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Outsourcing usług hotelowych w publicznych podmiotach sektora ochrony zdrowia

Hotel Services Outsourcing in Public Entities of Health Care Sector

Streszczenie

Ograniczona wysokość środków jakie są kierowane do Samodzielnych Publicznych Zakładów Opieki Zdrowotnej (SPZOZ) przez głównego ich beneficjenta tj. Narodowy Fundusz Zdrowia, wynikające z podpisywanych kontraktów na świadczenie usług medycznych oraz rosnące koszty usług niemedyycznych powoduje, że podmioty sektora ochrony zdrowia poszukują rozwiązań prowadzących do ograniczenia kosztów funkcjonowania podmiotu. Jednym ze sposobów jest korzystanie z usług podmiotów zewnętrznych, które są w stanie spełnić wymagania zamawiających. Zawieranie umów/kontraktów na usługi medyczne (badania laboratoryjne – diagnostyczne) oraz usługi niemedyczne doprowadziło do wykształcenia się modelu zarządzania opartego na outsourcingu usług. Prowadząc do ograniczenia kosztów i zmiany ich struktury (z kosztów stałych na koszty zmienne) outsourcing stał się modelem zarządzania wspomagającym procesy (hospitalizacji pacjenta) i procesy restrukturyzacyjne. Wydzielenie ze struktury organizacyjnej podmiotu procesów/działów wspomagających proces świadczenia usług medycznych prowadzi jednocześnie do *lean management*. Pozwala to zarządzającym na skupieniu się na procesach bezpośrednio związanych z działalnością operacyjną podmiotu.

Istotnym narzędziem wspomagającym prowadzenie wymienionych działań jest rynek zamówień publicznych, który w wyniku mechanizmów rynkowych jest w stanie zagwarantować obiektywną cenę oraz pozwala na wybór optymalnego oferenta. Determinantem są jednak wymagania SPZOZ zawarte w Specyfikacji Istotnych Warunków Zamówienia (SIWZ), które w istotny sposób decydują o liczbie podmiotów zainteresowanych świadczeniem usług dla podmiotów sektora ochrony zdrowia.

Usługami najczęściej zlecanymi wyspecjalizowanym podmiotem zewnętrznym są tzw. usługi hotelowe (wyżywienie, usługi pralnicze i usługi sprzątnia/utrzymania czystości), ze względu na proste czynności organizacyjne pozwalające na ich wydzielenie ze struktury organizacyjnej podmiotu.

Zastosowane przez SPZOZ warunki wyboru wykonawcy zawarte w Specyfikacji Istotnych Warunków Zamówienia w postaci m.in. kryteriów przyjętych do oceny ofert przetargowych powoduje, że mają one wpływ na zainteresowanie outsourcingu świadczeniem tych usług.

Słowa kluczowe: outsourcing, catering, usługi pralnicze, usługi sprzątnia, model ekonometryczny.

Summary

Limited amount of financial means directed to Independent Public Healthcare Centres (SPZOZ) by the major beneficiary i.e. the National Health Fund, resulting from contracts concluded for medical services provision, and, still rising non-medical costs make entities of health care sector search for solutions that will cut down their operational costs. Outsourcing is one of the means that could be helpful here, i.e. using services of external entities that are able to meet requirements of the ordering party. Concluding medical service contracts (laboratory and diagnostic examination) and non-medical service contracts resulted in creating a model of an open management based on outsourcing of services. Leading to cost reduction and changes of their structure (from fixed into the changeable costs), outsourcing became a management model facilitating processes (of patient's hospitalisation) and restructuring processes. Separating processes/divisions facilitating the process of medical healthcare services provision from the organizational entity structure leads to *lean management*. It allows the managers to focus on processes directly connected with operational activity of the entity.

A crucial tool facilitating the above mentioned activities is the public procurement market, which can guarantee an objective price; it also allows to choose the best possible bidder resulting from market mechanisms. However, the determinants are the requirements of Independent Public Healthcare Centres contained in the Specification of Essential Terms of Procurement (SIWZ), which significantly affect the number of entities interested in providing services for the health sector entities.

So-called hotel services (catering, laundry services and cleaning/maintenance services) are most often commissioned to specialized external entities; because of their simple administrative character they may be separated from the organizational structure of the company.

Conditions addressed to a contractor applied by Independent Public Healthcare Centres contained in the Specification of Essential Terms of Procurement in the form of, inter alia, criteria for tenders evaluation results, have an impact on outsourcingers' interest in these services.

Key words: outsourcing, catering, laundry services, cleaning and maintenance services, econometric model.

