum for chemical manufacturing, data centers, metal/machining, engineering, design, and research projects. All other projects must create 50 jobs.
- This is a discretionary incentive. The availability of this incentive is based on the results of an economic impact analysis performed for each project.
- Additional bonuses:
- Up to an extra 0.5% for employing a workforce with at least 12% veterans.
- Up to an extra 1% for businesses operating in designated targeted counties (i.e., counties with a population of less than 60,000, of which 44 exist in Alabama)

Investment (Capital) Credit

- Benefit: Up to 1.5% credit on qualified capital investments per year for up to 10 years.
- Bonus durations: Up to 15 years for businesses in underrepresented or targeted counties (see target county definition above).
- Applicable against taxes such as income tax, utility tax, and more.



- Unused credits can be carried forward for up to 5 years; the first 3 years may be transferable ($\geq 85\%$ of face value) with approval.

Enterprise Zone Incentives

- Hiring credit: Credits based on hiring new full-time employees who were unemployed for at least 90 days—phased over 5 years (80%, 60%, 40%, and 20% in later years).
- Capital investment credit: 10% on the first \$10,000, 5% on the next \$90,000, and 2% on the remainder.
- Training credit: Up to \$1,000 per new permanent employee, max \$2,500 per employee.
- Tax exemptions: May include exemptions from sales/use, income, and business privilege taxes.

Apprenticeship Tax Credit

- Up to \$1,250 per qualifying apprentice, for a maximum of 10 apprentices.
- Extra \$500 credit for apprentices aged 18 or under in certain recognized programs.

Employer Childcare Tax Credit (2025–2027)

- For small businesses (<25 employees): 100% credit of eligible childcare expenses, up to \$600,000/year.
- Larger employers: 75% credit, same annual cap.
- Must support employees eligible for the Earned Income Tax Credit (EITC) and use licensed providers participating in Quality STARS.
- Caps per year: \$15M (2025), \$17.5M (2026), \$20M (2027), with 25% reserved for small or rural employers.
- Reservation via the My Alabama Taxes portal begins March 1; claims must be submitted in the same tax year.

Basic Skills Education Tax Credit

- An employer may qualify to receive an income tax credit of 20 percent of the actual cost of an employer-sponsored educational program that enhances basic skills of employees up to and including the 12th-grade functional level. This includes programs that teach English as a second language.
- Expenses covered: instructor fees, materials, equipment, and employee wages during training.



- Programs must be state-approved, and employees must meet eligibility criteria.

Full Employment Act of 2011 Credit

- \$1,000 credit per qualifying new full-time hire (earning at least \$10/hour and employed for 12 consecutive months).
- Business must show net growth in full-time positions year-over-year.
- Targeted at small businesses with **50 or fewer employees**.

Other Notable Incentives

- **Net Operating Loss (NOL) carryforward:** Up to 15 years.
- **No tax on inventory or goods in process.**
- **Sales & property tax abatements:** Available on construction materials, equipment, and incremental property taxes for new or expanded facilities.
- **Pollution control equipment:** Exempt from property tax.
- **Utility service increases:** Exempt up to 10 years.
- **New Market Tax Credit:** A tax credit against state income, financial institution excise, and insurance premium tax is available to investors in community development entities which provide funding to businesses that are located in qualified low-income or impoverished communities, especially central business districts, in Alabama. This credit parallels the provisions of the federal New Markets Tax Credit (I.R.C. § 45D) in many ways. The total amount of tax credits the Department of Commerce can grant to all applicants for any given tax year is capped at \$20 million and the maximum qualifying credit for a particular project is \$10 million.
- **Energy savings loans:** Lower-interest loans via Alabama SAVES program for energy improvement projects.
- **Infrastructure grants & Bond financing:** Including Industrial Development Grants, Industrial Access Road & Bridge, Industrial Revenue Bonds (IRBs).

The above is not an exhaustive list of incentives available for Alabama businesses, including investors in those businesses. Federal, county and city tax incentives, grants



and funding are also available. Moreover, some of the incentives described above interact with each other to add additional incentives.

For example, The Alabama Jobs Act and the New Market Tax Credit provide an additional incentive for underrepresented companies to qualify for extended incentive periods (e.g., 15 years for an investment credit or a 4% jobs credit), subject to approval by the Secretary of Commerce. A company qualifies as “underrepresented” if either of the following conditions is met:

- Small startup (<10 employees) in a New Markets Tax Credit–eligible community with average gross revenues of under \$500,000 over the three preceding years
- Majority-owned (51% or greater) by underrepresented persons who are US citizens and a woman or African American.

