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Use of outsourcing in Israeli medical centers

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Abstract

Outsourcing (using external contractors to provide services) is an organizational approach that eliminates business barriers. In healthcare, outsourcing can enhance efficient, quality care. Our objective was to evaluate the use of outsourcing in Israeli hospitals. Factors that affect the decision to outsource, contracts, and funding allocated to outsourcing were compared between private and public hospitals based on a questionnaire sent to 36 administrators. We found that private hospitals invested significantly more in outsourcing than public hospitals (11–20% and 0–10%, respectively; $p=0.05$). Medium and large hospitals allocated approximately the same budgetary proportion to outsourcing ($p=0.24$). Urban hospitals allocated more to outsourcing than rural hospitals. Cost containment, flexibility, client satisfaction, and a focus on core services affected the decisions to outsource most; 75% reported that outsourcing saved costs. For private hospitals, outsourcing provided the most added value by focusing on core services, improving service, and using the provider's infrastructure. The greatest disadvantages to public hospitals were resistance to change by personnel and reliability. We concluded that outsourcing is a viable strategy for controlling costs and maintaining quality patient care. It is a well-embedded, managerial-operational strategy, globally. Expanding outsourcing to include medical and administrative services can provide novel business opportunities, enabling cost savings and competition.

Keywords: Outsourcing, private hospitals, public hospitals, Israel.

Introduction

Health care executives face an ongoing challenge of reducing costs while maintaining quality patient care. Outsourcing is one of the strategic tools healthcare executives use to meet this challenge by transferring services or operating functions to a third party that provides a partnership management (1). The use of outsourcing in the healthcare industry is increasing (2) because it enables the development of innovative

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services and efficient quality care (3-7). The services most frequently outsourced in the healthcare market are information technology, finance, and support services such as security, food, and training (8, 9). In some healthcare organizations, outsourcing includes medical services such as teleradiology (10, 11), emergency department, and operating service centers (6, 12) such as intensive care units with off-site patient monitoring, using closed-circuit television (13-15).

In Britain, the National Health Service (NHS) outsources healthcare services to private providers to reduce waiting times for surgery, with a high satisfaction rate (16-18). In the United States, improvement in hospital operations is the most important criterion in the decision to outsource; cost savings and improved patient satisfaction are the second and third priorities (19, 20). Additional important factors in the decision to outsource are client satisfaction, quality of service, work environment, approach of the healthcare team, and reduction of costs (21). These parameters resulted in greater patient satisfaction with external service providers than with services provided within the organization. In a random sample survey of 100 public hospitals in Greece, Moschuris and Kondylis found that reduction of costs and client satisfaction were the main reasons for using external contractors (22). Cooperation with the service provider led to considerable improvement in the quality of services. Most users were satisfied and believed that ~~in~~ the use of outsourced services would increase (22). In Turkey, private hospitals outsource more services than public hospitals do, mainly in logistics, operations, and medical services such as laboratory and imaging (23). Hospitals in Italy are increasingly outsourcing services; however, the results do not always align with managers' expectations, especially in cost containment and efficiency (24).

Our study compared outsourcing activities in private and public hospitals in the Israeli healthcare arena. Specifically, we analyzed types of contracts, factors that affect the decision to outsource, and budgets allocated to outsourcing. Outsourcing activities were compared according to hospital size and location. We assumed that outsourcing is beneficial for all hospitals, regardless of type of ownership.

Methods

This study was performed using a quantitative email survey sent to administrative directors of 40 hospitals in Israel in February and March 2008.

The study population included all 40 major hospitals in Israel, comprising approximately 37% of the national healthcare budget. Hospitals were categorized into for-profit (private) organizations or public hospitals, in urban or rural locations.

A questionnaire based on a previous outsourcing questionnaire for hospitals (22) was translated to Hebrew. The questionnaire focused on four parameters: the extent to which hospitals outsource services, the decision-making process when choosing a provider, the impact of outsourcing, and the future trend of outsourcing among hospitals. Questions were translated into Hebrew and back to English to verify the translation. Eight questions reflecting managerial experience were added.