INTRODUCTION

Functioning of Independent Public Healthcare Centres (SPZOZs) in a dynamic environment creates some area of change that may be undertaken by managers when deciding about the operational activity of an organization [1]. Limiting decision-related areas of the entity, resulting from the fact of outsourcing some divisions/processes separated out of its structure, brings about “lean management”. Decreasing management scope allows, at the same time, the managers to focus on basic processes deciding about organization efficiency. Outsourcing-based model is the tool facilitating on-going (restructuring) processes in health care sector. Tenders for services announced by Independent Public Healthcare Centres allow to choose, during tendering procedures, such contractors/service providers that can meet requirements of the Independent Public Healthcare Centres included in Specification of the Essential Terms of Procurement. The public procurement market having a simulative and pro-effective role [2] also ensures spending of public funds in an effective and rational way.

SPZOZ search for external actors (outsourcers) providing high standard services, results from the need for effective / efficient management of the still insufficient funds in the health sector entities.

METHODOLOGY

Regulations of Public Procurement Law committing entities (Independent Public Healthcare Centres) that spend public financial means to publish public procurement orders and results of tenders [3], allowed for gathering extensive statistical data. It contains procurement notices for services and results of tender proceedings that were published in 2004 – 2008 in Public Procurement Newsletter at an Internet platform of the Public Procurement Office. The basis for statistical analysis was data quantification and their appropriate transformation. It also helped in establishing the cause-effect dependencies of the incoming tenders/number [4] of entities submitting tenders originating from the public procurement market in response to announcements for (hotel) services tender issued by Independent Public Healthcare Centres [5].

This paper aims to present in what degree requirements of Independent Public Healthcare Centres relating to outsourced services influence outsourcers’ interest in rendering these services for public entities of health care sector.

SERVICES OF HEALTH CARE SECTOR ENTITIES IN PUBLIC PROCUREMENT

Outsourcing, as a management method, is used by these entities in which one needs specialized competence or a certain standard of rendered services. In consequence, the managers are obliged to make decisions that shall assist/replenish the basic processes i.e. the so-called core business [6]. Services rendered for public services sectors are of high significance; they usually focus on areas in which financial investments are restricted by economic conditionings. Services and business activity have been increasing using outsourcing, which led to so called economic service-

dependence, facilitated by international services exchange –globalisation and liberalization processes.

The process of service-dependence (outsourcing of services) began in the Polish health care sector on the momentum when Health Funds were set up (1999) and health benefits contracted. Per capita payment for the provided service contributed to searching by managing personnel solutions that would cut costs of the provided services.

Outsourcing was accomplished basing on its two essential models i.e. total and partial outsourcing.

The first one was when the external service provider overtook control over the process separated from the entity’s structure. The process in this instance will be understood as an activity of the entity that leads up to such a solution in consequence of which the client receives a product/service of value according to client’s wish [7]. The latter model of outsourcing came up to supervision over the outsourced part of contractor’s activity. The above mentioned outsourcing models belong to contract models i.e. the ones based on contracts concluded with Independent Public Healthcare Centres [8] for specified time of contracted services provision.

Processes of service outsourcing present in health care sector entities reflected their financial and administrative potential. In 2004 – 2005 high public obligations of health care sector [9] and resistance of employees and trade unions did not allow managers to introduce any changes that could end up with cost cutting/rationalization. However, the hospitals restructuring process, forcing hospital restructuring, resulted in outsourcing that since 2006 has become a management model leading to cost and employment reduction – see Figure 1.

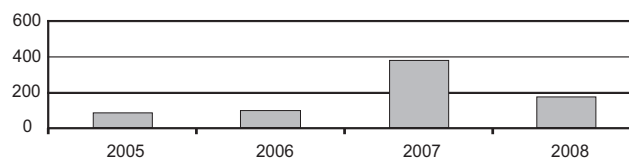


FIGURE 1. Dynamics of procurement notices for services in 2005 – 2008 (previous year = 100).

Source: own calculation basing on the number of services advertisements published in BZP/UZP platform in 2004 – 2008

Within 2005-2006 a fall in dynamics of announced tenders for services was registered respectively by ca. 13% and about 2%. Still, in 2007 the increase amounted to 239% in relation to year 2006. Significantly high rise in dynamics resulted from restructuring processes that took place in Independent Public Healthcare Centres. Moreover, debt removal of entities in consequence of financial restructuring started in 2005 also influenced the rise in dynamics of services. In 2008 the 69% rise of dynamics against 2007 was an effect of continuity of the started processes that were leading to cost cutting of hospitals operational spending.