Alabama has evaluated the impact of the Jobs Act, and for the 84 firms with projects that entered into project agreements with the state for Alabama Jobs Act incentives since the creation of the tax Incentive, the tax Incentive will create an estimated 83,486 indirect jobs with an annual payroll of \$3,703,305,522, resulting in an estimated annual sales tax revenue of \$60,277,663 and estimated annual income tax revenue of \$129,615,693. For these 84 firms, nearly \$65 million in tax credits have been claimed.¹²⁴

This suggests that the tax incentives not only provide firms with qualified projects with substantial tax incentives but also provide a healthy ROI back to the state.

What is not known is how many, if any community pharmacies claimed any of the incentives and tax credits described above. Clearly many smaller pharmacies, located in appropriate enterprise/opportunity zones, and/or owned by underrepresented individuals, would appear to qualify for some of the incentives described above. Others may be eligible for various industrial development funds and grants, and many others might qualify for inventory credits or hiring and training credits.

Any partnership with the Alabama Department of Revenue, and/or county/city industrial development boards, could shed light on tax incentives and credits claimed by community pharmacies to evaluate use and impact, as well as opportunity available. This analysis would be valuable for legislators in evaluating all options and tools available to extend relief to community pharmacies, or targeted groups of community pharmacies.



12. Summary

Following on the heels of the enactment of AL SB 252, the Community Pharmacy Relief Act, a comprehensive review of PBM practices, operations and impacts on drug prices, drug access and pharmacies was conducted for the Alabama State Legislature. The purpose of the study was to provide legislators and staff with a deeper understanding of the industry and to better inform them of potential options for consideration in improving the livelihoods of community pharmacies while balancing the needs of businesses in managing drug benefits provided to their employees and dependents.

The study consisted of a comprehensive review of the literature, as well as an in-depth analysis of regulatory activity across 50 states. The study also included a detailed review and analysis of the pharmacy landscape in Alabama, using State Board of Licensing data, Medical Licensure Commission data, business and tax incentives data, and primary data collection from a Community Pharmacy Survey and Stakeholder Interviews.

Without the Alabama-specific information and analysis, very few conclusions and recommendations would be supported.

The national data and literature review largely confirmed what is widely known. Prescription drug costs are rising faster than any other segment of healthcare and now constitute 12-15% of all healthcare spend, even after rebates are netted out. PBMs, who are the key stakeholder tasked with managing this spend and assuring access to medications, provide substantial and unequivocal value for employers and consumers, estimated to be in the tens or even hundreds of billions of dollars to the US healthcare system in value and savings. However, the distribution of this value – to employers, plans, consumers, pharmacies – is not known, and concern arises as to how much of this value is retained by PBMs themselves.

What is known is that the PBM industry, by most accounts, is less competitive than nearly any other segment of healthcare. There are only 70 PBMs in the country managing drug benefits for 300 million plus Americans, compared to 1,500 health insurers and TPAs managing the same population for medical benefit administration. Moreover, the market is highly concentrated, with the three largest PBMs accounting for 80% market share.



It is also clear that many of the business practices of PBMs and their [financial] relationships with other stakeholders in the drug supply chain create conflicting incentives and are highly opaque. The industry generates more revenue as the number of drugs utilized, and their costs, goes up. This inherently conflicts with the goals of PBM customers, who desire to lower spend and utilization.

PBM reimbursement models to pharmacies also represent somewhat of a conflict. PBMs, in order to control costs for their customers, lower reimbursements to pharmacies. However, this creates substantial pressure on pharmacies to purchase drugs at lower acquisition costs, as well as become more efficient, in order to maintain or become profitable. Unfortunately, how far upstream this pressure can be conveyed (e.g., all the way up to the manufacturer), particularly for smaller pharmacies with lower volumes, is likely minimal. This in turn means that PBM reimbursement models will generally punish smaller, lower volume pharmacies, which may be the cause of net declines in community pharmacies in the US and in Alabama specifically.

The market also procures PBMs services inefficiently. Rather than purchasing based on the price of drugs, rebates and administrative fees that PBMs offer, employers, plans and their agents (brokers and consultants) should focus on **net spend**, which accounts for utilization, cost and clinical programs that can impact spend, after rebates and other discounts. This model would bypass the need for transparency on how PBMs make money or how much they make is passed on to customers and instead focus on how they provide value.

Finally, in a review of regulatory initiatives across the country, only a few seemed of incremental value for the Alabama legislature. This includes model regulations for price gouging, in particular for shortages (e.g. the insulin fix). Instead, it was more telling as to what was missing, which are regulations aimed at making the PBM landscape far more competitive, stronger proactive oversight, and streamlined ability for stakeholders to lodge complaints and receive responses.

The Alabama component of the study yielded considerable insights. Nearly 8.5% of Alabama's population, or 415,000 people, live in zip codes where there was only one pharmacy, and only one or no physicians. Another 240 zip codes in Alabama had neither a pharmacy nor a physician. So not only are there quite a few pharmacy deserts in Alabama, affecting a significant number of Alabamians, there is also a substantial population that live in zip codes where pharmacies represent the only or material caregiver around. Keep in mind that these results are directionally accurate, as



of course, residents may cross zip code boundaries to access pharmacies and/or physicians.

