

# Chapter 11

## Transformation of the Hospital Supply Chain: How to Measure the Maturity of Supplier Relationship Management Systems in Hospitals?

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### ABSTRACT

*Increased competition and market dynamics in healthcare have led to a stronger need for a strategy to amend customer relationships and for a clear understanding of how healthcare providers can improve their collaboration with key suppliers. Under the label of 'supplier relationship management', more research is conducted to study this phenomenon either on a social system or technical system perspective. In this paper, the author presents a maturity model that links metrics for both 'worlds' to prescribe the evolution of key practices, IT-services, and people skills. The proposed model can be used to examine the maturity of supplier relationship management of a particular hospital, identifying performance gaps and systematizing improvement initiatives. When used across a health system, it can be applied to benchmark the performance of the participating members, facilitating new ways for collaborative learning.*

### 1. INTRODUCTION

The adoption of information and communication technology (ICT) in healthcare is seen as an opportunity to improve not only effectiveness, efficiency, and quality of health services but also the transparency of the economic activities and

the availability of information in real time (World Health Organization, 2006). Despite enormous investments in innovation and the magnitude of the opportunities for innovators, the healthcare sector has not experienced fundamental change yet (Herzlinger, 2006). However, the pressure to achieve effectiveness and efficiency is set to increase significantly as in many countries economic principles, such as fixing rates for medical

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Table 1. Different views on supplier relationship management (adapted from Mettler & Rohner 2009)

	Social system perspective	Technical system perspective
Foundations	<ul style="list-style-type: none"> <li>• Relationship theory, social network theory</li> </ul>	<ul style="list-style-type: none"> <li>• Process re-design, transaction cost economics</li> </ul>
Main focus	<ul style="list-style-type: none"> <li>• Proactive development of relationship between an organization and its suppliers</li> <li>• Design, implementation and control of cross-organizational relationships to suppliers</li> <li>• Continuous advancement of the 'lived' partnership to strategic suppliers</li> <li>• Exchange of improvement ideas between buyer and supplier</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination of procurement process and monitoring of quality consistency of different suppliers</li> <li>• (Technical) Integration of suppliers in procurement processes</li> <li>• Continuous analysis and control of procurement processes and supplier performance</li> <li>• Automation of all procurement activities between the enterprise and supplier</li> </ul>
Key objectives	<ul style="list-style-type: none"> <li>• Enhancement of co-operation and quality of information flows</li> <li>• Security of supply and leverage through negotiation of better deals from suppliers</li> <li>• Continuous improvement with suppliers by encouraging innovation</li> <li>• Compliance with contracts and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Better risk control through better information flows</li> <li>• Lean processes and consolidation of supplier base</li> <li>• Reduction of cycle times and process costs and better value for money</li> <li>• Improvement of process quality</li> </ul>

treatments or charges for medical registration, are introduced in order to reduce health expenditures and enhance the competition among the healthcare providers.

Although labor costs constitute the major share of the total costs of a medical treatment, there is still a major economic potential in improving expenditure on materials and services in healthcare (eBusiness Watch, 2006). One source to reduce these costs and enhance service delivery at the same time is supposed to emerge from better managed relationships with suppliers (Mettler & Rohner, 2009). In a way, supplier relationship management (SRM) can be seen as “[...] a mirror image of customer relationship management (CRM). Just as a company needs to develop relationships with its customers, it also needs to foster relationships with its suppliers [...] The desired outcome is a win-win-relationship where both parties benefit” (Supply Chain Management Institute, 2008). In this sense, the direct objective of SRM is to improve collaboration between an enterprise and its suppliers (Fleming, 2004), however, SRM claims also to have an impact on costs, responsiveness, reliability, and flexibility of supply-related business processes (Leftwich, Leftwich, Moore, & Roll, 2004). Hence, differ-

ent delineations and connotations of the SRM concept exist today (Table 1). On the one hand, research is focused on the rather social aspects of the buyer-customer relationship (Harland, 1996; Riemer & Klein, 2002), on the other hand, the new technical possibilities for streamlining procurement processes are accentuated (Appelfeller & Buchholz, 2005; Hines, 1996; Spekman, Kamauff, & Spear, 1999).

This dichotomy of understanding the concept often complicates the development of an instrument to evaluate the efficiency and effectiveness of SRM as a whole. Hence, the assessment of SRM is generally reduced to a particular perspective, either focusing on the continuous improvement of business processes, organizational structures, software services, or the capabilities of the people involved.

With this paper, we present a multi-dimensional maturity model for hospitals, which helps to answer the following research questions:

- What are relevant reference points in hospitals for assessing the maturity of their SRM systems?
- How can the different levels of maturity of SRM systems be described?

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