Outsourcing in the Healthcare Sector-A State-of-the-Art Review

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Outsourcing has become one of the healthcare sector's buzzwords. In the supply chain management of healthcare organizations, outsourcing decisions have specific distinctiveness. This article reviews the state-of-the-art literature on outsourcing in the healthcare sector and provides a structured frame of outsourcing in different countries with different healthcare systems. This appears to be the first time evidence on outsourcing practices in the healthcare sector have been systematically collected and structured in order to understand the reality beyond the outsourcing processes and trends.

Keywords: Outsourcing, healthcare, health systems, contracting, literature review

Introduction

In the supply chain management (SCM) of healthcare organizations, outsourcing decisions have specific distinctiveness, namely, in the reasons and constraints of the decision, in the selection criteria of the activities left to third-party operators, in the type of possible agreements, and even in the impact of the outsourcing decision on the organization. After the outsourcing trend in the manufacturing industry (Roberts, 2001), the healthcare sector is considered one of top three sectors (along with the finance and legal industries) with a significant outsourcing growth (Brown & Wilson, 2005).

Our goal in this study was to understand how embedded the outsourcing practices in the healthcare sector are. Thus, the literature review approach involved (1) reviewing scientific articles and grey literature (Farace, 1998) on the subject, (2) reviewing publications that focus narrowly on outsourcing in private and public healthcare organizations, (3) reviewing publications regarding clinical and nonclinical outsourced activities, and (4) categorizing literature into thematic areas and items regarding motives, risks, advantages, and trends in this researched field.

This article enhances the evolution of SCM in healthcare, particularly in identifying (1) outsourcing decisions rationale, (2) the main drivers and their differences from other sectors, (3) specific risks and benefits of this decision related to outsourced clinical and non-clinical activities, and (4) the wide spectrum of private-public supplier relationships.

Healthcare organizations have a commitment to reliability (Weick & Sutcliffe, 2001), which implies not treating SCM decisions about outsourcing as a panacea.

1. The Vitasek (2005) definition, consensual among the Council of Supply Chain Management professionals, can be found at http://www.cscmp.org/Website/AboutCSCMP/Definitions/Definitions.asp
Methods

In this study we synthesized evidence of outsourcing in the healthcare sector. We developed a key word search in electronic databases to find articles representing the inclusion criteria of being related only to outsourcing in the healthcare sector and the exclusion criteria of being related to contracting out or subcontracting in the healthcare sector. In the literature, outsourcing has different connotations from the common use of the concept. In fact, outsourcing also refers to activities not previously performed in-house (e.g., procurement) and it differs from subcontracting and contracting out by the premises of long-term relationships and the obligation of not only providing the means but also results (Kakabadse & Kakabadse, 2003). We identified 76 eligible articles in the peer-reviewed literature, 16 in the grey literature, and 10 books concerning (1) outsourcing in private and public organizations in different types of health systems, (2) distinction between outsourcing clinical and nonclinical activities, (3) motives, risks, advantages, and trends in this researched field.

Outsourcing Rationale in a Healthcare Setting

Outsourcing, or transferring internal activities to third parties (Greaver, 1999), can assume several forms in a wide spectrum of relationships (Ballou, 2003; Franceschini & Galetto, 2003; Sanders et al., 2007). A theoretical evolution from transaction cost analysis (Coase, 1988, Williamson, 1979) and agency theory (Eisenhardt, 1989) to a resource-based view (RBV), which supports outsourcing noncore activities, keeping core activities internal (Bettis et al., 1992; Kelley, 1995; Lacity et al., 1995; Mullin, 1996; Peisch, 1995; Prahladh & Hamel, 1990; Quinn & Hilmer, 1994), and, more recently, to the transformational view (Linder, 2004), places outsourcing as an SCM strategic tool able to redesign the organization value chain and sometimes also its mission (Schneller & Smeltzer, 2006).

The main drivers for outsourcing in healthcare units are cost reduction, risk mitigation, adapting to quick changes and value stream redefining.