The easiest and fastest process of separating entities of areas facilitating patient’s hospitalisation related to the so-called hotel services i.e. non-medical services such as laundry, catering and cleaning services. These processes were conducted by all public health care centres; they presented the above mentioned services (besides other items) in so-called recovery schedule allowing to receive financial support [10]. Another reason for a significant amount of

orders for hotel services was the need to adjust their standard to optional requirements (e.g. HACCP for catering services [11]). The above mentioned conditionings influenced managers' decision making on passing those services over to some professionally specialized external entities; it influenced the high share of these services in the structure of all services ordered by Independent Public Healthcare Centres – see Figure 2

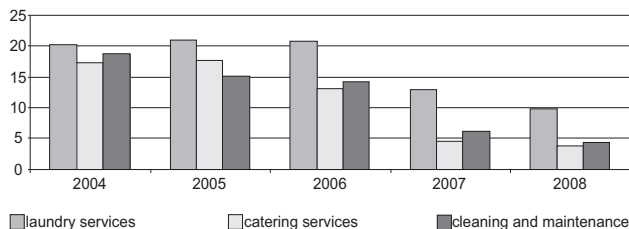


FIGURE 2. Structure of hotel services outsourcing in 2004 – 2008 (%).

Source: Own calculation based on announcements by Independent Public Healthcare Centres in Public Procurement Newsletter (2004 – 2008)

High share of laundry services (ca. 20% in years 2004 – 2006, ca. 13% in 2007, and ca. 10% in 2008) and catering services (ca. 17% in years 2004 – 2005, ca. 13% in 2006 and ca. 4% in 2007 – 2008) resulted from their position in organization structure of the hospital (the easiest division). The downward trend of these services participation in years 2007–2008 was a result of period of time for which contracts for executing them were concluded in previous years (32 months) and a limited number of public entities (hospitals) offering in-patient health service. The share of cleaning/maintaining tidiness services in services structure was respectively ca. 19%, ca. 15% and ca. 14% in years 2004 – 2006. However 2007 – 2008 the share of these services decreased to ca. 6% and ca. 4%, and the reason why public sector health care entities withdrew from these outsourcing contracts was a low quality of those services. The ‘win-lose’ (inequality of partners) rule applied by outsourcers in result led to higher number of hospital infections, which occurred mainly due to application of inappropriate washing/cleaning materials/agents and lack of appropriately trained outsourcer's employees.

Independent Public Healthcare Centres decision to resign of outsourced services of cleaning/maintenance influenced the higher competitiveness of entities offering their services. It may be proved also by the number of incoming offers to only one tender announcement [12] for this type of service – compare Figure 3.

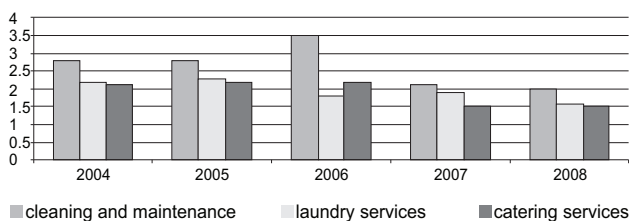


FIGURE 3. Average number of tenders submitted to one announcement made by an Independent Public Healthcare Centre within 2004 – 2008.

Source: Own calculation based on announcements made by Independent Public Healthcare Centres in Public Procurement Newsletter (2004 – 2008)

In 2004 – 2006 the number of incoming tenders for cleaning services amounted to 2.8 tenders, whereas in 2006 it amounted to 3.5 tenders, and still in 2007 – 2008 respectively to 2.1 tenders and 2 tenders. The lowest number of incoming tenders was for laundry services. Their number against the analysed years remained at a comparable level of ca. 2.1 tenders per one tender proceeding. In terms of catering services the number of incoming tenders indicated insignificant differentiation of ca 2 tenders in 2004 – 2006 to ca. 1.5 tenders within 2007 – 2008.

The number of incoming tenders (external entities' interest in servicing Independent Public Healthcare Centres) influenced the value of the signed contracts. Analysis of tender proceedings results allowed to assess that the Independent Public Healthcare Centres used to choose the cheapest tenders out of the incoming ones – see Table 1.

TABLE 1. Difference between the price chosen by an Independent Public Healthcare Centre and the lowest price offered by bidders (%).

