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The Spread – Exploring the Reason for the High Cost of Pharmaceuticals, Part 2

By Chuck Dinerstein — June 2, 2017

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Welcome back. In Part 1 we considered the spread – the difference between the cost of a product or service and the price charged for that product or service – for the three major suppliers in the pharmaceutical supply chain, manufacturers, wholesalers, and retailers. And we mentioned, in passing, the role of payers who fund the supply chain, insurance, the government and the only group paying for any of this, us.

Intermediaries – facilitators of transactions

Using cost and price to improve your spread requires having the information necessary to discover the little differences, the points of arbitrage you can exploit – 'knowing the market.' Information like any asset is distributed unevenly. Differences in our knowledge, information asymmetry, like any difference in the markets can be exploited. The initial information is the manufacturer's price which propagates downstream. This is the price that wholesalers use to set their spread, which in turn, the retail pharmacies use to set their spread which becomes the cost to the payers. Initially, the manufacturer's 'sticker price' called the wholesaler's acquisition cost (WAC) could be used to calculate downstream spreads for wholesalers and retailers. But because this information was not equally shared, pricing companies entered the market as an intermediary, carrying the pricing information to every wholesaler. The correct term for these lubricators of the market's wheels is intermediary – they do not sell products but add value selling information. The pricing companies' spread comes from fees from manufacturer's publicizing their prices, and fees from the wholesalers receiving that information. This information was useful to everyone. The pricing companies' spread was absorbed in the manufacturer spread in their initial price, the wholesaler included their costs in their spread to the retailers, and the retailers continue to pass the cost along

as the ‘cost of doing business.’ Information intermediaries can differentiate themselves by the quality and timing of their information. Some wholesalers may learn about a price a bit early getting a jump on the market or the prices reported to wholesalers may be lower for some. This knowledge for select audiences influences the number of manufacturers and wholesalers price companies reach, this differentiation of knowledge is what drives intermediaries’ spread.

Pricing companies arbitrage resulted in retailers seeing increasing, small differences in their market prices. Wholesaler B charged less than wholesaler A for the same pharmaceutical. Knowing and tracking this information is very valuable but again, not a retailer’s core competency. To help them, another information intermediary appeared trading in the information about wholesaler’s prices. These agencies were to become pharmacy benefit managers (PBMs). PBMs looked for the best deal for their clients, the volume purchasers of pharmaceuticals, large pharmacy chains, and insurance companies. PBMs broker deals, bringing buyers and sellers together receiving their piece of the action, their spread. For the bulk purchasers, the cost of the PBM came from the savings PBM information provided in protecting or decreasing their costs. Wholesaler demanded a lower price from the manufacturer because of the increased volume of the market they could now provide recouping their PBM expenses. And manufacturer’s reset their spread by raising sticker prices. Equilibrium regained.

But the largest individual purchaser was neither an insurance company or retailer it is government, predominantly federal, but state governments have an increasing share through Medicaid. They had no negotiators for their interests, no PBMs. Wh would the PBMs work for the Department of Defense, the VA, Medicare or Medicaid? Who would they report to, no one individual signs off on government contracts? The government might try and emulate PBMs, or they could apply an effective tool only they possess, regulatory law. And they did, setting by law the price they would pay as the largest purchaser of the biggest volume of pharmaceuticals. While legislators regulate, their tenure depends on votes and votes upon campaign funds, not pharmaceutical prices. As Adam Smith said, “Whenever the legislature attempts to regulate the differences between masters and their workmen, its counselors are always the masters.” This helps explain why Medicare, arguably the largest purchaser of drugs in the United States is expressly prohibited from negotiating price.

With the government demanding the lowest price everyone had to recalculate their spreads – and oddly enough, no one wanted their spread reduced more than others. But there was a solution, along the lines of robbing Peter to pay Paul. Markets could meet the price needs of the government by further stratifying their customers – using a Marxian ‘from each according to their ability’ approach. The first customers to feel the pinch were those unrepresented by any player in the market, those who pay for their pharmaceuticals directly, with their cash. The price of drugs for them went up to offset and protect the spreads of retailers, wholesalers, and manufacturers. The supply chain turned to the next group of buyers, the insurance companies. For the insurance companies, calculating their spread was simple mainly because they employed actuaries and analytics on the information they held on their beneficiaries. Insurance companies spread simply the difference between what they collect from a patient and what they spend on a patient – not individually but in the aggregate, reducing the high cost of one against the profit of another. But raising the cost of a policy was too direct a signal, customers could directly compare one insurer to

another. To hide consumer's new costs to consumers differentiated premiums creating several tiers of benefits – pay more get more. Far more important in obfuscating price costs were two new terms, deductible, and co-payment. These are costs borne by the patient, covert payments reducing insurers costs for drugs. In determining their cost for a pharmaceutical, they like the government, imposed regulations (deductible and co-payments) producing a lower cost to them, restoring or enhancing their spread. Each of the supply chain members, manufacturer, wholesaler, and retailer made similar calculations shifting their decrease spread as best they could within their markets.

