Pharmacy Benefit Managers and Their Role in Drug Costs, Accessibility, and Spending

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Contents

Overview of Industry

In the United States, pharmacy benefit managers (PBMs) are third party companies that manage prescription drug benefits on behalf of health insurers, Medicare Part D drug plans, self-insured employers, and other payers.[2] PBMs have proven to have a significant "behind-the-scenes" impact in determining total drug costs for insurers, influencing medication accessibility, and dictating how much pharmacies are paid.[22] PBMs function in the middle of the supply chain for prescription drugs. Their primary roles are outlined in three areas:

1. Develop and maintain formularies of covered medications on behalf of health insurers, shaping which medications patients have access to and influence out-of-pocket costs;
2. Utilize their purchasing power to negotiate rebates and discounts from drug manufacturers;
3. Work directly with individual pharmacies to reimburse for drugs dispensed to beneficiaries.2

While today the pharmacy benefit management industry in the United States is quite large, having generated approximately $391.60 billion in revenue and $20.80 billion in profits in 2020, the industry has not always been this profitable.3 In fact, upon origination, the roles of PBMs looked a bit different than they do today. Pharmacy benefit managers emerged in the late 1960s to ensure that the rapidly rising costs of drugs were kept in check, but did not become a large force in the healthcare industry until the 1980s.8 At the time, there was little to prevent overpricing by drug manufacturers, or to guarantee reliable prices depending on geographic location. PBMs added value by providing stability and predictability in the market, by acting as a middle man to hold the pharmaceutical industry accountable and easing the billing process for payers.1 According to Ray Quinones, Vice President of product development for Helios, "When PBMs first started, they were primarily focused on financial and administrative aspects, like reducing the amount of paper billings that occur, and providing transactional savings. The second thing they provided was access. By establishing pharmacy networks, PBMs helped ensure injured workers had access to their prescribed, claim-related medications."1

However, since the industry's establishment, it didn't take long for PBMs to start filling a more critical role for their clients, expanding and shifting their focus to the clinical side of pharmacy cost management.[23] External factors, such as broad changes in health care have driven the expansion of clinical services within the pharmacy benefit management industry. For example, the shift from fee-for-service to a more holistic, outcomes-based reimbursement model, prioritizes a patient's course of care and recovery in its entirety, rather than isolated treatments for specific conditions.1 So, in order for PBMs to maintain relevance, they were

inclined to move in the direction of clinical management. Clinical management services include utilization review done by a physician or pharmacist, as well as recommendations for high-risk claims.[24] Interestingly, according to Ron Skrochi, VP of product management and development at GENEX Services, "PBMs' clinical interventions were not very robust 10 years ago. There were weak utilization controls."1 It is clear that the last decade has seen an evolution in the role of PBMs due to external health care trends and priorities among their consumers, and the pharmacy benefit management industry has apparently made efforts to align their operations with this prioritization of clinical initiatives.

Another external aspect that has influenced the evolution of the pharmacy benefit management industry is maintaining a good relationship with employers. For a PBM, serving their primary function of providing cost savings requires maintaining a strong relationship with drug manufacturers, as this is the best way to ensure good rebates and discounts. However, clients are now demanding that their own relationships with PBMs are of greater importance.1 This has brought to light the issue of transparency on deals with manufacturers and the spread of fees PBMs charge, which will be further addressed later in this thesis report. Executives in the industry have attested to this shift in prioritizing relationships with clients, as opposed to solely focusing on a good relationship with manufacturers. Cheryl Larson, Vice President of Midwest Business Group for Health reports, "The level of accountability is evolving and we're starting to see the PBM model evolve to meet the needs of employers as key purchasers."1 Larson continues to add, "Employers have gotten a lot smarter in recent years. We represent large employers, and they're relatively sophisticated and have good relationships with their

suppliers, whether it's a PBM or a health plan, and their contracting reflects that they know where their rebates are going, that they are transparent."[1]

Based upon the industry's origination and evolution from the 1960s to present, there are some key statistics and trends in the market currently that are important to highlight. As previously mentioned, the industry generated $391.60 billion in revenue in 2020. The figure below highlights the industry's total revenue year over year from 2005-2020, as well as provides projections for 2021-2026.