Results from the Community Pharmacy Survey were incredibly rich, and the accuracy of the self-reported information meets strong validity tests we performed. As expected, rural pharmacies in particular make up most of the lone pharmacies in pharmacy deserts, but they also have 40% fewer volumes, 30% less margins per script, and provide less high margin services than their urban counterparts. They also tend to report plans to close more than urban pharmacies.

There appears to be a significant opportunity to support community pharmacies in extending goods and services that provide higher margin, including high leverage of their pharmacists in delivering reimbursable health and wellness services to their patients.

The good news is that pharmacy owners are business savvy. Rural pharmacies, while under intense economic pressures, have lower costs per script before reimbursement than urban pharmacies. They also have a payer mix that is better than urban pharmacies (e.g., proportionately more Medicaid and Medicare prescriptions compared to commercial, which has the lowest margins)

The analysis suggests a targeted approach of relief for pharmacies at risk, or pharmacies that provide disproportionate value (e.g., in disadvantaged / underserved areas) may be more efficient. In addition, a review of the tax code and business incentives revealed an opportunity to leverage those to achieve a targeted approach to community pharmacy relief efforts.

Finally, stakeholder interviews provided good insights, particularly for real “on the ground” views and initiatives that are generally not publicly available otherwise. Nearly all stakeholders agreed and sympathized with the “mom and pop” pharmacy issues and might be supportive particularly of targeted approaches that more fairly balance relief with who pays for that relief.

Data is not perfect. The information contained in this report from nearly all sources and the analysis performed to rationalize that information will have limitations. The results are not intended, or should be viewed as precise, but rather directional, particularly with the substantial corroboration of other sources and data performed in this study.



As a result, several key recommendations are proposed for consideration, without any order of importance or prioritization:

- Analysis of tax incentives and credits and modeling approaches of how to provide targeted relief to pharmacies at risk or who provide disproportionate public value
- Conduct an impact assessment of SB 252, particularly changes in pharmacy reimbursements and dispensing fees, using claims analysis from plans/insurers such as PEEHIP/SEHIP
- Fund / require AL State Board of Pharmacy to do semiannual assessments of pharmacy openings and closings, pharmacy deserts, and conduct post closure surveys of pharmacies that closed operations.
- Facilitate outreach and education to promote pharmacy licensing and participation in collaborative service agreements and pharmacy clinical networks and perform annual evaluations of participation and reimbursement
- Facilitate PBM and market competition – promote PSAO competition for greater accountability of value delivered to pharmacies, promote best practices in PBM procurement, evaluation and implementation
- Limit PBM retroactive fees
- Assure proprietary products from PBMs are available at the same acquisition cost that the PBMs makes available to its own pharmacies
- Consider strengthening oversight of vertically integrated PBMs including disclosures
- Enforcement efficiencies for pharmacies – create simpler, more efficient complaint and complaint resolution with required resolution timeframe for any violation of SB 252, and enforce any violations confirmed
- Consider gouging/affordability regulations, or engage top PBMs in market approaches to avoid these situations

Finally, it is important to distinguish between market failure problems that require regulatory intervention vs initiatives that are designed to serve the financial interests of other market participants (e.g., pharmacies, pharmaceutical manufacturers). Generally, if regulation is to serve the public interest, improving PBM market competition may be the best way to do so.



13. Glossary of Terms

340B: A federal drug pricing program allowing eligible healthcare entities to purchase outpatient drugs at significantly reduced prices.

Adjudication: Real-time process of verifying eligibility, pricing, and coverage rules when a pharmacy submits a claim to a PBM.

Average Manufacturer Price (AMP): It represents the average price paid by wholesalers and retail pharmacies to drug manufacturers for a given medication, before any rebates or discounts are applied to downstream purchasers (e.g., pharmacies, PBMs). Serves as the foundation for calculating Medicaid rebates and reimbursement limits (e.g., Federal Upper Limit). It is reported quarterly and excludes customary prompt-pay discounts to wholesalers and prices for 340B-covered drugs.

Average wholesale price (AWP): The average price paid by retail pharmacies when buying a drug from wholesalers.

Average Sales Price (ASP): Represents the average price at which a drug is sold by manufacturers to all purchasers (e.g., wholesalers, pharmacies, hospitals) in the U.S., after accounting for discounts, rebates, and other price concessions. It is typically calculated over a defined period (e.g., quarterly) and is used as a benchmark for reimbursement. Medicare Part B typically reimburses at ASP + 6% (or another percentage) to cover pharmacy overhead. Some Medicaid programs and commercial payers also use ASP-based pricing models.

Brand Drug: A medication sold under a proprietary, trademark-protected name. Usually more expensive than generics.