Outsourcing decisions frequently result in organizational change. Even low-volatility sectors such as healthcare (Goepfert, 2002) have riotous periods resulting from regulations alterations, more informed and demanding patients. In this entrepreneurship environment, healthcare organizations adopt outsourcing solutions for the same reasons as in other sectors (Quinn & Hilmer, 1994): looking for efficiency, quality, and profitability gains. However, in healthcare units, outsourcing is part of volume flexible strategies to adapt capacity (namely in bigger organizations such as academic medical centers) trying to respond to demand fluctuation’s, care that is increasingly complex, and to the linkage between clinical performance and number of medical acts (Jack & Powers, 2006). In fact, according to some authors (Atun, 2006; Campos, 2004), in some European countries that are more politically reluctant to privatizations (e.g., the United Kingdom, Sweden, Spain, and Portugal), outsourcing of clinical services was a response to waiting lists. Through contracting agreements with public and private providers (including public-private partnerships [PPPs]), healthcare systems looked for access, quality, equity, and efficiency advantages (Abramson, 2001; Liu et al, 2004). However, according to Bossert (2004), although there’s evidence in primary care outsourcing agreements (Walshe & Smith, 2006) of access improvement (in provision, coverage, and use) gains, there is not clear evidence of equity, quality, and efficiency effects. Evidence regarding efficiency gains has revealed some inconsistency (Atun, 2006; England, 2000, 2004; Liu et al., 2004, 2007).

Although the extension of outsourcing decisions from nonclinical to clinical activities occurred in the healthcare sector later than in other sectors, the phenomenon took a global scale with many reported cases, from medical transcription to the latest trend of “medical tourism” with people travelling abroad for healthcare services seizing the best relaxing environment for recovering (Bies & Zacharia, 2007; McCallum & Jacoby, 2007).

Main Drivers

From reviewing the literature, the most pointed drivers for outsourcing in healthcare units are (1) cost reduction, (2) risk mitigation, (3) adapting to quick changes without jeopardizing internal resources, and (4) value stream redefining (Alper, 2004; Bhattacharya et al., 2003; Chen & Perry, 2003; Hazelwood et al., 2005; Lawrence & Spink, 2004: Roberts, 2001; Wholey et al., 2001; Yang & Huang, 2002). Wigglesworth and Zelcer (1998) defend the outsourcing of healthcare units’ supply chain global management to specialized providers identifying three reasons: (1) the possibility of externalizing noncore activities but critical to process-oriented organizations; (2) the transference of information technology to support SCM investment, which allows the leverage of its nuclear capacities; and (3) the possibility for critical mass to build up and achieve economies of scale.

Yang and Huang (2002) identify four imperatives for outsourcing growth in the healthcare sector: (1) organizational, (2) strategic, (3) regulatory, and (4) technological. Still, outsourcing decisions in healthcare units depend on (1) the kind of activity (modular versus
integral; more or less contractible); (2) the type of contract (classical versus relational); (3) contract duration (depending on contract type and supplier selection process); (4) specification of performance requirements (process and outcomes indicators); and finally (5) payment mechanisms (Liu et al., 2007).

Clinical and Nonclinical Risks and Benefits

We found a consensual typology in the literature that identifies as “clinical” all the activities (direct or indirect patient care deliveries), processes, or sub processes that are carried out by health professionals, whereas “nonclinical” actions differ from healthcare delivery for being delivered by other areas’ professionals. We also identified a pattern of distinguishing outsourced clinical services with less the proximity to patient (non directly delivered to the patient) and the separation of nonclinical actions from support activities and business process outsourcing (Alper, 2004; Cezarotti & Di Silvio, 2006; Guy & Hill, 2007; Hazelwood et al., 2005; Shinkman, 2000; Shohet & Lavy, 2004; Stockamp, 2006; Worrell, 2003).

In general, outsourcing in healthcare risks were identified as follows: (1) losing control of suppliers (discontinuity of service quality levels (MacCutcheon & Griffin, 2002), accountability issues, loss of competences (Hazelwood et al., 2005), and information confidentiality problems; and (2) excessive supplier dependency and consequent loss of flexibility (Renner & Palmer, 1999).

Referring to nonclinical services several authors stressed the importance of performance monitoring to avoid quality problems (infection risks, patient dissatisfaction) and hidden costs of support activities such as (1) cleaning (Andersen & Rash, 2000; Barrs & Fahey, 2000; Dancer, 1999; Giarraputo, 1990; Goggins, 2007; Griffith et al., 2000; Liyanage & Egbu, 2006; Murphy, 2002) and (2) meal services (Bossert, 1994; Crogan & Evans, 2006; Hwang et al., 2003; Kwon & Yoon, 2003; Lau & Gregoire, 1998). Other nonclinical activities outsourced and identified as the main drivers of cost reduction are procurement and purchasing to group purchasing organizations (GPOs) (Nollet & Beaulieu, 2005; Rivard-Royer et al., 2002; Schneller & Smeltzer, 2006). Although evidence of GPOs shows cost reduction advantages (10% to 15% in acquisition cost, 40% in transaction-related costs), some authors highlighted the risk of oligopoly development and function duplications due to strategic misalignment.

