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Pharmacy Benefit Managers: A Market Solution

In the past thirty days, according to the Centers for Disease Control and Prevention (CDC) 48.9% of the U.S. population has used a prescription drug (CDC). The prescription drug market, according to the Centers for Medicare and Medicaid Services, accounts for 10% of U.S. spending on health care; many have called for better cost-saving measures to limit the amount of taxpayer dollars needed for such a large government program (CMS). While public policy advocates search for a better pharmaceutical system, the market has come up with a solution, Pharmacy Benefit Managers (PBM). These firms seek to reduce the costs of prescription drugs and lessen the burden of prescription drug claims for insurance companies and care organizations. PBM's are a market solution that reduce some of the asymmetries of the healthcare market and bring marginal revenue closer to marginal cost, but they face challenges imbedded in the rules of the game that produce uncertainties about how productive they are.

PBMs were first introduced in the 1960's when health plans began covering prescription medication (Appleby Et. Al.). PMBs were intended as outsourcing solution for prescription drug claims. Employed by health plans, PBMs began arbitrating prescription drug claims on paper. According to Garret, these claims needed to be verified through information collected by the pharmacy. With the information collected, the PBM would then accept or deny the claim (Gerrett, Dabbs, Garris 49). This would then cause the pharmacy to fill the prescription if the claim was accepted. They did this for a small fee for every prescription that was filled. In the 1980's, PBMs began to grow, along with the amount of prescriptions being filled. With new technological advances, they were also able to do most of their work electronically instead of by paper.

As time passed, the responsibilities of PBMs grew. They began work on drug utilization reviews, drug education for disease management, and helped to create formularies. Drug utilization reviews are audits that PBMs conduct for patients to determine drug safety, through effectiveness and drug interactions. They also require a standardized set of procedures before drugs can be administered (Prosmushkin). PBMs also negotiate formularies. These are lists of drugs that insurance companies and care organizations have identified as the most valuable that are covered under a particular health plan. These expanded responsibilities kickstarted a new era for PBMs.

With large patient networks, PBMs had gained bargaining power in setting the prices of the drugs that the pharmacies were supplying. This peaked the interests of drug manufacturers (Feldman). With increased bargaining power, manufacturers could set the prices that they wanted for the drugs that they produced. With the conflicts of interest in mind, the Food and Drug Administration acted. When the FDA saw these mergers, they began "to clamp down on promotional claims by PBM's that were owned by drug companies" ("Another PBM Sold As Express Scripts Buys Diversified"). These actions caused pharmaceutical companies to sell the PBMs they owned. This advance created a new era for PBMs: The Pharmacy Era.

While the pharmaceutical companies were selling off their PBM firms, large pharmacies saw a large profit potential. If one pharmacy had a large market share in the PBM industry, they could set the prices that their pharmacies could meet while putting other competitors out of business. This caused a spike in the number of mergers from the early 2000's to current day. Currently the market is held by three major PBMs: CVS Caremark, United Healthcare's OptumRx, and Express Scripts.

PBMs today now have three revenue sources. The first is flat fees they charge to process drug claims. Whenever an insured customer walks into a pharmacy, their information must be verified, and the claim accepted before the pharmacy fills the prescriptions. Once the claim is processed, the flat fee is sent to the PBM from the care organization that the service was provided for.

PBMs are also compensated through a process called skimming. PBMs have increased bargaining power, due to the large networks of patients that they have. PBMs can then set differing prices between what the care organization reimburses, and what the pharmacy charges for a certain drug. The difference between the reimbursement and payment then goes to the PBM. Much of the information regarding this topic is very vague. Because many PBMs are privately traded companies, the financial information regarding revenues can be difficult to determine. This provides a veil for PBMs to work behind as they gain monies from this practice. Although not much is known about how much of the profit is kept from this practice, one study has aimed to show just that. In Ohio, Auditor Dave Yost conducted an audit on the Medicaid program and how it interacted with PBMs. His study showed that there was indeed skimming occurring in Ohio with an 8.9% spread (qtd. Yost). Although this number is concerning, many drug prices change daily, especially generics, which Yost found to have the highest amount of spread. These spreads could simply be the cushion for fluctuating drug prices.