Copay Accumulator: A strategy that prevents manufacturer copay assistance from counting toward a patient's deductible or out-of-pocket maximum.

Copay Maximizer: A program that aligns patient copays with the maximum manufacturer assistance available, often spreading it over multiple months.

Dispense as Written (DAW): Prescriber instruction not to substitute a generic for a brand drug. DAW codes are tracked in claim submissions.

Direct and Indirect Remuneration Fees (DIR Fees): Post-point-of-sale fees collected by PBMs from pharmacies, often tied to performance metrics. Common in Medicare Part D.

Federal Upper Limit (FUL): The Federal Upper Limit (FUL) is a reimbursement ceiling set by the Centers for Medicare & Medicaid Services (CMS) for certain generic drugs covered under Medicaid. It establishes the maximum amount that state Medicaid programs can reimburse pharmacies for multisource (generic) drugs, ensuring cost containment while maintaining access to affordable medications. The Affordable Care Act (ACA, 2010) updated the formula to: $FUL = 175\%$ of the weighted average of the most recently reported AMP (Average Manufacturer Price) for all equivalent generic versions.

Formulary: A list of drugs covered by a health plan or PBM, often structured into tiers with varying copays or restrictions.



Generic Drug: A non-branded version of a drug that is chemically equivalent to the brand but typically less expensive.

MAC Maximum Allowable Cost (MAC): The maximum amount a PBM or payer will reimburse a pharmacy for a generic drug.

Manufacturer: A developer and maker of prescription drugs, with some producing brand-name drugs and others specializing in off-patent generic drugs.

Medication Therapy Management (MTM): A service provided by pharmacists to optimize therapeutic outcomes, required under Medicare Part D for certain enrollees.

Med Part D: The Medicare benefit that covers outpatient prescription drugs, administered through plans approved by CMS.

NABP: National Association of Boards of Pharmacy – supports uniform pharmacy regulation across states and administers pharmacy accreditation programs.

National Drug Code (NDC): A unique 10- or 11-digit identifier for medications in the U.S., specifying manufacturer, product, and package size.

Network Pharmacy: A pharmacy that has a contract with a PBM or health plan to provide covered drugs to beneficiaries.

Out-of-pocket costs (OOP): Costs the patient must pay for their care under their plan, including deductibles, copays, and coinsurance.

Prior Authorization (PA): A requirement that a prescriber obtain approval from the PBM or plan before a drug will be covered.

Pharmacy benefit manager (PBM): A middleman entity that contracts with health insurance plans to develop and administer pharmacy benefits, including negotiating with drug manufacturers to develop the plan's formulary, as well as negotiations with pharmacies to develop the plan's pharmacy network

Rebate Aggregator: An entity that negotiates and collects rebates from manufacturers on behalf of PBMs or plans, often consolidating multiple clients.

Retail Pharmacy: A pharmacy provides medications directly to patients, typically at a walk-in location. May be independent or part of a chain.

Specialty Pharmacy: A pharmacy that dispenses high-cost or complex medications that often require special handling, storage, or patient education.

Step Therapy: A utilization management strategy requiring a patient to try one or more lower-cost or preferred drugs before coverage of a higher-tier option.

Spread pricing: A compensation scheme under which a PBM reimburses a network pharmacy less than the plan pays to the PBM for a drug, and the PBM retains the difference as profit.

Tiered Formulary: A formulary with multiple levels (tiers) of drugs, each with different copayment or coinsurance amounts.

Usual and Customary (U&C): The standard cash price a pharmacy charges the public for prescription medication, excluding insurance discounts, coupons, or third-party payer agreements. It serves as a benchmark for payers (e.g., insurers, Medicaid, Medicare) to determine fair reimbursement rates and prevent overpayment.



Utilization Management (UM): Techniques such as prior authorization, step therapy, and quantity limits to control drug usage and cost.

Wholesale acquisition cost (WAC): The manufacturer's list price for a drug or biologic, not including any discount offered to a wholesaler or other purchaser.

Wholesaler: A distribution coordinator between manufacturers and pharmacies that specializes in inventory management and product shipment.