Service/year	2004	2005	2006	2007	2008
Laundry	1.63	no	no	0.06	0.24
Catering services	21.3	1.45	no	no	no
Cleaning/maintenance services	1.14	no	0.32	0.03	0.13

Source: Own calculation based on announcements made by Independent Public Healthcare Centres in Public Procurement Newsletter (2004 – 2008)

In 2004 Independent Public Healthcare Centres chose tenders with higher price than the lowest one suggested by bidders respectively by ca. 21% for catering, ca. 1.6% for laundry and ca. 1.1% for cleaning/maintenance services. In 2005 execution price in case of laundry and cleaning/maintenance services was the lowest price offered by bidders; while for catering the ordering party chose the more expensive tenders by 1.5% than the lowest one. In 2006 – 2007 difference between prices that were chosen for execution, and the lowest prices included in tenders ranged from ca. 0.3% to ca. 0.2%.

That choice of tenders proves Independent Public Healthcare Centres manage their financial resources in an efficient method. Nevertheless, they do not guarantee appropriate quality standards of services they offer (e.g. cleaning/maintenance).

ASSESSMENT OF PROCUREMENT MARKET FOR SERVICES OF INDEPENDENT PUBLIC HEALTHCARE CENTRES (ECONOMETRIC MODEL)

The number of entities interested in rendering services for **Independent Public Healthcare Centres was influenced by tender assessment criteria applied by the ordering parties (Independent Public Healthcare Centres)**. In 2004 – 2008 these criteria for analysing hotel services depended on the service type – see Table 2.

The Independent Public Healthcare Centres applied the highest price criterion for laundry services tenders (respectively from ca. 89 percentage points in 2004 up to ca. 98 percentage points in 2008). An equally high price criterion was applied for catering tenders (from ca. 88 percentage points to ca. 96 percentage points). The lowest price criterion was applied for assessment of cleaning/maintenance tenders.

TABLE 2. Assessment criteria for hotel services tenders.

Criteria/service	Laundry					Catering					Cleaning/maintenance				
	'04	'05	'06	'07	'08	'04	'05	'06	'07	'08	'04	'05	'06	'07	'08
Price	88.5	92.7	95.1	98.1	97.2	88.1	92.9	92.6	96.3	96.1	83.7	89.7	84.2	96.6	82.7
Payment term	13.1	11.4	11.3	11.7	20.1	15.4	10.1	11.4	10.1	20.1	12.2	8.6	11.3	-	17.3
Quality	18.8	15.1	26.4	22.5	24.2	18.9	19.3	19.7	22.1	-	18.8	15.1	26.4	22.5	24.2
Stability of price	12.5	13.1	11.3	11.7	8.8	12.4	12.7	15.1	10.1	10.1	12.9	6.4	9.1	15.1	5.6

Source: Own calculation based on information included in bid announcements (2004-2008)

Using a high price criterion implied that entities preferred services of lowest possible prices. Other assessment criteria for tenders assessment i.e. payment term, quality and price stability (in some cases) were of secondary importance and did not influence the outsourcer that much.

Using the above presented information, criteria that arouse most interest in Independent Public Healthcare Centres as for hotel services were established. Econometric models were of much assistance in that case.

Econometric models, reflecting relations existing in reality (economic processes), may consist of numerous equations and inequalities. The model, in which the described (model) event takes place at the same time is a static model; whereas, when time is one of the explanatory variable or when one of the explanatory variables is delayed/accelerated in time, it is the dynamic model [13].

Models used in this paper are the static ones. The influence of (explanatory) variables on the variable – result (explained) is the effect of each variable– cause’s influence on the variable – result in consequence of change of this variable, which shows no correlation with other explanatory variables. If the explanatory variable is non-correlated with other explanatory variables, then it directly influences the explained variable. Thus, in variables-causes no collinear variables may occur [14].

For the purpose of assessing public procurement market (its supply part) in terms of the above mentioned services, econometric line models estimated with a classic Least Squares Method (IRLS) were applied. The variable being explained in all presented models is the number of entities submitting their tenders (*akc*), whereas explanatory variables – value of concluded contracts (*val*) and tender assessment criteria applied by Independent Public Healthcare Centres in following forms: payment criterion (*pay*), quality criterion (*qual*), guarantee criterion (*guar*) and price stability (*price*). An explanatory variable in the form of number of announcements issued to the public procurement market by Independent Public Healthcare Centres (*pop*) did not always come as statistically significant at the given 0,05 level of significance.

