# Chapter 10 Sustainable Supply Chain Management and Total Quality Management in the Health Sector

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### **ABSTRACT**

The supply system in health sector determines effective stock management, regular material supply, speed, and quality of maintenance and service process. Elimination of all non-value-adding activities, movements, and processes in the procurement process; minimizing errors; and increasing the efficiency of the process between the inputs and outputs of the hospital is possible by applying total quality in supply management. Effective supply chain management in health institutions improves the quality of healthcare.

### INTRODUCTION

Today, being good enough is not sufficient for competitive edge. Total quality management (TQM) and supply chain management (SCM) have played an incremental role in the strengthening of organizational competitiveness. In the ever-changing global market, international business competition is no longer limited to organizations, but also includes supply chains (Vanichchinchai & Igel, 2009). Despite the popularity of the term Supply Chain Management both in the academia and in practice, serious confusion remains in its meaning. Some authors see SCM as a management philosophy, while others consider it as a management process. The SCM philosophy encompasses all other functions within SCM to create

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all customer functions and satisfaction within a company and within a supply chain. In this context, it is fundamental to understand the values and needs of customers. In other words, SCM philosophy prompts the supply chain members to be customer-oriented (Mentzer, DeWitt, Keebler, Min, Nix, Smith, & Zacharia, 2001). Besides, it is pointed out by academics and practitioners that supply chain management reduces operation costs and increases service level (Demirdöğen & Polater, 2018).

With their achievements in the global market, companies implementing Total Quality Management (TQM), and continuous improvement programs provide a significant competitive edge. While customer expectations are increasing, businesses adopting a culture of continuous learning and development create the real difference by providing for the customers' wishes and expectations (Çetin, 2010). Successful implementation of TQM requires an effective change in the culture of an organization and it is nearly impossible to change an organization without intensive effort shown by the management aiming for continuous development, open communication and cooperation throughout value development (Kaynak, 2003).

Health care involves a complex organizational structure and the balance between quality and cost has a more exquisite nature than in other industries (Abdulsalam, Gopalakrishnan, Maltz, & Schneller, 2015). Health services are different from other businesses because of their high dependence on professionals from the fields of expertise based on over-specialization and the need for further cooperation and their non-error structure. Moreover, health services are non-delay able services (Acar & Bozaykut Bük, 2017). Since health care is abstract, quality is realized or not realized when health care is provided (Ekici, 2013). Reducing the increasing medical costs and expenses, increasing quality, maximizing patient and employee satisfaction are among the main objectives of health services (Swinehart & Smith, 2005).

In health sector, implementation of Total Quality Management enables faster growth for the institutions who have the ability of providing faster and better designed service than their competitors, and adaptation, rapidly-changing requirements of customers, market and legal conditions (Swinehart & Smith, 2005). In this context, more importance has been given to supply chain management in the health sector in recent years due to the increasing pressure to reduce health care costs, reduce waste, prevent medical errors, improve service quality and increase operational efficiency.

Zairi and Liburd (2001) describe sustainability as "the ability of the organization to adapt to change in the business environment in order to capture contemporary best practices and achieve superior competitive performance". Sustainability within a business creates value for customers, investors and the environment. Without sustainable development, the benefit from Total Quality Management is minimal; because, Total Quality Management is a culture that supports business development over time, now and in the future. Also, it is a source that ensures edge in competition in the global market (Zairi & Liburd, 2001). However, quality does not emerge itself; it must be conducted (Çetin, 2010). In Supply Chain management, executive management support has a critical role in shaping an organization's values, orientation, and direction. It also has a significant impact on organizational performance (Mentzer et al. 2001).

### SUSTAINABLE SUPPLY CHAIN IN HEALTH SERVICES

# The Concept of Supply Chain Management

Supply Chain Management (SCM) first emerged in 1982 from the manner Toyota managed its relationships with suppliers and customers (Vanichchinchai, & Igel, 2009). The emphasis on SCM in recent years

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