14. Sources/References

- ¹ PSG Survey of PBM Satisfaction. 2025
- ² Understanding the Use of Medicines in the U.S. 2025. IQVIA Institute. April, 2025.
- ³ National Health Expenditures Historical and Projected. Office of the Actuary. Centers for Medicare and Medicaid Services.
- ⁴ Pharmacy Benefit Manager Customer Satisfaction Report. PSG. Fall, 2025.
- ⁵ Rosenthal, Meagan et al. The impact of pharmacy benefit managers on community pharmacy: A scoping review. *Exploratory Research in Clinical and Social Pharmacy*. May 27, 2023.
- ⁶ AI search and analysis of published government and policy reports, national news coverage including healthcare trade press, and healthcare coverage, regional press, articles and op eds, and trade press and industry commentary for the period January 1, 2023 through November 3, 2025, representing 1000 published artifacts. November 3, 2025.
- ⁷ Keehan, Sean P. et. al. National Health Expenditure Projections, 2024–33: Despite Insurance Coverage Declines, Health To Grow As Share Of GDP. *Health Affairs*. Vol 44. No. 7. June 25, 2025.
- ⁸ National Health Expenditures by type of service and source of funds, CY 1960-2023. Centers for Medicare and Medicaid Services.
- ⁹ AI search and analysis of published government and policy reports, national news coverage including healthcare trade press, and healthcare coverage, regional press, articles and op eds, and trade press and industry commentary for the period January 1, 2023 through November 3, 2025, representing 1000 published artifacts. November 3, 2025.
- ¹⁰ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ¹¹ Access Market Intelligence. PBMs 2022 Annual Review. Available at <https://accessmarketintell.com/product/pharmacy-benefit-managers-pbms-2025-report/>. Accessed 10/30/2025.
- ¹² The Role of Pharmacy Benefit Managers in Prescription Drug Markets. House Committee on Oversight and Accountability. US Congress. 2023.
- ¹³ Pharmacy Benefit Managers: The Powerful Middlemen Inflating Drug Costs and Squeezing Main Street Pharmacies. An Interim Report. Office of Policy Planning. US Federal Trade Commission. July 2024.
- ¹⁴ Fraud and Abuse Laws. Office of the Inspector General. US Health and Human Services.
- ¹⁵ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ¹⁶ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ¹⁷ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ¹⁸ What Are DIR Fees and How Have They Changed in 2024? NOVA. September 19, 2024.
- ¹⁹ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ²⁰ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.



-
- ²¹ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ²² The Prescription Drug Landscape, Explored. PEW Foundation. March 8, 2019.
- ²³ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ²⁴ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ²⁵ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ²⁶ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ²⁷ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ²⁸ Muralidharan, Bhairavi., et al. Procedural Prescription Denials and Risk of Acute Care Utilization and Spending Among Medicaid Patients. JAMA Network Open. January 30, 2025.
- ²⁹ Joyce, Geoffrey., et al. Medicare Part D Plans Greatly Increased Utilization Restrictions On Prescription Drugs, 2011–20. Health Affairs. Vol 43. No 3. March 2024.
- ³⁰ Dunne, Caroline. Medicare Part D plans initially denied medicines for more than 70% of patients in four chronic disease areas. PhRMA. June 16, 2025.
- ³¹ High Rates of Prior Authorization Denials by Some Plans and Limited State Oversight Raise Concerns About Access to Care in Medicaid Managed Care. Office of Inspector General. US Department of Health and Human Services. July 2023.
- ³² Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ³³ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ³⁴ Informa TechTarget. What Utilization Management Strategies Do Payers Use to Lower Costs? Available at <https://www.techtarget.com/healthcarepayers/feature/What-Utilization-Management-Strategies-Do-Payers-Use-to-Lower-Costs>. Accessed 10/30/2025.
- ³⁵ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ³⁶ Cencora. Transform evidence and insights into effective market access strategies. Available at <https://www.cencora.com/our-capabilities/commercialization-support/market-access-strategy>. Accessed 10/30/2025.
- ³⁷ Fein AJ. The Big Three PBMs' 2023 Formulary Exclusions: Observations on Insulin, Humira, and Biosimilars. Drug Channels. Available at <https://www.drugchannels.net/2023/01/the-big-three-pbms-2023-formulary.html>. Accessed 10/30/2025.
- ³⁸ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ³⁹ Cencora. Transform evidence and insights into effective market access strategies. Available at <https://www.cencora.com/our-capabilities/commercialization-support/market-access-strategy>. Accessed 10/30/2025.
- ⁴⁰ Exouza Inc impact for PAP, VCP and Importation for a 12,000 life TPA. 2023 Annual Report.