In consequence of model parameters estimation the following was received:

- for catering services

$$\ln akc = \frac{2.9}{(0.002)} + \frac{0.12 \ln val}{(0.053)} - \frac{0.32 \ln pay}{(0.05)} - \frac{0.35 \ln qual}{(0.043)} - \frac{0.46 \ln stab}{(0.007)} + \frac{1.23 \ln pop}{(0.067)}$$

$$R^2 = 0.939 \quad D-W = 2.2$$

The obtained model explains the existing relationships in ca. 94%. The increase in contract value by 1% results in increase of ca. 0.12% in interest of entities submitting their

tenders (*ceteris paribus*). The rise in payment criterion by 1% (i.e. time in which payment should be settled by the outsourcer) causes a fall in interest in laundry services by ca. 0.3% (*ceteris paribus*). Quality criterion rise of 1% brings about decrease in incoming tenders by ca. 0.4% (*ceteris paribus*). The increase of price stability criterion by ca. 0.5% causes fall in interest of service buyers by ca. 0.5%. However, quantity of orders issued for this type of services by Independent Public Healthcare Centres (*ceteris paribus*) turned out to be insignificant at the accepted 0.05 level of significance.

- for laundry services

Laundry services are the ones which were primarily outsourced by Independent Public Healthcare Centres. The major reason for that was the uncomplicated process of them being separated from the organization structure of the entity, relating to place where the services were rendered

$$akc = \frac{-25.07}{(0.007)} + \frac{6.9val}{(0.001)} - \frac{2.9qual}{(0.002)} - \frac{0.674stabil}{(0.0014)} + \frac{2.13pop}{(0.020)}$$

$$R^2 = 0.990 \quad D-W = 2.1$$

(a separate facility within hospital area).

The received model explains what is the influence of explanatory variables on the explained variable in ca. 99%. Increase of the concluded contracts by value of 1 thousand results in increase of bidding entities (*ceteris paribus*) of ca. 7 digits. Increase of the quality by 1 criterion causes decrease in ca. 3 tenders (entities) interested in the same type of services for Independent Public Healthcare Centres (*ceteris paribus*). Increase in price stability by 1 criterion causes decrease in ca. 0.7 incoming tenders (*ceteris paribus*). Increase in the number of tender announcements for laundry services causes increase of ca 2 digits of incoming tenders (*ceteris paribus*).

$$akc = \frac{-6.38}{(0.004)} + \frac{3.58val}{(0.0031)} + \frac{7.28price}{(0.004)} - \frac{4.67pay}{(0.003)} - \frac{1.14qual}{(0.010)} - \frac{1.54gwar}{(0.003)} - \frac{1.99guar}{(0.008)} + \frac{2.17pop}{(0.580)}$$

$$R^2 = 0.991 \quad D-W = 1.7$$

- for cleaning/maintenance service

The model describes the occurring relationships in ca. 99%. Increase in signed contracts by 1 thousand results in the growth of number outsourcers of ca. 4 digits (*ceteris paribus*). Increase of the assessment of tenders in terms of price, payment, quality, guarantee and stability by 1 criterion causes respectively increase of incoming tenders by ca. 7 (*ceteris paribus*), ca. 5 (*ceteris paribus*), ca. 1 (*ceteris paribus*), ca. 1.5 (*ceteris paribus*) and ca. 2 (*ceteris paribus*) digits.

The presented hereby assessment of outsourcing services, included in the so-called hotel services, allows to make the following conclusions:

1. the number of incoming tenders/ number of entities submitting tenders (*ceteris paribus*) was mainly influenced by assessment criteria of a tender applied by the ordering parties (*ceteris paribus*),
2. value of the price being the criterion of tenders (so, the requirement of the lowest possible price for services ordered by the ordering parties) leads up to growth of interest of clients (cleaning/maintenance services),
3. value of other criteria used for assessment of tenders i.e. payment criterion (*ceteris paribus*), quality criterion (*ceteris paribus*), guarantee criterion (*ceteris paribus*) and price stability criterion (*ceteris paribus*) results in fall in interest in rendering services for Independent Public Healthcare Centres,
4. increase in value of concluded contracts (*ceteris paribus*) results in rising interest of outsourcers.

CONCLUSION

Taking advantage of external service buyers for whom services “facilitating” operation activity of a public health care centre constitute their basic business, may finally bring measurable profits to the concerned parties. Still, the *sine qua non* condition has to be the right division of outsourced processes, cooperation with outsourcer and monitoring quality of rendered services by the ordering entity.

The presented models for hotel services, specifying dependencies that appear, allow to state that Independent Public Healthcare Centres have direct influence on creating (activity) of the supply part of the procurement market. Instruments here are mainly criteria used for tenders assessment, about which every bidder present in the procurement market is informed at the stage of tender announcement. These criteria decide to high extent whether the entity rendering certain type of ordered services shall be accepted as a bidder (shall submit a tender).

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