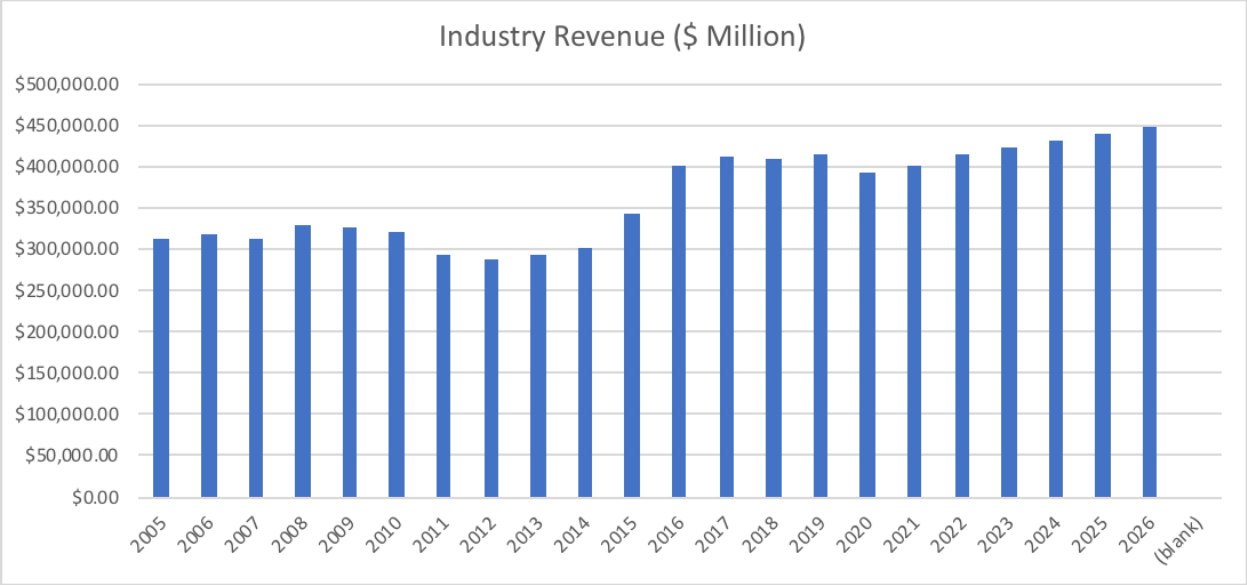


Figure 1

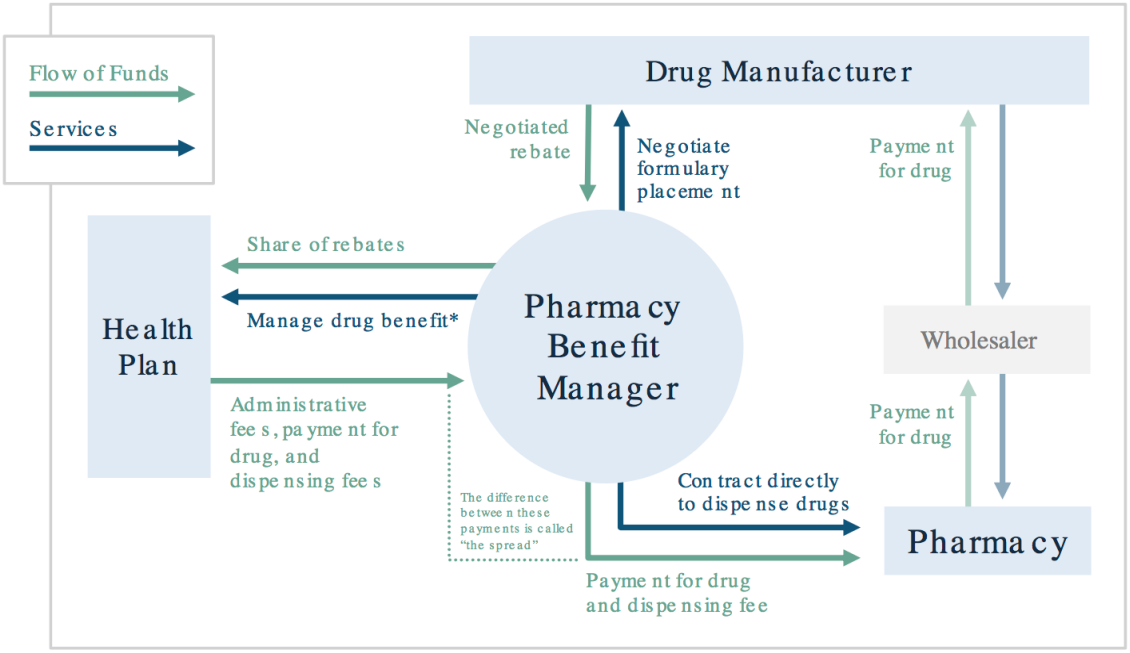
With a couple exceptions, the figure depicts a fairly consistently growing industry, with a profitable future. Since 2012, when the industry saw a minimum in revenue of $287.50 billion, the industry has grown each year until 2020, with a peak in 2019 of $414.60 billion in revenue. As shown by the figure above, 2020 saw a slight decline in revenue, as most industries did during COVID-19, but the industry remained adequately strong, only declining approximately

