

21st Annual European Pharma Congress

May 20-22, 2019 | Zurich, Switzerland

Improving drug availability by managing medicine supply chain

Samer Alghamdi

John Hopkins Aramco Hospital, Saudi Arabia

Healthcare institutions around the world are looking for ways to improve their work efficiency and cost reduction without affecting patient care and services. At the same time, the requirements for providing health care are numerous and need a complex supply network of relationships from supplier to customer. Concurrently, "health care budgets are generally very tight, and that is why healthcare providers around the world are seeking to improve processes and reduce costs" (NHS, 2004). To achieve this the healthcare organizations need to provide the medical, non-medical and pharmaceutical items by the right quantity on the right time to the right place by affordable prices. Unfortunately, missing any of these items are common and may cause crises. For example, many healthcare organization reporting the shortage of essential medicines which expensive for health systems and adding additional costs for replacement of medicines and staff time. Medicines shortages considered as a risk for patient health as a result of missing doses, rescheduling or possible medication errors due to using alternatives medicines. While medicines shortages are not a new phenomenon, they have been increasing in recent years, prompting international concern about long-term supply of key medicines. An extensive survey of 311 pharmacy experts during 2010 discovered that on average drug shortages lead to \$200 million annually being spent on costly therapeutic alternatives. This does not cover the indirect costs connected to drug shortages, such as additional labour, which are estimated to be an extra \$216 million. In the U.S., new drug shortages rose from 70 in 2006 to a high of 267 in 2011. The total number of new and ongoing shortages crossed the 450 mark in 2012. In a large European survey, 21% of hospital pharmacists reported experiencing a shortage of medicines every day, a further 45% every week. One in five pharmacists felt that they could not manage the shortage all or most of the time, suggesting that medicines shortages cause patients to suffer disruption to their treatment. The solution to eliminate the shortage of medicines in health care institutions and avoid excessive waste of effort and budget is improving the supply chain management. Supply chain management means managing all process of forming the medication from purchasing the raw material until reach these medication to the patients. Currently, Supply chain management consumes between one third and two thirds of the annual operations of hospitals, and their partners. Most of these expenses are spent on procurement management. Procurement of pharmaceutical items consists of three divisions: planning, purchasing and management. Where any defect in any of these divisions leads to suffering of staff and patients from drug shortage. There are many factors that effect on the procurement then on supply chain such as :

1. Lack of Trained Staff
2. Lack of communication
3. Lack of proper Inventory Control System in supply chain:

In 2014, there is study conducted to critically assess the procurement system in the supply chain for hospital with frequent antidote medication shortage which has proven the effect of previous factors for antidote availability in the hospital.