Consolidation and Integration

Other forces reshaped the balance within the PIC. First was competition within each market. For branded manufacturer's it was expensive to create new pharmaceuticals, R&D costs and the time waiting for FDA approval were very, very expensive. Branded pharmaceuticals manufacturers merged and absorbed, reducing their numbers, growing their size, increasing their market power. But consolidation has its costs by a lack of resilience to market forces. Small movements in market share or drug prices could injure these production behemoths in ways that a smaller, nimble company might avoid. Resilience improved by diversifying and it was more economical to expand by purchasing the better bets among the upstarts before they grew to be competition. For manufacturers of generics, it was a race to the bottom, their product was a commodity bought and sold at the lowest prices obtainable. Their numbers were reduced by attrition, merger, and absorption.

Wholesalers were not immune to competitive forces fighting for market share by aligning with large purchasers to get them the best deal and preserve the wholesaler's spread. Small wholesalers could not compete or were too small to distribute to the vast networks of retail. Wholesalers absorbed and merged or disappeared. Three major wholesalers now control 90% of the pharmaceutical markets. And in turn, competition reduced retail pharmacies into large chains or purchasing groups of independent pharmacies. The concentration of manufacturers, wholesalers, and retailers were horizontal integrations.

As horizontal coalescence of the markets continued another force exerted increasing power. The competition between the markets could be internalized and external costs reduced or their spreads consumed. Purchasers restructured the distribution and purchase markets, vertically integrating them; coupling their buyers more directly to the manufacture by becoming a wholesaler themselves. The wholesaler's spread was now theirs, and they could keep it for their spread or pass a portion along to their buyers making them more attractive to the buyers paying higher rates. When it was too difficult to integrate distribution and purchase, then purchasers buy a portion of the wholesalers and recoup some of their costs from the profits they shared as partial owners of wholesalers. The flow of money is perhaps more confusing, but it returns to the same pockets at similar rates.

The business of the intermediaries does not involve physical assets; their assets are information. Information assets differ from tangible assets. Information is paradoxical. Information is reusable, not consumed or used up as a physical asset. But information has no value in differentiating you in the market or increasing your ability to leverage small differences when shared. Information is the

asset that cannot be shared; it is a proprietary knowledge that gives them an edge. As a result, how drug prices are ultimately set is opaque, Adam Smith's invisible hand moves markets through information asymmetry.

A final thought

Despite pages of acronyms and 25 pages of typewritten notes, I could not find the lowest drug price. That is when I recognized that the PIC incorporates costs at every level and each level seeks to optimize their spread. This is what I think a reasonable person can conclude.

- The American citizen through direct payments, insurance and taxes pay for the largest free pricing pharmaceutical market in the world. We, through our labor, support everyone's pharmaceutical expenses globally not insurance companies or the government.
- Higher prices result from many sources, all protecting as best they can their spread. Some days it will be because of manufacturers, on others because of increasing co-payments or higher deductibles, or occasionally we uncover proprietary workings of the PBMs of the insurance world or the bureaucrats of the government. Each take turns as the villain, but all are connected by a market ecosystem.
- The pharmaceutical market ecosystem is a result of a 100-year push and pulls of traditional market forces, competition, innovation, acquisition, merger. It is complex, and alterations lead to unintended consequences, like drug shortages or a decline in the search for drugs
- There is no lowest price. The best approximation comes from the Federal Supply Service [2] where the lowest price is mandated. That said, there are more than one lowest price for most drugs.
- Every headline about high drug prices resulting in investigation or regulation to correct the latest perturbation of market's equilibrium can further distort the market.
- Real transparency lies in knowing the price at every level in the market. Something the market participants will not provide because it is the source of their spread.

Links

[1] http://www.shutterstock.com

[2] https://www.va.gov/oal/business/fss/pharmaceuticals.asp