

Service Management of Special Care Units: Lessons Learned in Manufacturing

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ABSTRACT

Special care units express an increasing interest in adopting methods for quality management, previously developed and implemented in manufacturing firms. The paper examines the analogy between service management in special care units and the management of manufacturing processes. This paper is based on the authors' implementation of ISO 9001:2000 in a neonatal intensive care unit. It maps the major processes and entities that create the treatment outcome, conducting a focused comparison between healthcare organizations/special care units and manufacturing organizations. To verify the performance of various major processes in healthcare the authors recommend the use of the Yield performance measurement. The literature review shows that a comparison between manufacturing and service organizations is both useful and valid even though service organizations differ from manufacturing organizations. Despite the complexities of treating humans and the level of uncertainty that goes hand in hand with health care decision making, strict product and/or customer treatment identification and specifications can raise the level of success in achieving positive results.

Keywords: Health Care, Intensive Care, Neonatal, Services, Special Care Units

INTRODUCTION

Recent studies have stated a pronounced interest of healthcare executives and practitioners in taking service quality to a higher level, often adopting leading techniques in other industries. Therefore, a useful way to introduce the concept

of managing service of special care units is to relate it to another well known type of organizations, the management of manufacturing firms. Applying the lessons learnt by manufacturers' efforts to improve their production processes can be transferred to healthcare, thus reducing a patient length of stay, providing a higher quality of care, maintaining hospital sustainability

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and raising patients' satisfaction (Burge, 2008; Kenagy, Berwick, & Shore, 1999).

This article critically reflects upon the value of some of the approaches that have been attempted in healthcare organizations during the last decades. After considering their weaknesses, the article offers a novel perspective with which managers and clinicians can improve care. This paper is based on the authors' experience with implementing ISO 9001:2000 in a neonatal intensive care unit in a prominent public hospital in Israel, during 2006-2008.

The literature review of the management of service organizations shows that a comparison between manufacturing and service organizations is both useful and valid even though service organizations differ from manufacturing organizations. Wilderom (1991) defines service sector organizations as work units with a production process in which there is direct interaction between clients or customers and providers of the services, in which the output is intangible, almost impossible to store and has a considerable degree of variety. The feeling is that service is people-intensive, while the rest of the economy is capital-intensive. These distinctions are largely spurious. There are no such things as service industries. There are only industries whose service components are greater or less than those of other industries. Everybody is in service (Levitt, 1972). He claims that to improve the quality and efficiency of services, companies must apply the kind of technocratic thinking which in other fields has replaced the high-cost and erratic elegance of the artisan with the low cost, predictable munificence of the manufacturer. Services may be created out of standard elements or modules that can be combined for the individual customer at the moment of purchase. Thus the content of the service is standardized, but the standard elements can be combined in many ways when delivered (Sundbo, 1994). The industrialization of service production will become more standardized and designed and the production process will be systematically planned as in manufacturing. The tendency towards modularization brings the form of service production

closer to the contemporary form of production in manufacturing. Industrialized tendencies in service management incorporate more systematic organizations and management of service production. It is often done by using term service operations (Johnston, 2005; Jones, 1989). Various management aspects developed in manufacturing firms may be adopted in service firms: price as a competitive factor, productivity, quality, strategy development and technology development (Sundbo, 1994). Since service firms aim to design standard elements which can be mass-produced, they attempt to form the production process as systematically as possible. This makes it more possible to plan and control the service production process, thus improving quality as well as reducing costs, so that productivity is increased. The similarities in development between service and manufacturing were also pointed out by Ochel and Wegner (1987) in an analysis of global business change. Traditionally, the manufacturing industry is supposed to use more technology than the service industry. But, the use of technology in services has increased (Rajan, 1985).

Gronroos (2000) noted that many of the characteristics applied to services also can be applied to manufactured goods. Bowen and Ford (2002) observed that it is becoming more difficult to separate the two because most companies produce tangible and intangible products. Akehurst (2008) noted that services are an essential part of most products produced and delivered today. Mills (1986) stated that it is difficult to separate goods from services in the symbiotic relationship in which the service functions are intricately intertwined with the manufacturing activities. Polito and Watson (2004) make a convincing case for combining manufactured goods and services on a continuum. They identify goods moving from flow process to shop and goods projects and services moving from service projects and shop to service flow. Reed and Storrud-Barnes (2009) combine the characteristics of tangibility and customization, but do so across the continuum of manufacturing and service. Some services such as surgery, which require the customer to participate and

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