Questionnaires were sent and received by email. Before sending the questionnaires, the administrative director of each hospital, was informed of the objective of the study by telephone and agreed to respond. Respondents were asked:

- To estimate the percentage of the annual hospital budget allocated to outsourcing.
- To estimate their involvement in the decision-making process regarding outsourcing, on a scale from 1 (very little) to 5 (very high).
- How the hospital becomes aware of potential outsourcing service providers.
- To assess the importance of the factors affecting the decision to use outsourcing services, on a scale from 1 (not important) to 5 (very important).
- To rate the importance of criteria for estimating contracts with external providers of services.
- To estimate the effect of outsourcing on the organization.
- To state the difficulties and obstacles that might arise in contracting with service providers.
- To state the benefits of outsourcing to the hospital.

- To state the disadvantages of outsourcing.
- To state whether outsourcing reduced expenses.
- Whether outsourcing reduced the work force and by what percentage.
- To state if they thought that the use of outsourcing would increase or decrease in their hospital over the next three years.

Statistical analysis

Data were recorded and analyzed using the SAS program and tested for reliability. The chi-square test was used to determine frequency differences between the study groups. Significance level was set at 0.05. We used Fisher's Exact Test because of the small sample size.

Results

One private and three public hospitals did not answer the questionnaire and were not included in the study sample. Thus, the 36 hospital administrators (10 from private hospitals and 26 from public hospitals) who responded to the survey represent 90% of the key players in the Israeli healthcare arena.

Twenty-four (67%) were medium-sized hospitals, and 12 (33%) were large. The hospitals were distributed evenly between urban ($n=19$) and rural locations ($n=17$). The ten privately owned hospitals were all in the central region of the country.

Administrative and finance personnel had the greatest involvement in outsourcing (70%–100%) among all hospitals, compared to other hospital officials (10%–50); physicians, nursing services, and medical technicians had the least (20%–30%). In privately owned hospitals, 80% of the financial officers, 70% of the administrators, 50% of the purchase managers, and 20% of the legal advisors were involved in the outsourcing process.

Medium and large hospitals allocated approximately the same proportion of their budgets to outsourcing ($p=0.24$). However, privately owned hospitals invested a larger portion of their budgets in outsourcing than did public hospitals (11–20% and 0–10%, respectively; $p=0.05$). Urban hospitals

outsourced more types of services than did rural hospitals (4–7 and 3–5, respectively), and allocated a larger portion of their budgets to it (6–15% vs. 1–5%, respectively). In comparison to rural hospitals, urban hospitals allocated relatively more ($p=0.04$) of their budgets to outsourcing.

In 60% of all hospitals, outsourcing contracts were longer than three years, and were for two to three years in 20%. Both private and public hospitals in urban areas found that the development of new services provided operational flexibility and improved their image. As expected, 75% of all hospitals confirmed that outsourcing reduced expenses and improved services. The main savings were in cleaning (33%), security (28%), and laundry services (14%). Reduced manpower was attributed to outsourcing by 88% of the hospitals, who used external contractors for security (33%), cleaning (45%), laundry (17%), database systems (14%), and maintenance (14%). Reductions in manpower ranged from 1–10% in about 85% of the hospitals ($p < 0.01$).

Private hospitals tended to outsource more services than public hospitals. Outsourcing of legal services and cafeteria services were similar (Table 1). The most significant differences were for food ($p=0.0032$) and laboratory services ($p=0.0024$).

Most hospitals chose one provider over another because of price (53%), meetings with consultants and experts (50%), prior experience (44%), cost containment (81%), client satisfaction (69%), focus on core services (72%), operational flexibility (75%), funding of service providers (80%), and lack of skilled workers in the field (58%). Cost containment was less of a concern for privately owned hospitals than for publicly owned hospitals (50% vs. 70–80%, respectively). Half of private hospitals stated that focusing on core services played an important role in their decision to hire external services, compared to 14.3% of public hospitals. As shown in Figure 1, cost containment (85%) and client satisfaction (73%) had the greatest impact on the decision of publicly owned hospitals to outsource, compared to privately owned hospitals (70% and 60%, respectively). Comparing private hospitals to public hospitals, the most influential factors in the decision to outsource were focusing on core services (80% vs. 69%), operational flexibility (90% vs. 69%), and improved image (40% vs. 23%), respectively.