$23 billion in revenue from the industry's most profitable year shown. Further, in 2020 the United States pharmacy benefit management industry earned $20.80 billion in profits, with a profit margin of 5.3%.3 Interestingly, between 2015 and 2020, the industry did not see much change in profit margin. 2015 experienced the largest decline in profit margin at 0.7%, while 2018 saw the largest increase in profit margin, growing 0.8%. With only a 1.1% maximum variation in growth over 5 years, the industry seems as though profitability remains consistent and predictable.

Pharmacy Benefit Manager Payment Structure

It is clear that the pharmacy benefit management industry has positioned itself in the market in a profitable manner, but to understand how PBMs generate profits, it is imperative to understand the business model and payment structure of these companies.

Role of a Pharmacy Benefit Manager in Providing Services and Flow of Funds for Prescription Drugs



* Includes establishing formulary and patient adherence programs and implementing utilization management tools – such as prior authorization, step therapy, and tiering – to steer patients toward certain drugs on formulary.

Data: Adapted from Congressional Budget Office, "Prescription Drug Pricing in the Private Sector," January 2007.

Figure 2

The graphic above illustrates the flow of funds in the drug supply chain process, and appropriately highlights how PBMs make money through each of their functions. Pharmacy benefit managers make money through two primary ways: retained rebates and spread pricing. Retained rebates refer to the difference between the rebate received from the manufacturer and the amount passed through to health plans. In other words, PBMs negotiate rebates with drug manufacturers in order to determine formulary placement. PBMs then pass on a share of

their rebates to health plans, and in turn, receive negotiated payments for reimbursing pharmacies and administrative fees.[4] Alternatively, spread pricing occurs when PBMs keep a portion of the amount paid to them by health plans for prescription drugs, rather than passing the full payments on to pharmacies. PBMs pay pharmacies on behalf of health plans, but there is a spread between the amount that the health plan pays the PBM and the amount that the PBM reimburses the pharmacy for a beneficiary's prescription.[5] Spread pricing is a primary revenue generator for the industry, but has received much scrutiny by the general public and within the political realm. This lack of transparency means that consumers don't always necessarily benefit from high rebates, which certainly presents controversy within the industry.

Challenges and Controversy

With this payment structure in mind, the primary controversy with the industry revolves around rebates. PBMs are often presented with an incentive to favor high-priced drugs over cost effective drugs. Rebates are typically calculated as a percentage of the manufacturer's list price, so PBMs receive a larger rebate for more expensive drugs. That being said, people who have a high deductible plan or have copays may incur higher out-of-pocket costs for medicine.[2] The figure below will outline a scenario in which a PBM is presented with two drugs to potentially choose between.

