



## The Importance of Communication with Customers in Supply Chain of Pharmaceutical Market of Uzbekistan

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### **Abstract**

Communication with consumers plays an essential role in the supply of in-demand medicines. In this article an extensive overview of the literature on the problem is made, the author, based on personal experience in the supply chain of medicines, provides a valid argumentation of the relevance and significance of this communication. Based on the analysis of the pharmaceutical industry of Uzbekistan the author draws his own conclusions and recommendations.

**Keywords:** *Pharmaceutical Market; Supply Chain; Customers; Communication; Medicine; Pharmacist; Drugs; Pharmaceutical Industry*

### **Introduction**

Uzbekistan is a central Asian country that became independent in 1991 with the break-up of the Soviet Union. The independence of Uzbekistan gave hope for better life and prosperity to all nations. The better life and prosperity can't be reached without healthy nation and a good health care system. Every nation deserves for best health care system, and government should offer the best available healthcare [1]. Three important areas are required to increase efficiency and effectiveness of Uzbek health care system: quality of services, health care finance and quality of medical products used to treat patients [7].

According to information [15], 220 local pharmaceutical manufacturers have been operating in Uzbekistan, 101 specialized in manufacturing of ready-to-sell medical products, 29 of them are manufacturing medical equipment and 82 of them manufacturing medical items. Nevertheless, local manufacturers supply only 20–25% medicines from total market share [16]. There are 669 wholesaler/distributors, and 13,957 retail pharmacies are operating to supply medicines and medical products to the customers [15]. The quality, effectiveness and efficiency of healthcare system heavily depend on healthcare specialists, doctors, who prescribe medicines and treats patients [2]. The doctors' treatment depends on quality and viability of medical products, where in pharmaceutical manufacturers' supply chain and quality control plays major role in well-being of a nation [3]. The definition of supply chain and supply chain managements differs from one author to another author. The supply chain starts from production and ends delivering goods to end users by creating the series of value-creating processes [4]. Supply chain and supply chain management isn't only production and logistics, it's about sharing

information about customer needs, providing enough medicine to satisfy demand, forecasting the demand, innovating and quick response to the market changes [4]. According to [5] authors define supply chain differently, but they agreed on common four elements of supply chain:

1. A goal of supply chain is to meet expectations of consumer;
2. Supply chain is the cooperation of several market players at all levels;
3. In all levels of supply chain will be created value by each market players;
4. Supplying high quality medical products according to quality control standards.

Unfortunately, pharmaceutical manufacturers and wholesalers face stock shortage or abundance, this problem occurs due to low level of communication among all supply chain actors [3]. Pharmaceutical market is highly regulated by government and pharmaceutical market players must follow regulations, wherein doctor's role is huge in creating demand and sharing information with pharmaceutical manufacturers [6].

### Literature Review

Supply chain is competitive advantage of any company if it's optimized, and flow of physical goods and information is organized wisely. It is important to take care of the needs of patients and to keep pharmacies adequately stocked [8]. Information exchange about needs of consumers and all market players plays essential role as it determines what kind of medical products are need and at what quantity, producing medical products at wrong amount will hinder growth and profitability of the companies [9]. The information about medical product shortage was informed from upstream to downstream, from manufacturers to other market players, and it was fact without any correction in short term and patients suffered from the shortage [5]. The main reason of medical product shortage occurs due to lack of communication with prescribers/doctors, pharmaceutical manufacturers should get information market needs and changing environment [9]. According to information [10], medical practitioners/doctors play the vital role in recommending prescribing and taking active role in application of medical products to patients [10]. Thus, pharmaceutical companies should inform doctors about features, advantages, and disadvantages of the medical products, it will increase effectiveness of the medical product [19], and satisfaction of both doctors and patient [11].

