Tactful Management Research Journal
ISSN: 2319-7943
Impact Factor : 2.1632(UIF)

STUDYING SCOPE, CHALLENGES AND ISSUES WITH INDIAN PHARMACEUTICAL LOGISTICS MANAGEMENT

Meghana Vyas

Assistant Professor, BMS Dept., at S.K.Somaiya college of Arts,
Science and Commerce, Vidyavihar.

Abstract : Over the last few decades, increasing globalization and supply chain complexity have posed risks to pharmaceutical safety, ultimately impacting businesses and, most importantly, patients. Today, materials are procured from multiple countries, manufactured somewhere else, potentially packaged in yet another country and distributed and sold globally. To successfully protect against these risks, proactive supply chain security must deliver actionable intelligence to mitigate those risks. Once implemented, this decision-based approach, utilizing information delivered in real time, allows for efficient business practices that not only protect a brand but also the many partners and people connected to that brand.

Increasingly, supply chain management is being recognized as the management of key business processes across the network of organizations that comprise the supply chain. Practitioners and educators have variously addressed the concept of supply chain management (SCM) as an extension of logistics, the same as logistics, or as an all encompassing approach to business integration. Based on a review of the literature and management practice, it is clear that there is a need for some level of coordination of activities and processes within and between organizations in the supply chain that extends beyond logistics.

The concepts of a Pharmaceutical supply chain are receiving increased attention as means of becoming or remaining competitive in a globally challenging environment.

In this paper an attempt was made to study the pharmaceutical distribution system in India, Challenges faced by pharmaceutical supply chain, Critical issues in managing pharmaceuticals and an example of Indian pharmaceutical distribution company.

Key words: Pharmaceutical distribution system, critical issues and challenges

INTRODUCTION

Supply chain management is, however, a work in progress like blind man touching different parts of an Elephant. The definition of SCM is in the eyes of the beholder. It could be trunk, the leg or the tail. So it is with traditional functions along the supply chain, like manufacturing, procurement, distribution, marketing and sales, product design and information technology managers from these functions will propose different definitions depending on their personal professional experiences.

SCM encompasses the planning and management of all activities involved in sourcing and procurement, conversion and all Logistic management activities. It also includes coordination and collaboration with suppliers, intermediaries, third party providers and customers. In essence, SCM integrates supply and demand management within and across companies.

In short, SCM is the design, maintenance, and operation of supply chain processes, including

those that make up extended product features, for satisfaction of end-user needs.

Pharmaceutical Supply Chain is defined as the management of product supply from raw material sourcing to active ingredient manufacturing through formulation, packaging and distribution to the patient. It encompasses all related activities across the product lifecycle including clinical supply, scale-up and transfer as well as outsourcing and product discontinuation. A key requirement is the safe and reliable supply of quality medicines through a supply chain which is responsive to true demand and understands the voice of the customer.

The Indian Pharmaceutical industry is highly fragmented with more than 20,000 registered units. Indian Pharmaceutical market is likely to grow at a compound annual growth rate (CAGR) of 14-17 per cent in between 2012-16 in terms of volume. India is now among the top ten Pharmaceutical emerging markets of the world. It is mainly operated as well as controlled by dominant foreign companies having subsidiaries in India due to availability of cheap labour in India at lowest cost.

Indian pharmaceutical industry is on a strong growth path with the total value of Indian Pharma industry expected to reach almost $50 Billion by 2015-2016. Out of this close to 22 billion is expected to originate from the domestic formulation business. Supply chain in India is highly fragmented with more than 550,000 retail pharmacies in the country.

PHARMACEUTICAL DISTRIBUTION SYSTEMS IN INDIA

Drug distribution in India has witnessed a paradigm shift. Before 1990, pharmaceutical companies established their own depots and warehouses. Now they have been replaced by clearing and forwarding agents (CFAs). In the simple models popular with industry analysts, The Indian drug distribution system has a small number of layer: The pharmaceutical manufacturers; Clearing or carrying and forwarding agents(CFAs) ;stockiest ; wholesalers and retailers.