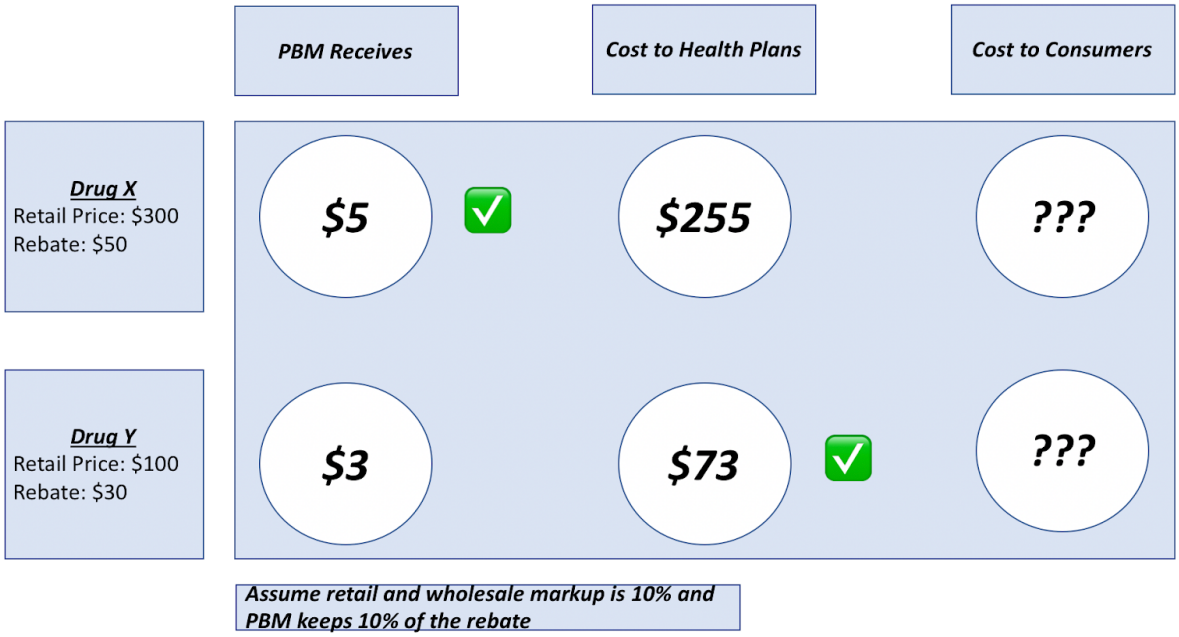


Figure 3

Let's say there are two drugs--Drug X and Drug Y. We will assume a retail and wholesale markup of 10%, as well as the PBM's profit to be 10% of the rebate. The retail price of Drug X is $300 and the PBM negotiates a rebate of $50. Drug Y has a retail price of $100 and the PBM negotiates a rebate of $30. 10% of the $50 rebate for Drug X leaves the PBM with $5, while 10% of the $30 rebate for Drug Y leaves the PBM with $3. However, with a 10% markup on retail and wholesale, Drug X costs health plans $255, while Drug Y costs health plans $73. As you can see in the figure above, this structure causes a misalignment of incentives. The PBM is incentivized to choose the drug with the higher rebate, even though it becomes more costly for health plans, which in turn results in higher costs for consumers. Therefore, for PBMs to maximize profits oftentimes they must make a decision that does not maximize cost savings for consumers.

Based upon this business model, there is a lot of debate over whether PBMs should be permitted to keep the rebates they receive from drug manufacturers, as they are not typically publicly disclosed. Some argue that PBMs should be inclined to "pass through" all or the majority of the savings to health insurers.7 If this became reality, insurers would be able to use these savings to reduce consumers' premiums and cost-sharing payments. A study revealed that the share of rebates PBMs passed through to insurers and payers increased from 78% in 2012 to 91% in 2016.2 Unfortunately, many insurers and other employers reported that they do not receive the share of additional savings. Similarly, spread pricing raises much controversy. The payment schedules PBMs generate for pharmacies remain undisclosed from health plans--perpetuating this behavior that permits a lack of transparency.6

Policy Implications

As the lack of transparency within the drug supply chain is brought to light, policy makers have considered possible reforms to improve the regulation of PBMs. The Trump administration and Alex Azar, the US Secretary of Health and Human Services, have significantly reprieved PBMs from policy changes during their term. However, the administration did indicate areas in which PBMs should have to re-evaluate their role in the pharmaceutical supply chain and the ways in which the negotiation of rebates should be re-examined in the future.[10]

The first area of reform would be to require greater transparency around rebates. If policymakers (at either the federal or state level) had data on the rebates PBMs negotiate, they

would have a more complete understanding of spending, and would be better equipped to dictate where reform needs to take place.