The most reported risks of outsourcing clinical activities refer to integration difficulties in activities such as radiology and other laboratory functions (Chasin et al., 2007; Peisch, 1995). On the benefits side, gains in expertise, capacity, and resource release are underlined by Renner and Palmer (1999) and Greeno (2001).

Visiting Different Healthcare Systems

One common conclusion derived from reviewing the several cross-national health system studies (Elling, 1980; McPake & Mills, 2000, among others) is that context differences are crucial to understanding the advantages and risks of outsourcing in each healthcare system framework. Based on the source of funding, three main models can be identified: the Beveridge model, with predominantly public funding based on taxation (in the United Kingdom, Spain, Portugal, Greece, Italy, Sweden, Denmark, Canada, Australia, and New Zealand); the Bismarck model, with private-public providers and premium funding (Germany, France, Austria, Switzerland, Belgium, Holland, and Japan); and the private insurance model, as shown in the United States with predominantly private providers coexisting with Medicare and Medicaid social care (Simões, 2004). From all reviewed literature, we focused on Germany, United Kingdom, Australia, New Zealand, the United States and Greece, not only because of the higher number of articles founded regarding outsourcing practices, but also for being illustrative of the three different healthcare systems. The main findings are summarized in Table 1.

Outsourcing in the German Healthcare Sector

A description of the Bismarck model evolution, adopted by the German healthcare sector in 1883, is presented by Kakabadse and Kakabadse (2005) and stresses the demographic changes, the social security financial resources scarcity (mostly due to unemployment), and the decrease of physicians as main constraints for deep reforms in the hospital sector. One of the measures deployed was a new remuneration system based on diagnosis-related groups (DRGs), following the Australian system, starting in 2004 to be completely implemented in 2009 (Augurzy & Scheuer, 2007). This new system, along with quality implications of the “integrated care” (or “integrated delivery systems” [Burns et al., 2001]), forced a second wave of outsourcing trying to achieve better cost-efficient outcomes than found in the first wave during the 1990s.

Outsourcing in the United Kingdom, Australian, and New Zealand’s Healthcare Systems

In the United Kingdom, the National Health Service (NHS) system, created from Beveridge’s 1942 report (Simões, 2004) steered universal access and comprehensive coverage of services for all citizens but has undergone considerable changes throughout the past decades. These changes have often been portrayed as a move toward an internal market in the UK system. Under a conservative government and against the strong opposition of physicians and nursing personnel, provisions to reform NHS (the National Health Services and Community Care Act) were
<table>
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<th>Table 1</th>
<th>Outsourcing in Healthcare Sector Across Countries</th>
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<td><strong>Outsourcing Activities</strong></td>
<td><strong>Drivers</strong></td>
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<td></td>
<td>Germany</td>
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<td>a) Nonclinical services</td>
<td>- Information technology services</td>
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<td>- Procurement, purchasing and delivery</td>
<td>- Human resources cost reduction</td>
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<td>- Payment collection</td>
<td>- Investments expenses (easier to support by bigger hospitals)</td>
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<td>- Facility management</td>
<td>- Clinical services</td>
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<td>- (cleaning, laundry)</td>
<td>- Clinical services</td>
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<td>- Patient transport</td>
<td>- Flexibility</td>
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<td>- Snack-bar</td>
<td>- Focus on critical activities and lean thinking deployment to achieve strategic advantages</td>
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<td>b) Clinical services:</td>
<td>- Clinical services</td>
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<td>- Physiotherapy, occupational therapy, speech and language therapy</td>
<td>- Clinical services</td>
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<td>- Home delivered high-tech healthcare (total parenteral nutrition, intravenous chemotherapy, continuous ambulatory peritoneal dialysis)</td>
<td>- Clinical services</td>
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<td>- Medical tourism</td>
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intended to open the field to the private sector on a wider scale. Private hospitals were allowed to compete with regional and municipal hospitals for NHS patients, publicly owned hospitals could be acquired by private entities, and, most visibly, services were to be managed under prospective global budgets (Perrot, 2004; Simões, 2004). The trusts and “internal market” creation, in the beginning of 1990s and later in 1997 the Blair’s government reforms, led to the encouragement of private sector entrance and spreading of outsourcing practices that had begun in the 1980s (McPake and Mills, 2000).

Likewise, Australia and New Zealand’s healthcare systems, which are based on the same Beveridge concept, were driven by efficiency, flexibility, innovation, waiting-time reduction, and service range diversity gains to take measures such as the “national competition policy,” which created outsourcing opportunities (Ashton et al., 2004; Prager, 1997; Young, 2005, 2007a, 2007b).