-
- ⁴¹ Mulligan, Casey. The Value of Pharmacy Benefit Management. Working Paper. National Bureau of Economic Research. July 2022.
- ⁴² Fiedler, Matthew., et. al. A brief look at current debates about pharmacy benefit managers. Brookings. September 7, 2023.
- ⁴³ Mulcahy, Andrew et. al., Prescription Drug Prices, Rebates and Insurance Premiums. RAND Healthcare. RAND Corporation. 2024
- ⁴⁴ Specialty Generic Drugs: A Growing Profit Center for Vertically Integrated Pharmacy Benefit Managers. Second Interim Staff Report. Federal Trade Commission. January 2025.
- ⁴⁵ Mattingly, Joseph T., et. al., Pharmacy Benefit Managers. History, Business Practices, Economics, and Policy. JAMA Health Forum. Vol. 4. No 11. November 3, 2023.
- ⁴⁶ National Association of Insurance Commissioners. Pharmacy Benefit Managers. Available at <https://content.naic.org/insurance-topics/pharmacy-benefit-managers>. Accessed 10/30/2025.
- ⁴⁷ US Health Insurance Industry. 2024 Annual Results. National Association of Insurance Commissioners.
- ⁴⁸ Competition in Health Insurance. A comprehensive study of U.S. markets. American Medical Association. 2024 Update.
- ⁴⁹ An Overview of the TPA and Self-Funded Market. TPA Network and Research Consortium.
- ⁵⁰ Company Search. Alabama Department of Insurance. Website results.
- ⁵¹ Policy Research Perspectives. Competition in PBM Markets and Vertical Integration of Insurers with PBMs. American Medical Association. 2025 Update.
- ⁵² CVS Health Corporation Fourth Quarter and Full Year 2024 Results. Exhibit 99.1. CVS Health.
- ⁵³ Great Southern Wood Interview. October 24, 2025.
- ⁵⁴ \$15 Million OptumRx Settlement Pushes AG Yost's Total Recoveries From PBMs Past \$100 Million. Ohio Attorney General's Office. 10/25/2022 News Release.
- ⁵⁵ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ⁵⁶ Gifford DS. Report of Pharmacy Benefit Manager Practices. Connecticut Health Strategy. February 2025. Prepared by Milliman. Available at <https://portal.ct.gov/-/media/ohs/reports/ohs-report-of-pharmacy-benefit-manager-practices-pa-23-171-s7.pdf>. Accessed 10/30/2025.
- ⁵⁷ Mattingly, Joseph T. et. al. Community Pharmacy Turnover and Context of Openings and Closings by Ownership Type. JAMA Health Forum. August 1, 2025.
- ⁵⁸ Ibid.
- ⁵⁹ NCPA Digest Reports, 2020 through 2025.
- ⁶⁰ Exouza analysis of AL State Board of Pharmacy licensing data.
- ⁶¹ Alabama State Board of Pharmacy. Public Records Department. August 30, 2024. Public records response to Mr. Edward Hosp, AL BCBS.
- ⁶² Schifner, Bill. Walgreens, CVS to acquire Winn-Dixie's pharmacy business. Chain Drug News. August 23, 2023.
- ⁶³ Alabama State Board of Pharmacy. Public Records Department. August 30, 2024. Public records response to Mr. Edward Hosp, AL BCBS.
- ⁶⁴ Berenbrook, Lucas A., et al. Evaluation of Frequency of Encounters With Primary Care Physicians vs Visits to Community Pharmacies Among Medicare Beneficiaries. JAMA Network Open. Vol 3 No 7. July 15, 2020.
- ⁶⁵ Valliant, Samantha N., et. al. Pharmacists as accessible health care providers: quantifying the opportunity. Journal of Managed Care Specialty Pharmacy. January 2022.
- ⁶⁶ Paige Minemeyer. 2023 forecast: Pharmacists push to take on a greater role in patient care. Fierce Healthcare. December 21, 2022.
- ⁶⁷ Washington State University. Pharmacists prove effective, less costly care option for minor illnesses. ScienceDaily. May 18, 2024.
- ⁶⁸ Sewell MJ, Riche DM, Fleming JW, Malinowski SS, Jackson RT. Comparison of Pharmacist and Physician Managed Annual Medicare Wellness Services. J Manag Care Spec Pharm. 2016 Dec;22(12):1412-1416.



