Impact of different pharmaceutical distribution systems on the access to pharmaceutical products in six European countries

E. Walter§, A. Dragotsis§, M. Said§

§ all authors contributed equally to this work

1st Institute for Pharmacoeconomic Research, Vienna, Austria

Objectives

The aim of the study was to analyze the structures, characteristics, efficiency, and performance of different primary distribution systems such as short-line wholesalers, direct sales, Reduced Wholesale Agreements (RWA) and Direct to Pharmacy (DTP) arrangements, with a particular focus on the role of pharmaceutical full-line wholesalers. This position is being considered from an economic, effectiveness, and most importantly a public health viewpoint. Furthermore, the performance of the pharmaceutical wholesale sector is illustrated with qualitative and quantitative methods.

Methods

The necessary data was obtained from primary and secondary sources: First, an online questionnaire addressing pharmacists of 5 European major markets (Germany, the Netherlands, France, Spain and the UK) as they were no response from Italian pharmacists, this country has been excluded from analysis) was designed and translated into the national languages. From October to October 1,813 pharmacists from the above-mentioned countries participated in the survey. As the results represent a snap shot of the respondent pharmacists’ opinions, the findings can only be considered as a trend.

Second, an additional questionnaire addressing GIRP (the European Association of Pharmaceutical Full-line Wholesalers – the umbrella organization of pharmaceutical full-line wholesalers in Europe) full-member associations and full-member companies (groups) active in the observed countries, was created to obtain detailed information about core indicators such as the percentage of safety stock in % of total stock value. This survey was conducted by e-mail from May to June 2011. A return rate of 86% was achieved. Third, additional data was provided by GIRP, consisting of GIRP’s annual report and key statistics gathered from its members. Further data has been sourced from IMS Health and systematic literature research which verified the empirical findings.

Results

Pooling of orders

According to the pharmacy survey, the perceived delivery time of pharmaceutical full-line wholesalers, based on national pharmacies opening hours (weekend and nights) including remote areas, is on average 4.53 hours, with perceived 14.51 deliveries per week. This is comparable to the reported deliveries per week of the GIRP member organisations (2.66 h vs. 15.88 deliveries per week). Moreover, the function of pooling orders is of particular relevance to pharmacies. If medicinal products were supplied directly by manufacturers, each pharmacy would have to contact each manufacturer in order to obtain a complete array of medicinal products. In the 6 countries observed, the continuous supply of medicinal products involves more than 702 million transactions between pharmacies, pharmaceutical full-line wholesalers and manufacturers each year. Without pharmaceutical full-line wholesalers this number would increase dramatically to 97.8 billion transactions per year (figure 1).

Satisfaction of pharmacists

The online survey has shown that in France the respondents were very satisfied with the distribution through their pharmaceutical full-line wholesalers (91%), while 52% were satisfied with the distribution through direct sales from manufacturers. In Germany the respondents (79%) were also very satisfied with the distribution from their pharmaceutical wholesalers and just 50% were satisfied with the distribution through short-line wholesalers and direct sales from manufacturers. In Spain, 99% of the pharmacists who took part in the survey were very satisfied with the pharmaceutical full-line wholesalers compared to the distribution through direct sales from manufacturer, where only a bit more than half expressed their satisfaction. In the U.K., despite the fast growth of RWA and OTP models, the respondents did not show satisfaction with these models (87% of the respondents showed dissatisfaction). However, 72% of the British respondents were satisfied with the distribution through their wholesalers.

Impact on process costs

The impact on process costs per country depends on the average deliveries per day and products of different manufacturers pooled per order. The results show the impact on the average process costs per year and per pharmacy. Furthermore, the yearly process costs if 25, 50 or 100% of the whole deliveries were carried out by the manufacturers on their own, are illustrated (see figure 4).

According to the GIRP member organisations, the pharmacies in the 6 mentioned countries receive ~16 deliveries/week. Without pooling, the process cost will increase from €5,587.63 to €42,877.51, resulting in a cost difference of €36,289.88, if 25% of wholesale deliveries/week are delivered by the manufacturers directly. Direct distribution with weekly deliveries amounting to 50% of wholesale deliveries would increase the process costs by €79,167.40. Strictly speaking, the process costs of an average pharmacy would increase by €164,922.43 to €171,510.06, if there were no pharmaceutical full-line wholesalers.

Conclusion

The findings of the study show that the pharmaceutical full-line wholesalers have an important and unique position in the pharmaceutical supply chain. Special functions like the pre-financing of the entire medicinal product market, the guarantee of the continuous supply of all medicinal products, the warranty that even the most isolated patients can receive the most specialized medicinal products through their pharmacists in a safe and timely manner are verifying its vital role in the European healthcare sector.

References


