

Direct-to-Pharmacy Distribution in Spain: An operational and politico-economic analysis

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Summary:

The thesis attempts to design the operating strategy for a direct-to-pharmacy distribution model for healthcare/pharmaceutical products in Spain. Through a simple model it captures the benefits of D2P for manufacturers, healthcare system, retail pharmacies and logistics service providers (LSPs). Additionally, it suggests ways to implement a direct to pharmacy model using nonmarket strategies that enable regulatory changes and stakeholder acceptance of a D2P distribution model.



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KEY INSIGHTS

1. Applying nonmarket strategies may allow a LSP to create a sustainable direct to pharmacy distribution model.
2. Starting initially with D2P for generic pharmaceutical products may evoke a weaker counter-response from the incumbent wholesalers.
3. Using an options based decision framework can allow the LSP to dynamically readjust its strategy and minimize its risk.
4. LSPs must be able to adapt to flexible and fast scalable operations to create a successful direct to pharmacy distribution model.

Introduction

The distribution of medicines around the world is organized in different ways depending on the country. The most common distribution is done by wholesalers, which are responsible for having a large number of medicines in stock. The activities performed by wholesalers can also vary from country to country.

Full-line wholesalers operate in Spain and most part of EU and they carry a large range of pharmaceutical products from different pharmaceutical companies. However, due to the large number of suppliers, it is economically difficult for wholesalers to organize import, warehousing, storage, distribution and financial management for the pharmaceutical manufacturers.

Thus, emerges the role of Logistic Service Providers (LSP) or pre-wholesalers. The LSPs offer their services to manufacturer and to full-line wholesalers, thereby becoming the prolonged arm of the manufacturers, as they hold their stocks in consignment.

Full-line wholesalers offer to retail pharmacies a high frequency of deliveries and a short lead time, many times in less than three hours.

Pharmacies in general tend to have one main full-line supplier and two to three additional suppliers that are responsible for a smaller share of its volume of purchases. The objective of these additional wholesalers is to offer specialized products or to be used in case of stock-out situations.

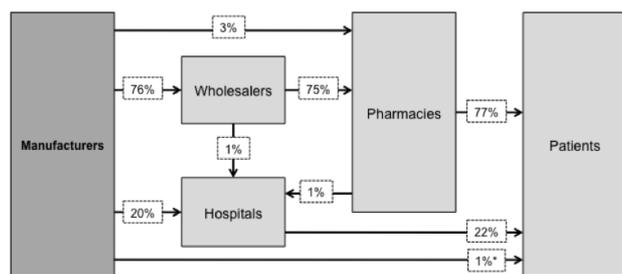
The redesign of the prescription drugs supply chain in Spain can bring a more cost efficient distribution model by reducing inefficiencies of the current distribution system and sharing the benefits among the complete supply chain.

However, pharmaceutical distribution regulation needs to be adapted to allow more competitiveness in the prescription drugs distribution industry, by using LSPs and the D2P distribution model.

Analysis of the current state

The validation of the regional industry competition model in Spain was based on the review of regulation, review of competition level (in terms of number of competitors and competition drivers), insights from interviews with LSP, pharmaceutical companies, wholesalers, retail pharmacies, industry experts, and academic observers.

The current route to market of prescription drugs in Spain relies only 3% on D2P channel while traditional wholesaler channels represent 76%.



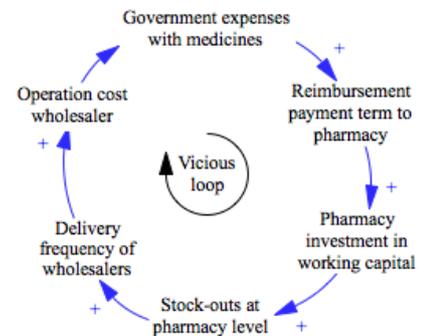
Source: Famaindustria report, 2004. *Governmental agencies

When the complexity of the National Healthcare System (responsible for 85% of the reimbursement of prescription drugs) is added to the picture a vicious loop emerges in the currently established combination of government healthcare reimbursement and regulation underlying the supply chain.

The above-mentioned vicious loop makes it impossible for the supply chain to evolve to a D2P model without structural changes in the regulation and on the incentive schemes in the different echelons of the supply chain.

The health care system currently depends on the wholesalers for the distribution medicines. The cost of the current traditional distribution model (6.5% of the total medicine expense in Spain) reflects the high service level offered to the retail pharmacies and the reimbursement policy that pays wholesalers a fixed percentage of the reference price of the medicine..

There is interdependence among delivery frequency, inventory levels, stock outs, operating cost of wholesalers and the pressure on the government budget. As a consequence, the loop continuously increases the pressure for extending the payment terms to the pharmacies in order to balance the deficit in government accounts.