The other way PBMs generate revenue is through rebates from drug manufacturers. Each time a care program wants to roll out a new policy, they must employ a PBM to make a formulary. These formularies include the payment systems, clinical programs, and kinds of drugs a health plan might cover. By doing this, the PBMs create incentives for pharmaceutical companies to give rebates for including their drugs in the formularies. The current issue is where

the rebates are going. Some claim that PBMs are keeping the whole rebate to themselves. PBMs claim that they pass a certain percentage of the rebates to healthcare providers based on their contract with the PBMs.

Murray Rothbard, in his article Entrepreneurship: Kirzner vs. Mises, says that Mises believed the entrepreneur bore the risk of his actions and that he generated profit from properly predicting the future (Rothbard). PBMs first came into the market because they saw a market opportunity. The insurance companies were bogged down with claims that they could not efficiently process. As PBMs evolved, they found other profit opportunities. Much of the work that they perform is a sort of outsourcing for care providers, and pharmacies. Rothbard says in Man, Economy, and State that “Every entrepreneur, therefore, invests in a process because he expects to make a profit” (Rothbard) The opportunities were pioneered by the pharmacy benefit managers because they expected to make a profit.

PBMs are also middlemen that provide many services ranging from the production of a drug to its distribution. By negotiating the prices, discounts, and payment methods for the different parties involved, PBMs are in fact, “performing a necessary function in an efficient manner.” (Block 180) Walter Block gives an explanation of this need in his book Defending the Undefendable. Suppose a production process is defined by 10 steps. Step 10 is production, and step 1 is sale to the end user. All middlemen provide a service that adds value that others before them were not able to provide at the prices the subsequent middleman can. This means that if middleman 4 was not adding value, middleman 3 would not pay a higher price than what middleman 4 paid for the good. The implication of middlemen then means that they add value or lower costs. This doesn’t mean that they lower prices.

Even with the straightforward explanation of middlemen given above, some believe that they are simply parasites, sucking the life from otherwise profitable goods and services. This view has been taken by Leo Marini. Marini begins discussing the downfalls of Uber, the famous ride sharing platform (Marini). He describes that when Uber employs workers, it keeps them from rising above the ranks of poverty and prevents them from rising out of poverty because they aren't given the work experience and pay grade to start their own business. At surface level this argument appears to be wrong and that is because it is. Without Uber, the middleman, these workers would be unemployed. Uber is adding value to the economy through speed, convenience, and completing the double coincidence of wants.

PBMs also add value by meeting the double coincidence of wants. When one individual wants what another has but does not have any resources that they can readily trade, a middleman can connect the two through multi-variable trades. One common real-world example of this can be found in the pharmaceutical industry. Imagine for a moment that drug wholesalers were determined to be a wasteful middle man and the FTC banned their existence. This would mean that drug manufacturers such as Pfizer, and Roche, who have many different drugs that they manufacture, would need to now need to distribute their drugs to pharmacies as well. Pandemonium would erupt while pharmacies scramble to get their prescription drugs safely and on time. Wholesalers allow drug manufacturers to avoid complex distribution and pharmacies are able to easily acquire the drugs they need in a timely manner. The same goes for PBMs. Care providers want lower drug prices, drug companies want to sell their drugs, and pharmacies want to profit from drug distribution. The PBMs meet in the "middle" and find a solution for all of them.

PBMs are entrepreneurs, but it is difficult to determine if the incentives they face cause them to act productively. William J. Baumol says that the rules of the game that entrepreneurs face, can influence an entrepreneurs' activities that are either productive, or unproductive (Baumol 909). When PBMs create formularies and set the prices that pharmacies charge for certain drugs, it is unknown to both the pharmacy and care organization what the other is charging. This allows PBMs to have the autonomy to earn money without accountability while practicing in price skimming. These incentives could cause PBMs to act less productively than if they were to be more transparent about their profitability.

PBMs also suffer from incentives that might cause them to put more expensive, brand name drugs on the formularies that they create. As highlighted previously, PBMs receive a rebate from drug manufactures, to include their drugs on the formularies. This allows more profitable manufactures to supply rebates, and therefore have their more expensive, branded drugs on the formularies. Instead of steering customers to less expensive generic drugs, PBMs are moving patients to more expensive brand name drugs, one formulary at a time. To their credit, some of these rebates are refunded and given back to the care network that paid for them (Prosmushkin).