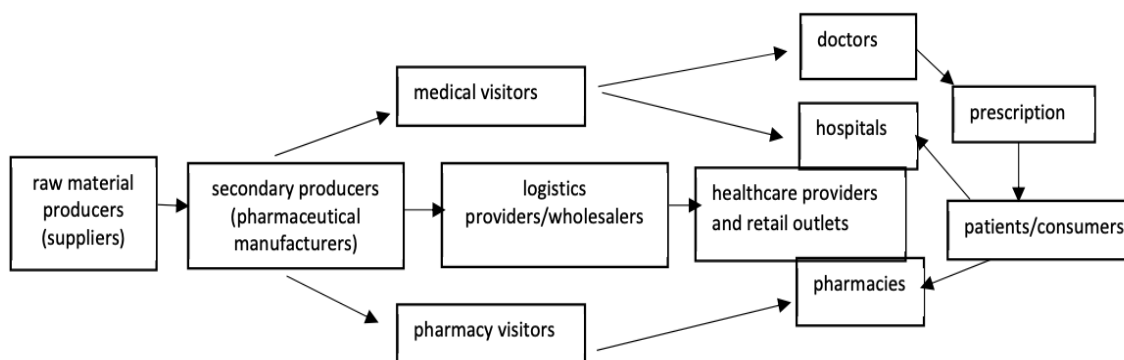


Figure 1. Pharmaceutical supply chain [3]

“In the pharmaceutical supply chain, the role of the buyer, i.e. the patient, is rather passive, as the doctor, the social insurance system, and the pharmacist play a major role in demand creation. In the case of prescription drugs, the pharmacy will dispense the product prescribed by the doctor to the patient. In the case of non-prescription products, the pharmacist's opinion, suggestion, or recommendation will

influence the buyer's decision. In this situation, the pharmacist will be guided by the manufacturer and the pharmacist's customer and will prefer the products that can boost sales" [3].

Every participant in the supply chain is interdependent [13]. The suppliers and partners' interactions must be informative, each party should supply information which should help in decision making for all parties, the decision of parties must help to serve customers at the best available level [14]. Wholesalers play important role in sourcing, storing, stocking, quality controlling, servicing and transporting medical products to retail pharmacies, thus, wholesalers influence to medical products' shortage in the market [5]. Pharmaceutical manufacturers must inform about products and be in close contact with doctors, the contact must be informative, wherein manufacturers get fresh information about treatment [6]. The customer preference changes continuously, and pharmaceutical manufacturers should adopt and answer to the changes [8]. The doctors use the medical products to treat patients, and they can check information provided by manufacturers about effectiveness of the medical products [9].

According to the information [16], patients and consumers get consultation and guidelines from healthcare workforce or doctors, and doctors also play vital role in supply chain of pharmaceutical in Uzbekistan. Local manufacturers must work on the marketing as competition is growing and their supply chain and sales forecasting will be significant factor for survival of the company [17]. Healthcare professionals determine the prescription and treatment of patients, wherein prescribers don't follow treatment guidelines issued by Ministry of Health [16].

Table 1. Prices of generic medicine in Uzbekistan for 2012 and 2021 [18]

International non-patented trade name	2012 y*	2021 y*
Cefozalin 1g	1 950	2 400
Ceftriaxone 1g	2 400	3 000
Procaine 5ml N10	1 300	1 100
Sodium chloride 100ml	1 300	1 500
*Prices are in Uzbek soums		

1 USD were equivalent to 1795 Uzbek sums in January 2012, and 10 476 in January 2021 [19].

## Conclusion

Uzbek government reformed the healthcare system in fast paces after the independence, changing 70 year practice is hard for any government. The Uzbek pharmaceutical market is growing and improving the healthcare services to the patients, but it's not nearly impossible without high quality local manufacturing base. The local manufacturers and their supply chain is crucial for Uzbekistan, nevertheless, 20–25% market share, mostly generics, isn't enough for supporting high quality healthcare conditions of the nation. The doctors, who decide the treatment of patients, should be aware and hold enough information to prescribe locally manufactured medicines, and increase customer awareness on the same time. The shortage of medicines isn't only about monetary profits, it's about wellness and health of the nation. The local manufacturers should improve their supply chain and more exchange information with doctors, the information exchange should be about customer preferences, newly accepted and more effective treatment methods. Generic market isn't attractive to the local manufacturers as profit is lowering and branding is going to be one of the directions to diversify their portfolio and manage sales. The information exchanges with doctors help to the local manufacturers in planning production volume, product portfolio and logistics, in supply the right medicines at right amount to the patients.

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