Table 1. Outsourcing contracts among private (for-profit) and public (not-for-profit) hospitals (n=36)

Service area	Private hospitals n=10 (%)	Public hospitals n=26			Total
		Public hospitals n=7(%)	Government hospitals n=11(%)	HMO hospitals n=8 (%)	(%)
Cleaning	6 (60)	7 (100)	6 (56)	8 (100)	21 (80.7)
Security	8 (80)	6 (86)	8 (73)	8 (100)	22 (92.3)
Laundry	9 (90)	4 (57)	6 (56)	5 (63)	15 (57.7)
Food*	7 (70)	1(14)	1 (9)	2 (25)	4 (15.4)
Cafeteria	4 (40)	5 (71)	3 (27)	5 (6%)	13 (50)
Laboratory**	6 (60)	1 (14)	0	1 (12)	2 (0.8)
Legal services	4 (40)	4 (57)	1 (9)	5 (63)	10 (38.5)
Database systems	5 (50)	3 (43)	3 (27)	4 (40)	10 (38.5)
Medical services	4 (40)	3 (43)	0	1 (12)	4(1.6)

p < 0.05, *p = 0.0032, **p = 0.0024.

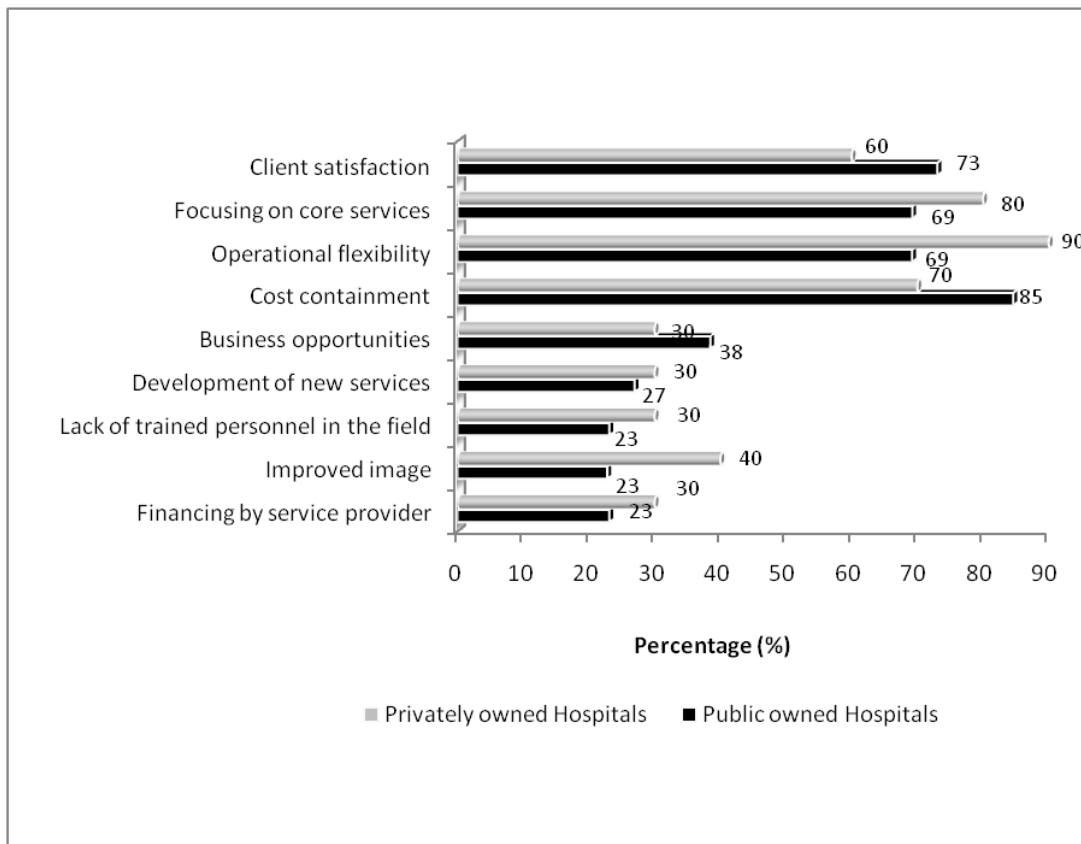
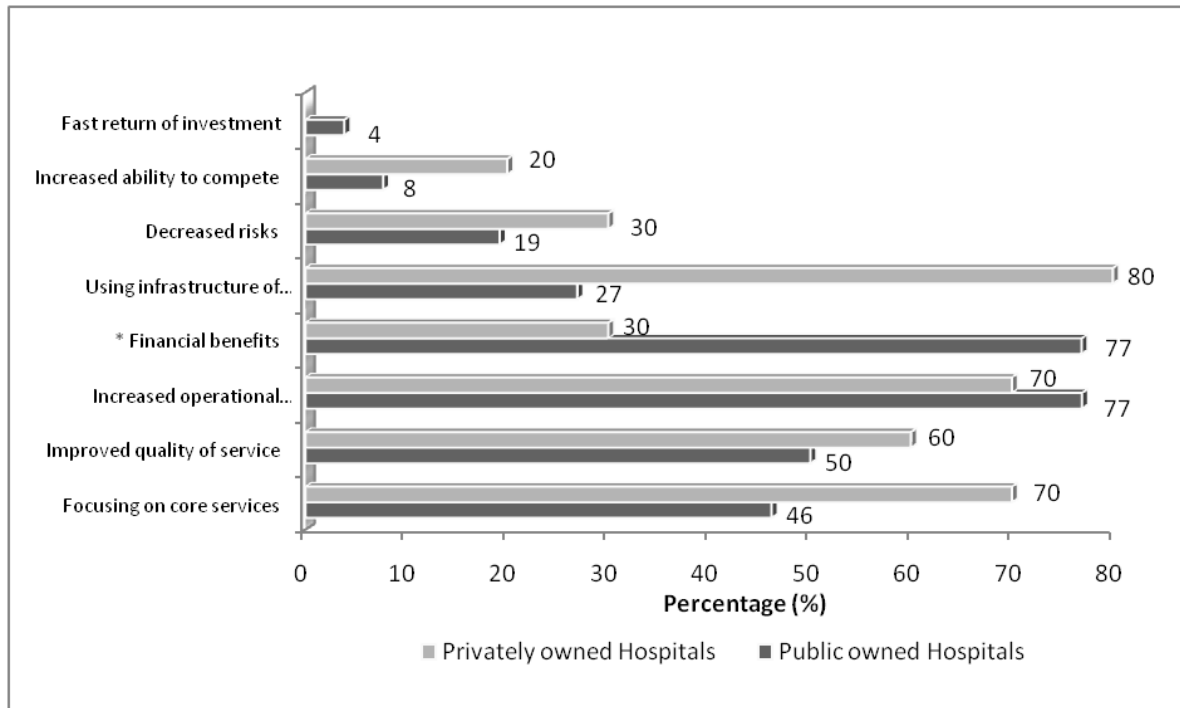


Figure 1. Factors (in %) affecting the decision to outsource among private and public hospitals (n=36).