CLEARING AND FORWARDING AGENTS

The position of CFA is one of the weakest in supply chain, they exists only because of India's particular taxation system, and new retail chains are attempting to by-pass the CFA and deal directly with producers. The rationale for the CFA depends on the divisions between central and state sales tax systems.

The distribution set-up in the Indian pharma industry is highly fragmented and has evolved on the basis of two tier sales tax structure, viz. the central sales tax(CST) and the local sales tax. While the inter-state sale of goods attracts CST , inter-state transfer of goods does not attract any tax. Therefore, in order to avoid CST, all the medium and big pharma cons having a carrying and forwarding agent(CFA) in each state and transfer of goods as inter-state stock transfer. The small companies(sales less than rs. 100 crore) adopted the CFAs outweighs the accrued tax advantages. In principle, each of the larger pharmaceuticals producers has one CFA in each India's states; In practice especially in case of larger company, there may be several in each of the larger states, but not all states may warrant a CFA. Currently, the Indian sales tax system is being slowly but steadily replaced by a Value added tax. As a result the new retail chains are negotiating direct contracts with producers, thus saving themselves the fees paid to CFAs and hence, the members of the retail pharmacy organizations are also developing co-operative marketing agreements.

STOCKIEST

During 1970s-1980s as an attempt was made to expand drug distribution to emerging markets, many small players became stockiest in order to compete with retailers. Stockiest typically market products of 6-8 pharmaceutical companies, only a few distribute products of more than 50 companies. Pharmaceutical companies have almost doubled the number of stockiest per company and created quite tough competition at the distribution level. Stockiest of the same company are competing against each other and thus possibly strengthening the bargaining position of Retailers. Stockiest also sometimes get discounts of 5-10% from manufacturers in the form of free packs, some of which they may pass on as a discount of retailers.

As per All India Organization of chemist and druggists (AIOCD) the number of stockiest in India is around 60,000.

RETAILERS / PHARMACIES / DISPENSING PRACTITIONERS

The remainder of the market is made up of large number of small scale suppliers who often act as retailers. The number of retailer is subject to considerable margin of error. Industry sources claims that

retailers account for about 70-80% of the pharmaceuticals sales in the country, with the remainder being sold directly through hospital pharmacies. Most small hospitals and nursing homes also have in-house pharmacies and require patients to buy the drugs on the premises, whether they are in- or-out patients.

Retailers are entitled to margins of 16% for controlled formulations and 20% for decontrolled formulations on the maximum retail price. But this formal position seems to mask considerable variations, whether by company, retailer, drug or for particular times when there is an imbalance between demand and supply or when a stock of drugs is nearing its sell- by date. Regarding the profitability, manufacturers, stockiest, distributors and sometimes medical representatives offer price reductions to the retailers to move drugs more quickly or to increase the margin that can be earned by the retailer. The retailers probably comprise a wide variety of very different kinds of operations ranging from small shops to retail chains.

CRITICAL ISSUES IN MANAGING PHARMACEUTICALS

- Managing perishable products
- Degradation of the medicines as they move along the supply chain which results in allowing substandard products to be dispensed to the patients
- Maintaining temperature control
- More focus on R&D
- Shipping of expiry products
- In case of an epidemic break-out, global demand for certain medicines overshoots the demand suddenly.
- Product withdrawal during sales due to side-effects and expiry
- Out of stock situations are unacceptable & patent lifespan is low
- Complex Network Design
- Controlling wide supply chain with huge Stock Keeping Units becomes very difficult
- Training & education cost to the stakeholders is high
- Integration of domestic and international businesses.