Another consideration has been banning spread pricing. If policymakers were to ban this practice, it would ensure that payers are not overpaying PBMs for prescription drugs. However, a ban certainly would be timely and would not necessarily be realistic at this point in time, so a more limited proposal could include a mandate that PBMs update their cost schedules with pharmacies to reflect price increases for generic drugs.2

The final policy recommendation would be to require PBMs to pass their rebates through to payers, and later to patients. If PBMs were to pass through a fixed percentage of their rebate to payers, or better yet, patients, they would still be incentivized to negotiate price reductions with drug makers, but wouldn't be the primary benefiters.2 Specifically, it could even be proposed that PBMs contracted with Medicare Part D plans specifically should pass at least ⅓ of their rebates and price concessions directly to patients. If the government were to enact firm regulation of rebate practices, it would eliminate a primary aspect of the current PBM economic model.[10] But, proposing that a fixed percentage of their rebate be passed to drug makers would allow PBMs to still capitalize on rebates, just in a more limited capacity that does not negatively affect consumers in their profit-maximizing process.

Industry Landscape and Large Players

The market landscape of the United States pharmacy benefit management industry is highly concentrated. The three pharmacy benefit management companies with the highest market share accounted for over 75% of the industry's revenue as of 2020.9

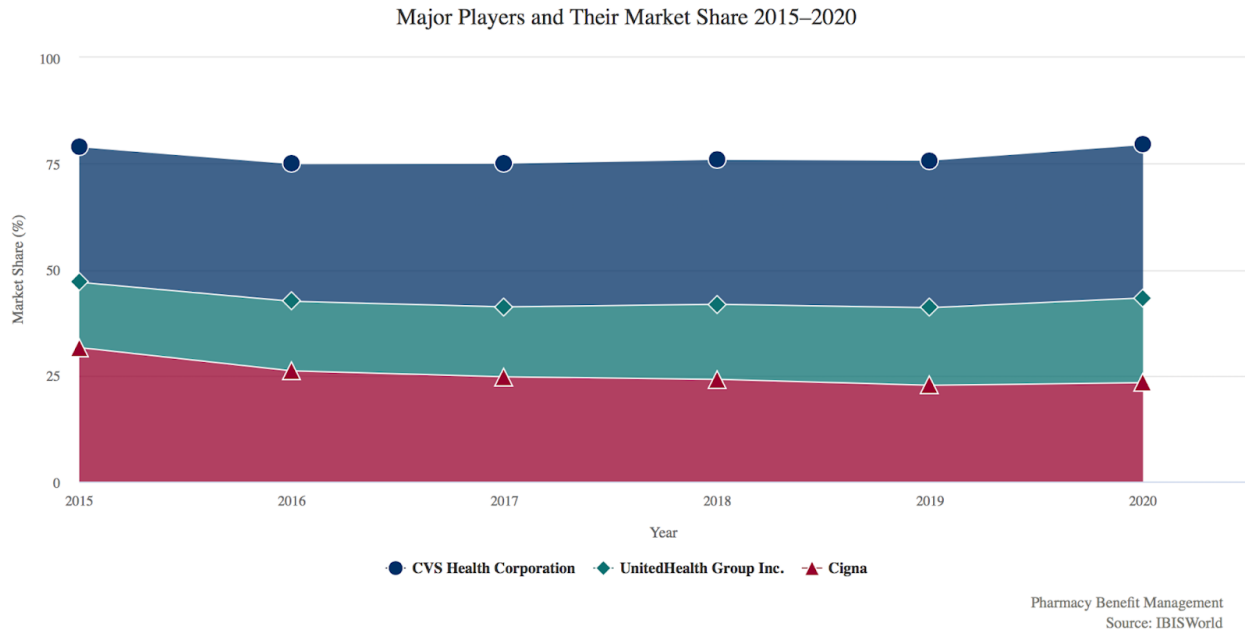


Figure 4

Looking at the figure above, the largest players in the pharmacy benefit management industry are CVS Health Corporation, Cigna, and UnitedHealth Group Inc.. CVS Health Corporation currently makes up 36.2% of the industry's total market share, while Cigna and UnitedHealth Group Inc. account for 23.3% and 20% of the industry's market share, respectively.3 The following table outlines the primary role of these key players, as well as the scale of their network and financial performance.