It is necessary to interrupt this vicious loop by using a “nonmarket” strategy to change the current regulation and create the possibility of a full implementation of D2P with the support of LSPs.

Solution Design

First, we carried out a nonmarket simulation using PolicyMaker® in which we calculated the best approach to implement a D2P policy. We find that a LSP should initially register as a wholesaler with the Medicine Agency and utilize a market entry strategy that minimizes reactions from existing wholesalers.

The graph below summarizes the expected supporters of this strategy on the left side and the opposers on the red side.

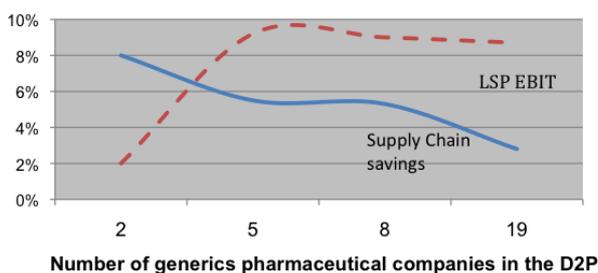


In this entry strategy, we have selected generic pharmaceutical companies as partners for three reasons. First, generic price generates very low incentive to wholesalers to push it to the market, so currently, they are approaching pharmacies offering bargaining conditions and going direct to pharmacy.

Second, according to the information we could gather in the early stages of the project, the pharmaceutical companies of generics will gain

market share in the future. Finally, if a big pharmaceutical company introduces an LSP in the D2P market, it will most likely meet a strong reaction from wholesalers, who would feel threatened. Choosing a partner from the generics minimizes the probability of wholesalers' reaction.

In order to answer these research questions, the methodology proposed was a Monte Carlo simulation aimed at investigating the potential savings in the Direct-to-Pharmacy distribution model when compared with the current traditional distribution model. To create a strategy to implement a D2P model, a PolicyMaker® simulation was used, considering the politico-economic forces involved in the subject.



Conclusions

Since current legislation is not favorable for D2P, the LSP should initially register as a wholesaler with the Medicines Agency and utilize a market entry strategy that minimizes the potential reaction from incumbent wholesalers.

In this entry strategy we have selected the generic pharmaceutical companies as partners for three reasons. First, the low prices of generics generate very low margins for the wholesalers and they have little incentive to push it to the market. So generic pharmaceutical manufacturers are going direct to pharmacy already by approaching retail pharmacies, and offering them better contractual terms. Second, generic pharmaceutical companies are likely to gain market share in the future. If a LSP enter into the D2P market by representing the products of a big pharmaceutical company, it will most likely evoke a strong reaction from incumbent wholesalers, who would feel threatened by such a move.

History reminds us of the attempt of Pfizer trying to implement a D2P policy and their failure to accomplish the goal due in part to the noise they made as new entrants.

The results of the operational simulation show that the profitability of the LSP and the savings of the total supply chain are negatively correlated with the

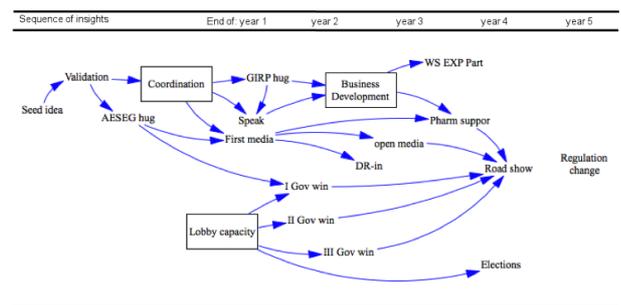
number of generic pharmaceutical companies that join the initiative. When the number of pharmaceutical companies increases, the profitability of the LSP also increases but the savings of the total supply chain decreases. One positive side of this negative correlation is that the LSP can adjust its entry strategy (including abandoning the D2P model, if necessary) generating the best information to leverage the nonmarket strategy.

Two high level capacities need to be developed; commercial capabilities and operational flexibility. These new sources of competitiveness can allow the LSP to operate in the new segment of D2P.

Roadmap

Conceptually, the option to enter in the D2P market to branded products in the future is acquired by the application of the nonmarket strategy and by the operational learning acquired in the first five years of the project. Relevant changes in the internal processes are required.

A list of insights is provided, reflecting the key tasks necessary to be implemented in order to construct the nonmarket capabilities (lobbying, marketing coordination and business development) and to be able to reach the market opportunity of the D2P distribution model in Spain, enabling regulatory changes that favor the LSP in this new model. The figure below summarizes the five years implementation roadmap built for the LSP.



Source: Image prepared by the authors.