Outsourcing in the U.S.A. Healthcare Sector

Funded through a complex mix of private and governmental insurance, the US healthcare system shows a great reliance on the mechanisms of the market, including contracting and competition that forces providers to do “more with less money” (Goolsby, 2001). Outsourcing practices evidence is, however, much later identified comparing to other sectors. Hazelwood et al. (2005) justify that fact because of the ownership of most healthcare organizations being mostly not-for-profit (80%), government financed, and managed by committees, and not by an administration with a strategic plan and cost-driven decision-making processes. However, a growing outsourcing trend (Smith & Waymack, 2000) has emerged, helped by quality constraints of JCAHO (Joint Commission on Accreditation of Healthcare Organizations) and illustrated by HIPPA (Health Insurance Portability and Accountability Act) (Goolsby, 2001; Hazelwood et al., 2005). According to Stockamp (2006), around 75% of US hospitals have at least one outsourced function, not just in support services, as in early years, but also in the patient path of inbound to outbound functions (Chess, 2006; Neil, 2005; Rhea, 2007; Casale, 2007; Schneller & Smeltzer, 2006). The growth trend is also posited in studies using surveys of hospitals, long-term-care units, and clinics (Hensley, 1997; Katzman, 1999; Kirchheimer, 2005, 2006; Shinkman, 2000). Another growing trend is group purchasing organizations (GPOs), which service 97% of US hospitals that outsource procurement (Neil, 2005). The latest trend is medical outsourcing (Bies & Zacharia, 2007) provided by partnerships such as in one of the Parkway Hospitals in Singapore; the Johns Hopkins Hospital in Baltimore, Maryland; one of hospitals in Health Care City in Dubai; and the Mayo Clinic in Rochester, New York (McCallum & Jacoby, 2007).

Outsourcing in the Greek Healthcare Sector

The Greek healthcare sector, also inspired by the Beveridge model, illustrates the importance of the public health sector as the main provider in an economically difficult environment. Despite the lack of empirical and published research on outsourcing in the healthcare sector, the Moschuris and Kondylis (2006) study gives a full description of the Greek healthcare system constraints to outsourcing practices in public hospitals, leaving private healthcare providers outside the empirical setting. This study focuses on the decision-making process, the extension of outsourcing, effects on public healthcare, and future trends; stresses the difficulty of decision making in public healthcare organizations; and explores the reasons of (dis)satisfaction with outsourcing decisions.

Conclusion

This article reviews the state-of-the-art literature on outsourcing in the healthcare sector with an aggregated view. Summing up all the available information regarding the activities typology commonly found, the pointed risks and pitfalls, and also the advantages and opportunities that turned outsourcing in this sector into a strategic tool, this article provides a structured frame of outsourcing in different countries with different health systems. A systematic review was conducted with the purpose of gathering information and examples from scientific and grey literature that could show a full picture of the main drivers, risks, advantages, and trends found when outsourcing different activities in different countries. In order to describe and compare all the relevant findings of the literature review, data from different healthcare systems in Germany, the United Kingdom, Australia, New Zealand, the United States, and Greece are presented and illustrate the updated reality of outsourcing in healthcare.

Despite the literature scarcity found in this field, all gathered information was synthesized, organized, and structured into main issues (activity typology, outsourcing drivers, benefits and risks, lessons learned and future trends) offering a new research agenda to follow the phenomenon evolution in the healthcare sector, namely, to compare the shifting of outsourcing paradigm stages of each country and to evaluate the implications to healthcare supply chain managers. The existing literature is frugal in empirical research on performance models and measures in outsourcing cases (Heavisides & Price, 2001). There is also a lack of published research on how healthcare organizations deal with outsourcing risks before and after the decision and in different contexts from organizational change processes, such as start-up organizations’ outsourcing decisions. Rigorous scientific research is also missing in order to gain a generalization of findings.
Lessons from other sectors’ practices should be studied instead of thinking of outsourcing as a panacea to mitigate risks or simply reduce costs.

References


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**Cristina Machado Guimarães** has a degree in Business Administration and Management from Catholic University of Porto, an MSc in Healthcare Management from ISCTE-IUL – Lisbon University Institute - where she develops leading research on Lean Healthcare. Having worked 15 years in industry and services as Supply Chain Manager, has, more recently, dedicated to consultancy projects in both industry and services settings as healthcare. She is also Invited Lecturer in Post-Graduation Programs on Lean Operations Management. Additionally, she is a regular speaker in workshops and conferences.

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