	Business Segments/Services	Magnitude of Client Base	Financial Performance
CVS Health Corporation	CVS functions through three main business segments: pharmacy services, retail/LTC, and corporate. The pharmacy services segment acts as a PBM to provide services for employers, insurance companies, unions, healthcare organizations, and other health benefit plans.	CVS provides prescriptions and related health services through its 9,900 retail stores and 1,100 walk-in medical clinics and online retail pharmacies. As of 2019, CVS had approximately 105 million members with a plan, allowing them to generate $256.80 billion in total revenue that year.	From 2015-2020, the revenue generated by CVS pharmacy services has grown year over year by approximately 7.2%. The primary driver behind CVS's successful performance over the past 5 years has been the significant growth in its consumer base, as well as prescription volumes. Furthermore, operating income improved as synergies between CVS and acquired companies (i.e. Aetna) improved.
Cigna	Cigna is a major insurance provider of medical, dental, disability, life, accident, and other services. They entered the pharmacy benefit management industry in 2018 through an acquisition of Express Scripts, one of the largest PBMs in the industry. Cigna generates most of its revenue from the sale of prescription drugs through its network of retail pharmacies.	Cigna members have access to a network of approximately 67,700 retail pharmacies, as well as the company's own mail-order pharmacies. They process claims for an estimate of over 1 billion prescriptions annually.	Over the five years to 2020, Cigna expanded its PBM operations via mergers and acquisitions, which has enabled exponential revenue and profit growth. The company has also grown through organic channels, including the addition of new customer contracts and the extension of existing contracts to add new services. However, from 2016-2017, revenue generated from PBM services declined as a result of lower claims volume from clients and an increase in generic consumption. Stagnant claim volume and increased usage of generics has been detrimental to their revenue.
UnitedHealth Group Inc.	UnitedHealth Group Inc. (UHG) provides health insurance and related services throughout the US. They operate under the UnitedHealthcare umbrella, which manages the company's health plans and Optum Inc. They are a leader in commercial and government health plans. OptumRx Inc. is UHG's industry-relevant subsidiary and is a leading PBM. OptumRx offers PBM benefits and specialty pharmacy benefits across UnitedHealthcare's businesses and to external employer groups, union trusts, managed care organizations, and Medicare and Medicaid-contracted plans.	OptumRx provides services to almost 56 million people and offers health plans through its network of 67,000 retail pharmacies, as well as two mail services facilities.	From 2015-2020, UHG's PBM revenue and market share has increased, with Optum being the company's most rapidly growing segment. UHG's ability to insource PBM services has allowed them to boost revenue during this period. Further, the acquisition of Catamaran Corporation influenced a 51% increase in company revenue in 2015 (the year of acquisition).

Figure 5

Further, over the last 5 years the industry has endured a shift, seeing a lot more merger and acquisition activity than ever before for the industry. Major players have acquired smaller companies in hopes of expanding their network and customer base, while also increasing bargaining power with drug manufacturers.3 Some PBMs have also begun partnering with insurance companies as an attempt to further control costs, while also improving synergies. In December 2017, CVS announced a deal in which they would acquire insurer Aetna for a proposed $69 billion, making CVS a healthcare giant.[11] CVS then partnered with a key player in the insurance industry, Anthem to create a PBM.[12] Interestingly, the increased M&A activity has taken the form of "vertical integration," as the companies consolidating have tended to be large PBMs and health insurance companies. This has resulted in the consolidation of key insurance players, and limits the potential for disruption within the market by health insurers for PBMs. This acquisition and partnership, and the many M&A deals announced since, has led to the belief that the pharmacy benefit management industry is bound to evolve in a more collaborative way, and this will be further conveyed in following sections of the thesis.

Where the Industry is Headed

A four-month period (between the end of 2017 and beginning of 2018) saw two major instances of vertical integration between commercial insurers and PBMs--CVS Health/Aetna and Cigna/Express Scripts--increasing these companies' negotiating power, while also contributing to increasing price pressures in the US pharmaceutical market.[13] Based upon the already highly concentrated nature of the pharmacy benefit management industry and the increased M&A activity taking place in this space, it seems safe to assume that the industry will see an evolution in the imminent future.

There are a few potential scenarios that could be the outcome of increased M&A activity within the industry. The first potential is that the industry sees so much M&A activity that the industry becomes dominated (even more than it currently is) by a small handful of integrated PBMs. As a result, smaller PBMs that are independent from other healthcare services companies will be unable to compete with the top players in the industry.[10] That being said, these smaller PBMs would be likely to seek acquisition or partnerships with other PBMs, further perpetuating the practice. Should this scenario become a reality, the dominant forces of the industry would be left unhindered by regulatory challenges.