- ⁶⁹ Pharmacy data from the Alabama State Board of Pharmacy. Physician data from the Alabama Medical Licensure Commission. Population data from the US Census Bureau. All 2025.
- ⁷⁰ Dima, Qato M., et al. Association Between Pharmacy Closures and Adherence to Cardiovascular Medications Among Older US Adults. *JAMA Network Open*. April 19, 2019.
- ⁷¹ Adepoju, Omolola E., et al. Rethinking access to care: A spatial-economic analysis of the potential impact of pharmacy closures in the United States. *Plos One*. July 27, 2023. Omolola E. Adepoju
- ⁷² Wolters Kluwer. Pharmacy Next Survey of 1002 US Adults. Amid Retail Pharmacy Closures, 59% of Americans Fear Losing Easy Access to Essential Medications, Wolters Kluwer survey shows. November 19, 2024.
- ⁷³ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ⁷⁴ National Academy for State Health Policy. State Pharmacy Benefit Manager Legislation. Available at <https://nashp.org/state-tracker/state-pharmacy-benefit-manager-legislation/>. Accessed 10/30/2025.
- ⁷⁵ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ⁷⁶ van Meijgaard J. Here's the Real Price of Prescription Drugs. GoodRx. Available at <https://www.goodrx.com/corporate/business/heres-the-real-price-of-prescription-drugs>. Accessed 10/30/2025.
- ⁷⁷ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ⁷⁸ National Academy for State Health Policy. State Pharmacy Benefit Manager Legislation. Available at <https://nashp.org/state-tracker/state-pharmacy-benefit-manager-legislation/>. Accessed 10/30/2025.
- ⁷⁹ Nebraska Legislature. Nebraska Revised Statue 44-4608. Available at <https://nebraskalegislature.gov/laws/statutes.php?statute=44-4608>. Accessed 10/30/2025.
- ⁸⁰ Leduc JK. State Laws Concerning Pharmacy Benefit Managers. Connecticut General Assembly. Office of Legislative Research. March 1, 2018. Available at <https://www.cga.ct.gov/2018/rpt/pdf/2018-R-0083.pdf>. Accessed 10/30/2025.
- ⁸¹ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ⁸² Trish E, Gascue L, Ribero R, Van Nuys K, Joyce G. Comparison of Spending on Common Generic Drugs by Medicare vs Costco Members. *JAMA Internal Medicine*. October 2012;181(10):1414-1416. Available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC8261681/>. Accessed 10/30/2025.
- ⁸³ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ⁸⁴ Code of Virginia. Article 9. Pharmacy Benefits Managers. Available at <https://law.lis.virginia.gov/vacodefull/title38.2/chapter34/article9/>. Accessed 10/30/2025.
- ⁸⁵ National Academy for State Health Policy. State Pharmacy Benefit Manager Legislation. Available at <https://nashp.org/state-tracker/state-pharmacy-benefit-manager-legislation/>. Accessed 10/30/2025.
- ⁸⁶ Code of Virginia. Article 9. Pharmacy Benefits Managers. Available at <https://law.lis.virginia.gov/vacodefull/title38.2/chapter34/article9/>. Accessed 10/30/2025.
- ⁸⁷ Michigan Department of Insurance and Financial Services. Pharmacy Benefit Managers. Available at <https://www.michigan.gov/difs/pbm>. 10/30/2025.



- ⁸⁸ National Academy for State Health Policy. State Pharmacy Benefit Manager Legislation. Available at <https://nashp.org/state-tracker/state-pharmacy-benefit-manager-legislation/>. Accessed 10/30/2025.
- ⁸⁹ Code of Virginia. Article 9. Pharmacy Benefits Managers. Available at <https://law.lis.virginia.gov/vacodefull/title38.2/chapter34/article9/>. Accessed 10/30/2025.
- ⁹⁰ Michigan Department of Insurance and Financial Services. Pharmacy Benefit Managers. Available at <https://www.michigan.gov/difs/pbm>. 10/30/2025.
- ⁹¹ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ⁹² Code of Virginia. Article 9. Pharmacy Benefits Managers. Available at <https://law.lis.virginia.gov/vacodefull/title38.2/chapter34/article9/>. Accessed 10/30/2025.
- ⁹³ Michigan Department of Insurance and Financial Services. Pharmacy Benefit Managers. Available at <https://www.michigan.gov/difs/pbm>. 10/30/2025.
- ⁹⁴ Nebraska Legislature. Nebraska Revised Statute 44-4608. Available at <https://nebraskalegislature.gov/laws/statutes.php?statute=44-4608>. Accessed 10/30/2025.
- ⁹⁵ Leduc JK. State Laws Concerning Pharmacy Benefit Managers. Connecticut General Assembly. Office of Legislative Research. March 1, 2018. Available at <https://www.cga.ct.gov/2018/rpt/pdf/2018-R-0083.pdf>. Accessed 10/30/2025.
- ⁹⁶ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ⁹⁷ Code of Virginia. Article 9. Pharmacy Benefits Managers. Available at <https://law.lis.virginia.gov/vacodefull/title38.2/chapter34/article9/>. Accessed 10/30/2025.
- ⁹⁸ Nebraska Legislature. Nebraska Revised Statute 44-4608. Available at <https://nebraskalegislature.gov/laws/statutes.php?statute=44-4608>. Accessed 10/30/2025.
- ⁹⁹ Leduc JK. State Laws Concerning Pharmacy Benefit Managers. Connecticut General Assembly. Office of Legislative Research. March 1, 2018. Available at <https://www.cga.ct.gov/2018/rpt/pdf/2018-R-0083.pdf>. Accessed 10/30/2025.
- ¹⁰⁰ Martin K. What Pharmacy Benefit Managers Do, and How They Contribute to Drug Spending. The Commonwealth Fund. Explainer. March 17, 2025. Available at <https://www.commonwealthfund.org/publications/explainer/2025/mar/what-pharmacy-benefit-managers-do-how-they-contribute-drug-spending>. Accessed 10/30/2025.
- ¹⁰¹ van Meijgaard J. Here's the Real Price of Prescription Drugs. GoodRx. Available at <https://www.goodrx.com/corporate/business/heres-the-real-price-of-prescription-drugs>. Accessed 10/30/2025.
- ¹⁰² Lee AJ, Hefner D, Dobson A, Hardy R Jr. Evaluation of the maximum allowable cost program. *Health Care Finance Rev.* 1983 Mar;4(3):71-82. PMID: 10309857; PMCID: PMC4191307.
- ¹⁰³ United States Government Accountability Office. Report to Congressional Requesters. Prescription Drugs. Selected States' Regulation of Pharmacy Benefit Managers. GAO-24-106898. Available at <https://www.gao.gov/assets/gao-24-106898.pdf>. Accessed 11/21/2025.
- ¹⁰⁴ United States Government Accountability Office. Report to Congressional Requesters. Prescription Drugs. Selected States' Regulation of Pharmacy Benefit Managers. GAO-24-106898. Available at <https://www.gao.gov/assets/gao-24-106898.pdf>. Accessed 11/21/2025.
- ¹⁰⁵ Kakani P, Navangul S, Lee Luo C, et al. Use of and Steering to Pharmacies Owned by Insurers and Pharmacy Benefit Managers in Medicare. *JAMA Health Forum.* 2025;6(1):e244874. doi:10.1001/jamahealthforum.2024.4874
- ¹⁰⁶ Rosenthal M, Miller L, Bateman M, Smith M, Nueva K, Ballou JM. The impact of pharmacy benefit managers on community pharmacy: A scoping review. *Explor Res Clin Soc Pharm.* 2023 May 27;10:100283. doi: 10.1016/j.rcsop.2023.100283. PMID: 37333968; PMCID: PMC10276176.
- ¹⁰⁷ Rosenthal M, Miller L, Bateman M, Smith M, Nueva K, Ballou JM. The impact of pharmacy benefit managers on community pharmacy: A scoping review. *Explor Res Clin Soc Pharm.* 2023 May 27;10:100283. doi: 10.1016/j.rcsop.2023.100283. PMID: 37333968; PMCID: PMC10276176.