Now, with the current situation in mind, many contemporary economists would argue that if PBMs were providing a service that was not valuable, care providers, insureds, and others would not pay for their services and instead bypass them. This would assume that the market for PBMs is in equilibrium. The problem with this argument is that it assumes the equilibrium and completes the Panglossian fallacy. The Panglossian fallacy is stated as an optimist who comes to economic explanations based on a market operating in equilibrium. According to Mises, markets are constantly moving toward the equilibrium price, but the final price is also always moving.

This means the market won't ever truly be in equilibrium, making this efficient market hypothesis for PBMs invalid (Mises).

In recent years, according to Forbes, large conglomerates have bought up PBMs and consolidated the mlarket to 3 major brands (Herber) they control 80%-85% of the market (Therigy). At face value, decreased competition can be concerning because it could lead to higher prices and rent seeking behavior. Instead, the larger a PBM is, the greater leverage it has in negotiating lower drug prices with pharmacies. This leverage comes from the number of patients a PBM can supply through the insurance policies they are writing the formularies for. Because of this leverage, PBMs can either sell drugs to the care network at lower prices and make their profits with lower profit margins and higher sales volume or ignore the increase in potential clients from the PBMs and make money with higher profit margins and less sales volume. Pharmacies choose to agree to the terms of the formularies with lower profit margins because they believe they can make it up from increased volume that the contract provides.

All of this means that the more bargaining power a PBM has, the easier it is to set low drug prices. Studies in Ohio, highlighted by the Ohio Pharmacist Organization, also show that there has been an increase in skimming. This means independent pharmacies, who aren't able to negotiate prices, are making fractions on otherwise profitable drugs.

Some of the issues that face PBMs incentives have frustrated policy makers and pharmacies with PBMs. They feel that the pharmaceutical industry would be purer if PBMs had more competitors and that they face issues in their payment structures that require governmental regulation or oversight. One of their solutions is to regulate greater transparency in PBM's dealings. Therigy pointed out that from 2015 to 2018, Congress has brought forward four new bills to ensure that PBMs are negotiating drug prices in the best interest of the patients in an

ethical manner (Therigy). Most of the bills simply call for greater transparency but one bill does much more. Bill H.R. 1038 will not allow for retroactive payment reductions to pharmacies. The difficulty with bill H.R. 1038 is that most of the rebates given to the purchaser of the drug, whether pharmacy, insurer, or PBM, is calculated retroactively based on sales volume. This would prevent the current rebate practice and cause miscalculation in drug discounting and pricing.

Other steps that different governing bodies are taking involves bringing lawsuits forward in order to try and prevent PBM's to behave in a way that isn't competitive. This includes one suit against Medco Health Solutions in 2018 allegedly for violating the False Claims Act for identifying Nexium as the only solution for a condition in exchange for reduced prices on other drugs (Balto)

As it is shown above, PBMs are an entrepreneurial market solution for a portion of the vast array of asymmetries experienced in the healthcare market. They were created to add value and reduce the prices for the patients that they serve. Although many PBMs are still in business, it is unsure how productive they are. These complex organizations are facing difficult problems that, in recent years, have appeared to cause a rise in pharmaceutical prices and raised some concerns for law makers and care organizations.

Many organizations and special interest groups are calling for more regulation. Instead, the best way for the U.S. to lessen the burden of rising drug prices is to let care organizations make the decision, on their own, whether to outsource to Pharmacy Benefit Managers or move operations back in house. When they were formed, PBMs were a market solution in the truest sense. Entrepreneurs formed the organizations to solve a problem that erupted from increased prescriptions. The way PBMs currently carry out operations is vague and hidden from insured

patients and practitioners. PBMs must be increasingly straightforward with negotiating practices. They must also outline their rebate programs, and formularies with more clarity. This way care organizations can see that they are working harder to lower drug prices and trying to keep costs low for care organizations.

PBMs are still a cost lowering middle man. This is proven through their sustained business profits. Despite this fact the organizations that hire them must know exactly how they are benefiting from the service of a PBM. Many care organizations are beginning to question their business viability. Without increased transparency, this market solution could slowly fade away in a rapidly changing healthcare industry.

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