CHALLENGES FOR PHARMACEUTICAL SUPPLY CHAINS IN INDIA

- To manage operational excellence in terms of cost-effective development and faster lead-times
- Expenditure of high cost and time in conducting clinical trials with low success rate in product discovery and clinical Development
- To improve Innovation rates in the industry
- Drug prices rises as high as 650 percent than the acceptable international standard in under developed countries in addition to the low availability of cheap medicines in the market
- Inability to forecast accurately, lack of incentives for maintaining stocks, inefficient distribution systems and pilferage of medicines for private resale
- Majority of hospitals seem to have outdated information systems with inter-organizational connectivity
- Inventory costs in the health care sector are substantial and are estimated to be between 10% and 18% of net revenues
- Determining optimal inventory levels in the pharmaceutical supply chain is a complex problem due to the involvement of various stochastic variables
- Optimal process planning and scheduling is crucial for the Development of New Product
- Reverse Logistic for expired medicines
- Risks and uncertainties related to the recovery of pharmaceutical drugs
- To control potential impact of pharmaceuticals that reaches lakes and rivers via sewage plants and other sources
- Implementation of e-business practices in the healthcare supply chain such as lack of consistency and poor data quality and global nature of suppliers.

AN EXAMPLE OF PHARMACEUTICAL DISTRIBUTORS IN INDIA

ABC pharmaceutical supply chain and distributors limited was formed in the year 1945. It imports pharmaceutical formulations from Europe and distribute them in Western India. It has three plants which are spread across Maharashtra and Goa in Western India and manufactures a wide range of products. It has over 800 field staffs and 1400 stockiest. It has emerged as the most suitable partner and provider of contract research and manufacturing services to its customers globally. The R&D center of ABC ltd. has three divisions viz. Formulations, active pharmaceutical ingredients & intermediates and Regulatory &IPR cell surrounded over an area of 70,000 square feet. The company has built up a strong international presence

across its markets in USA, Europe, Asia, Africa and other CIS countries. The company has set up its R&D centre at Rabale, near Navi Mumbai(India).

The company has also made efforts for conservation of energy which includes installation of 5 star rating Air conditioners and motors for plant machineries, Introduction to Rain water harvesting in order to save water and Improved air compressor efficiency.

CONCLUSION

The pharmaceutical supply chain used to be seen as a toolto supply products to market in an effective way, where the emphasis was on security of supply. Recent changes in the operating environment mean that companies are revisiting the components of their supply chains and identifying waysof extracting additional benefits from them. The supply chain of interest isnot simply the physical processes of conversion and distribution of materials. Equally important is the value-chain perspective of managing the innovation and development processes through to capacity and production planning.

The Indian pharma industry is on a major growth trajectory and is expected to reach US$ 74 billion by 2020. In order to realise the full potential of the market and tap growing global opportunities, companies operating will have to collaborate in a mutually beneficial manner. As we move into the next decade, Global pharma companies have the capability of bringing in newer products, technology, capital and quality leadership. They can help their Indian counterparts in their desire to ascend the innovation curve.

REFERENCES

1)Roger Jeffery, with inputs from SoumitaBasu, SamitaBhattarai, Petra Brahlikova, Abhijit das gupta, Stefan Ecks, Ian Harpar, Patricia Jeffery, Allyson Pollock, Nitu Singh &Madhusudan Sharma Subedi, Pharmaceutical distribution system in India, Working paper 1a, prepared for workshop on Tracing pharmaceuticals in South Asia, 2-3 july 2007, University of Edinburgh, The centre for International public health policy. Retrieved
fromhttp://www.csas.ed.ac.uk/__data/assets/pdf_file/0003/38829/PharmaDistributionIndia.pdf
2)Indian Pharma Industry - Distribution & Sales Force Structure Retrieved from
https://www.dolcera.com/wiki/index.php?title=Indian_Pharma_Industry_
-_Distribution_%26_Sales_Force_Structure
3)Jay Hauhn, chief technology officer, Tyco Integrated Security May 24, 2013,Retrieved from http://www.industryweek.com/supply-chain/what-pharmaceutical-industry-can-teach-us-about-supply-chain-security-best-practices
4)Dr. Rajesh kumarsingh, Associate professor, Delhi technological University (DCE), Delhi, Opportunities and Challenges for pharmaceutical supply chains in India: A case Retrieved from www.iimraipur.ac.in/ich/2013/docs/rajesh.pptx.
5)James B. Ayers, Handbook on supply chain management, second edition, Auerbach publications, April 24,2006, ISBN 9780849331602 - CAT# AU3160, Retrieved from
http://www.crcpress.com/product/isbn/9780849331602