-
- ¹⁰⁸ Shoemaker-Hunt S, McClellan S, Bacon O, Gillis, J, Brinkley J, Schalk M, Olsho L, Taninecz G, Brandt J. Cost of Dispensing Study, January 2020. Abt Associates; 2020. Available at <https://www.nacds.org/pdfs/pharmacy/2020/NACDS-NASP-NCPA-COD-Report-01-31-2020-Final.pdf>. Accessed 11/21/2025.
- ¹⁰⁹ Maryland Department of Health. Survey of the Average Cost of Dispensing a Prescription to Fee-For-Service Maryland Medicaid Participants. January 21, 2020. Available at https://health.maryland.gov/mmcp/pap/docs/md_2018_cod_report_final_report%20jan%202020.pdf. Accessed 11/21/2025.
- ¹¹⁰ McIntyre M. Va. Pharmacies say low reimbursement rates keep them struggling to stay afloat. Virginia Mercury. November 21, 2023. Available at <https://virginiamercury.com/2023/11/21/va-pharmacies-say-low-reimbursement-rates-keep-them-struggling-to-stay-afloat>. Accessed 11/21/2025.
- ¹¹¹ Scanlon, Ginger, Prescription for Savings? Disclosure in the Drug Market (November 14, 2024). Available at SSRN: <https://ssrn.com/abstract=5021179> or <http://dx.doi.org/10.2139/ssrn.5021179>. Accessed 11/21/2025.
- ¹¹² United States Government Accountability Office. Report to Congressional Requesters. Prescription Drugs. Selected States' Regulation of Pharmacy Benefit Managers. GAO-24-106898. Available at <https://www.gao.gov/assets/gao-24-106898.pdf>. Accessed 11/21/2025.
- ¹¹³ Birmingham Business Alliance. Website
- ¹¹⁴ Montgomery Area Chamber of Commerce. Website.
- ¹¹⁵ Northwest Alabama Economic Development Alliance. Website.
- ¹¹⁶ Made in Alabama. Alabama Chamber of Commerce. March 2025.
- ¹¹⁷ Alabama Economic Incentives. Biggins, Lacy, Shapiro & Company. Website.
- ¹¹⁸ Alabama lawmakers approve tax breaks for businesses that help employees afford childcare. Associated Press. May 7, 2024.
- ¹¹⁹ Alabama State Tax Credits. Make Taxes Fair. Website.
- ¹²⁰ Income Tax Incentives. Alabama Department of Revenue. Website.
- ¹²¹ Incentives. The Shoals Economic Development Authority. Website.
- ¹²² Taxes and Incentives. City of Madison Industrial Development Board. Website.
- ¹²³ 2024 Code of Alabama. Title 40 - Revenue and Taxation. Chapter 18 - Income Taxes. Article 16 - Alabama Jobs Act. Section 40-18-376.4 - Qualifying Projects by Underrepresented Companies. Justia US Law. Website.
- ¹²⁴ Jobs Credit Report CY 2023. Alabama Department of Commerce.