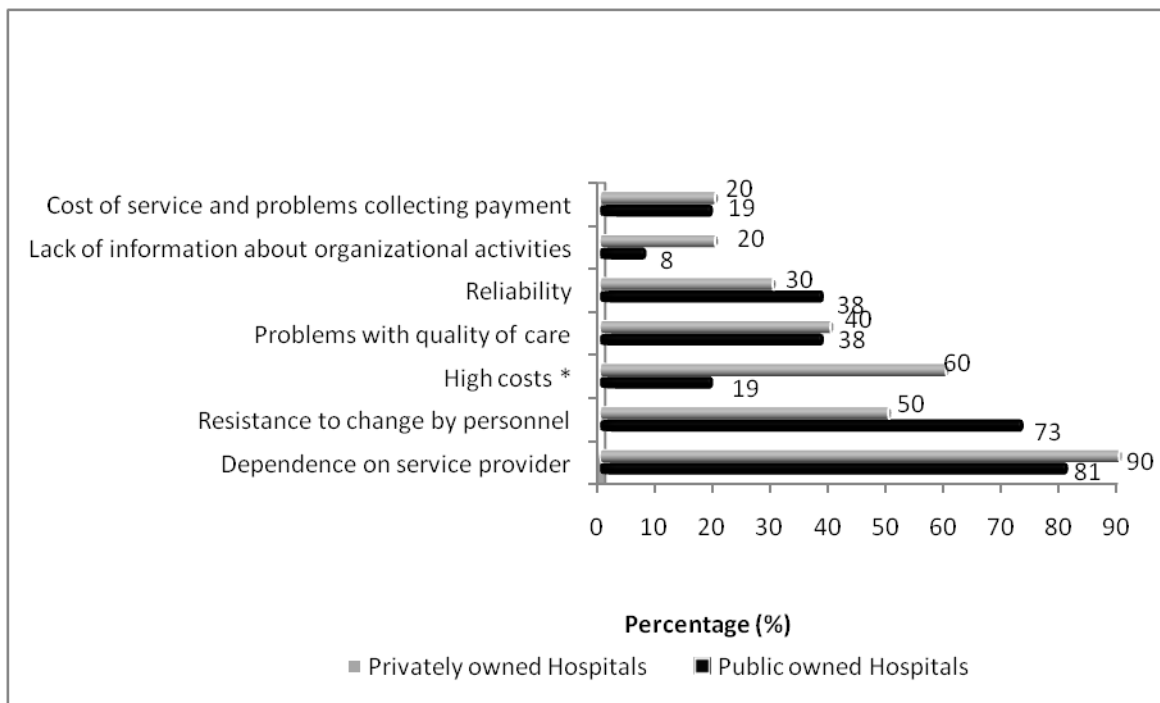
The major advantages of outsourcing for public compared to private hospitals were financial benefits (77% vs. 30%), and increased flexibility (77% vs. 70%), respectively (Figure 2). Outsourcing was more advantageous for private hospitals in the areas of focus on core services (70% vs. 46%), improved

quality of service (60% vs. 50%), decreased risks (30% vs. 19%), and using provider resources (80% vs. 27%). The biggest differences between the types of hospitals were in using the service provider's infrastructure (p=0.017) and financial benefits (p=0.017).



$p < 0.05$, * $p(0.017)$, ** $p(0.017)$.

Figure 2. Advantages (in %) of outsourcing as perceived by private and public hospitals (n=36).



$p < 0.05$.

Figure 3. Limitations of outsourcing as perceived by private and public hospitals (n=36).

The greatest limitations of outsourcing as perceived by private compared to public hospitals were dependence on service provider (90% vs. 81%), high costs (60% vs. 19%), and lack of information about organizational activities (20% vs. 8%), respectively (Figure 3).

Discussion

Purchasing services through outsourcing is an operational strategy used by hospital managers. Our study shows that privately owned hospitals used more external contractors for medical services (laboratory, imaging, doctors, and nurses) than public hospitals do. Outsourcing is used mainly in the areas of patient food, laundry, and cafeteria services. It also eliminates work force positions and is a means of containing costs.

The greatest portion of the hospital budget in Israel compared to other hospitals worldwide is allocated to security. Due to ~~of~~ the political situation in the Middle East, security is the most frequently outsourced service among all hospitals. Similar findings were reported in Turkey (23).

A. Outsourcing in private and public hospitals

Similar to our findings, Callahan found that privately owned hospitals use more outsourcing contractors than public hospitals do and allocate twice as much of their budgets to outsourcing (about 20% and 10%, respectively), mainly for services such as patient meals and laundry (19). Whereas public hospitals in Israel are bound by national, collective wage agreements and directives of the Ministries of Health and Finance, which require them to choose outsourcing services based primarily on price offers or tenders, private hospitals have more latitude in spending. Resistance from employee unions, which fear a loss of power when external employees are contracted, is another factor that restricts outsourcing among public hospitals.