The next scenario that has been considered is one integrated dominant player that becomes a super competitor for the industry.[10] A super competitor refers to a company that, by competing successfully with its distinctive capabilities, changes the dynamics of the business environment.[14] The emergence of a super competitor would require the other players in the

industry to re-evaluate their strategy and operations in order to remain sustainable. But, where there is disruption there is also opportunity. A potential disruption to the market of such nature could be the acquisition of online pharmacy PillPack by Amazon. On June 28, 2018, Amazon announced that it would acquire PillPack for $753 million, allowing for the delivery of medications and automatic refills, as well as 24/7 customer support.[15] Their value proposition centered around affordability, efficiency, and enhanced customer experience has disrupted the mail order pharmacy space, and will require many PBMs to rethink their processes for the future.[10] This acquisition was a primary factor in sparking a new projected trend that online pharmacies will experience the strongest growth in the industry in coming years.3

Regardless of whether a super competitor emerges or the market becomes further concentrated, the prevalence of M&A activity in the industry over the last few years has greatly shaped the direction in which the industry is currently headed. Specifically, this direction is in the form of increased integration between pharmacy and medical benefits. This shift in focus from independent PBMs to integrated models has resulted in pharmacy benefits being perceived as a strategic form of leverage that organizations can seek to ensure meaningful impacts on cost and quality of drugs.[12]

In addition to the influence of M&A activity on the future of the industry revolving around integrated healthcare services, consumer preference also played an important role in the direction the industry is headed. As previously mentioned, clients are now demanding that PBMs prioritize their relationships with each other, to the same degree of importance (if not more) as drug manufacturers. This highly valued priority of maintaining a strong relationship

with consumers drove Navitus Health Solutions, a pharmacy benefit manager, to partner with WithMe Health. Navitus Health Solutions serves as a PBM with a far from traditional business model for the industry. They provide full pass-through of all manufacturer rebates and negotiated pricing improvements to their health plans and consumers with a focus on lowest-net-cost medications and comprehensive clinical care programs, in order to ultimately reduce costs and improve member health.[16] WithMe Health was established with the goal of improving health outcomes and minimizing cost of care through medication guidance. Navitus Health Solutions announced their strategic investment in WithMe Health on February 19, 2021 with the hope of ensuring that their members are on optimal medications, receiving proper support, and making certain that their employers and members receive the most benefit from their medications.[17] Additionally, a study reported that oftentimes employers are ineffective in investing in prescription benefits, as 29% of adults do not take their medications as prescribed.[18] This leads to an increase in medical costs per capita, as well as an impact on the consumer's health. Navitus Health Solutions hopes that with guidance from WithMe Health, they can reduce medication spend waste, while providing proper medical assistance and access in the process.[17] WithMe Health reduces medical spend waste through a more personalized approach, where they personalize medications utilizing data accumulated on each member, as well as a pharmacist-led medication guidance team to ensure that members are on the proper treatment journey, preventing wasted expenditures on wrong treatment approaches.[17] It is partnerships as such, that were shaped by shifting trends in the industry, that will revolutionize the pharmacy benefit management industry in years to come, and help to establish benchmarks and expectations for other PBMs to aspire to adhere to.

Navitus Health Solutions not only exemplifies their core value of customer experience and quality treatment, but they also depict a trend that many smaller PBMs have had to follow in order to remain viable. This trend is finding a niche. Successful small PBMs have realized that with the increase in M&A deals, they cannot compete with super giant PBM providers when it comes to negotiating rebates. For that reason, many have started to look for opportunities to capitalize in niche markets (i.e. workers' compensation, specialty drugs, or specific diseases). Daniel Jordon, managing director at the Graham Company, an insurance broker and consultant business in Philadelphia, notes, "Many of them are not rebate driven. Many just want to be completely clinically driven."[19] Additionally, Joseph Paduda, president of CompPharma, a consultant to workers' compensation PBMs, suggests, "Keep the big folks on their toes," and continues, "[Small PBMs] have to compete on the basis of something else [other than rebates]."[19] With this in mind, Navitus Health Solutions exemplifies smaller PBMs' ability to profit in either a niche area or with a unique value proposition--in their case revolving around providing personalized medication guidance and lowest-net-cost medications.