Private hospitals tended to choose external service providers based on previous experiences and meetings with consultants and experts, while public hospitals chose external service providers based on

price and meetings with consultants. Both public and private hospitals found the disadvantages of outsourcing to be dependence on external service providers, resistance of hospital personnel to change, and problems with quality of care.

B. Savings and cost containment versus client satisfaction

Budget savings and cost containment were the most important factors influencing the decision to use external contractors. Decreasing manpower is an important means of containing costs, particularly since wages and benefits comprise more than 60% of organizational budgets. The main savings from outsourcing were in operational and logistics services that are not part of the core healthcare services. Our results also showed that 75% of hospitals reported that outsourcing primarily saved costs in logistics. It was reported that hospital experience with outsourcing (mainly in radiology, laboratory services, call centers, and reduced waiting time for surgery) improved client satisfaction and increased quality, but ~~does~~did not necessarily save costs (19-21). Financial considerations played a significant role in selecting a provider (through price offers), and the objective was to sign long-term agreements, which required the appraisal of benefits and long-term cooperation with the service provider.

C. Budget allocation to outsourcing

Compared to large hospitals, our study showed that medium-sized hospitals allocated a greater percentage of their budgets to outsourcing. Urban hospitals tend to have a larger infrastructure, more staff and equipment, as well as more money to invest in outsourcing than rural hospitals. Because of higher budgets, urban hospitals are often willing to take more risks. In contrast, in terms of costs vs. benefits, rural hospitals rely more on contracts with an outsourcing provider because of a lack of local resources and services. However, rural hospitals are wary of outsourcing because they may become dependent on the provider. Similar findings were not reported by other studies. It is possible that smaller organizations

have greater flexibility and are more open to the use of external contractors. In addition, it is possible that in less populated areas, outsourcing provides more benefit by using expert services that may be lacking in the region.

D. Decision makers and outsourcing of medical services

Private hospitals in some countries use external contractors more for medical services (laboratory, imaging, doctors, and nurses) than do public hospitals (23). Private and independent hospitals are similar in that their budgets are not controlled by the government or HMOs. It is possible that organizations that are less bound by governmental bureaucracy can be more creative in using medical outsourcing (24), with both a greater commitment and greater liability on the part of financial officers and administration.

Decision makers in public hospitals are mainly administrative directors, who are very involved in hiring external non-medical services. In private hospitals, which are more cost- and business-oriented, the Finance Departments are more involved in these decisions. In both types of hospitals, these professionals are the most influential in the decision to outsource. We found that management and legal departments are also very involved. Since finance department personnel are the key decision-makers (7) and not professional healthcare providers, fewer medical services are outsourced in both private and public hospitals.

We found that hospital location (urban vs. rural) was an independent factor that affected the decision to outsource more than did budget allocation. Most urban hospitals had a larger budget, a more diverse pool of outsourcing providers to choose from, and could take bigger financial risks when contracting for outsourcing services.

This study is limited by some of the unique features that exist in the healthcare market in Israel; it includes only 36 hospitals, of which 22% are owned by one HMO and 31% by the Ministry of Health. The number of beds per 1,000 residents is the lowest among OECD countries. Therefore, competition is mainly through the use of novel technologies, as well as outsourcing. Additional studies are needed from

other OECD countries who share similar challenges in their healthcare systems to better understand the potential of using outsourcing as a tool to increase competitiveness.

Practice implications

Outsourcing is a viable strategy for controlling costs and maintaining quality patient care. Therefore, it is a well-embedded managerial-operational strategy among hospitals worldwide. Expanding outsourcing of medical and administrative services can provide novel business opportunities, enable competition in the healthcare area, and save costs. However, development of novel outsourcing activities presents new challenges because it will define new rules in the areas of ethics, law, and quality of healthcare services.

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