COVID-19 Impact on Industry

COVID-19 has had a widespread impact on industries of all types globally. The pandemic has certainly affected the healthcare industry, even more drastically than other industries. As the world strives to adapt to the changing environment amidst COVID-19, United States PBMs are also working to develop policies to address the changing healthcare landscape in order to continue serving their clients. The ways in which PBMs have strategized their response to

COVID-19 can be categorized into three different segments: pharmacy management, medication access, and supply chain.

The first strategy within pharmacy management that PBMs have turned to is extending prior authorizations.[20] PBMs were forced to adapt to shelter-in-place policies due to COVID-19, and in doing so, they had to react to members' inability to see their healthcare providers. Extending prior authorizations for previously approved medications allows members to receive the treatment they need, while not overwhelming drug providers with additional administrative work in the process. Another challenge PBMs have had to combat is quantity control. Many drugs are being used to treat severe COVID-19 cases, so it has become the responsibility of PBMs to oversee utilization management for these medications.[20] It is imperative that these measures are taken to ensure that there is sufficient supply of certain medications in the case that a COVID-19 patient under extreme conditions has access to necessary medication.

The next strategy is with regard to medication access. Some PBMs have transitioned members to 90-day mail-order pharmacies.[21] Again, due to shelter-in-place polies, many PBMs have expanded their mail order pharmacy capabilities. Similar to many industries, the pharmacy benefit management industry has employed strategies to replace face-to-face interaction, and one way to do so is through direct-to-member mail and telephone communications. Based upon this strategy, some PBMs have projected that members receiving mail order prescriptions will increase by over 20% during COVID-19.[20] Another tactic PBMs have turned to is extending specialty medications. Most patients receive a 30-day supply of medication, but some PBMs are now allowing patients to receive 90-day supplies due to COVID-19.[25] However, it is crucial that

PBMs establish criteria to determine who and which drugs qualify for this extension. Taking measures as such will limit excess costs, prioritize patient safety, and prevent excess supply of certain drugs.[20] Additionally, some PBMs have been allowing temporary overrides for non-preferred items, while allowing members to pay preferred copays. This strategy has been considered when a particular pharmacy is out of stock for the preferred drug and the patient has a legitimate and immediate need for the prescription.[20] Unfortunately, this could result in an increase in plan costs based on the fact that, typically, preferred drugs have higher rebates to help control costs.

Finally, PBMs have faced the challenge of preparing for disruption within the drug supply chain. Luckily, the global drug manufacturing industry has withstood COVID-19 impacts, so PBMs have not faced major changes in their ability to supply their members with medication. But, as previously mentioned, some PBMs have experienced short-term supply shortages within specific pharmacies for select medications as a result of increased demand, which stems from the ability of distributors to accommodate the increased volume.[20]

The impact of implementing these strategies may influence the pricing of drugs and plans to consumers. As supply and demand change, pricing often does as well. It is of paramount importance that PBMs and plan sponsors are aware of the ways in which certain changes in response to COVID-19 will affect drug prices. Some of the strategies that have been discussed that have the potential to affect pricing include:

- Copay overrides
- 90-day prescription supplies (as opposed to 30-day supplies)

- Drug utilization management

While it is important to note the ways COVID-19 may impact costs for health plans and consumers, it is also important to acknowledge the shift in consumer preferences in this "new COVID-19 world." COVID-19 has caused a reliance on direct-to-home mail services, including the delivery of prescription drugs. This trend is important to note because even as states begin to open up, and face-to-face interaction becomes more acceptable, consumer preferences towards delivery (convenience) will likely have a lasting impact. That being said, PBMs must be prepared to adjust operations to accommodate consumer preferences as such.

Conclusion

The United States pharmacy benefit management industry has proven to be a dominant player in the drug supply chain. PBMs have evolved throughout their existence, and have continued to prove to add value to their clients and members. While there is certainly scrutiny when it comes to transparency within the industry, it is not likely that this will result in the elimination of pharmacy benefit managers. However, it is important to be aware of potential policy changes that may arise in the future in hopes of reforming the issue of transparency within the industry, and how that may affect many PBMs. Furthermore, it is imperative that PBMs, and investors in PBMs, are aware of the direction the industry is headed in, with increased M&A activity and changes in consumer preferences, so PBMs can be prepared to best position themselves within the market.

With all of the current trends, as well as potential for disruption within the industry, in mind, the pharmacy benefit management industry is projected to remain consistent in generating revenue and profits, and is projected to continue fulfilling their role within the pharmaceutical supply chain in the United States.

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