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Outsourcing services in the Italian National Health Service: the evaluation of private and public operators.

Paolo Mariani[a], Rosa Falotico[a], Biancamaria Zavanella[a,*]

[a]DEMS University of Milano-Bicocca, Via Bicocca degli Arcimboldi 8, Milano 20126, Italy

Abstract

Outsourcing has shown itself worldwide to be a useful tool for improving partnership between private and public companies. The budgetary constraints imposed by the Italian government on health industry are enhancing the urgency to outsource to face costs. Our study deals with the relationship between ASLs (Aziende Sanitarie Locali, the Italian local health authority) and private operators outsourcing in Italy.

We studied 44 pharmaceutical companies (with a yearly turnover of about €6 billion) and 34 ASLs (with about 12 million users) to find out the areas in which they used outsourcing, the amount and the frequency of such investment, their satisfaction and, therefore, their future intentions. We analysed the answers in search for possible relationships between size, frequency of use and other features to uncover a possible convergence between public and private interest in outsourcing.

To better evaluate the convergence we analyse and compare satisfaction of both the operators involved in outsourcing (ASL and private operators). We aim to offer a representation of the current state of outsourcing in the Italian Healthcare System and a first indication of possible contrasts in the relationship between public and private partners. The results suggest that public and private operator have a different satisfaction level and in particular their expectations are in contrast whit their satisfaction: ASLs are generally more satisfied than pharmaceutical companies, but expect a considerable reduction of outsourced activities; private companies are less satisfied and provide an increase in these activities.

1. Introduction

Companies are forced to limit the economic exposure and to defend their market shares because of the recent economic crises. To face this problem, they developed a wide range of business management tools and, nowadays, even public companies are starting to apply them. In this study we focused our attention on outsourcing, a way to increase flexibility in Public Healthcare services, and in particular on its development in Italian Public Healthcare companies. According to Fattore (2012), the Italian Public Health sector, although not subject to the competitive market rules, is facing severe budget restrictions, depending on the Central Government need of spending reduction.

* Rosa Falotico. Tel.: +39-02-6448-5823; fax: +39-02-6448-5878.
  E-mail address: rosa.falotico@unimib.it

Italian policy makers need to limit national debt and preserve high quality standards in the crucial area of Public Healthcare intervention. National policy makers aim at increasing flexibility and efficiency in public healthcare services and making local governments more responsible about their healthcare spending.

These new operational conditions allow the Public Healthcare sector to outsource more extensively. Outsourcing is a business tool largely employed in the private sector in order to increase flexibility and to contain costs. Its use in the public sector is increasing and various studies analysed its development (Macinati (2006), Mariani et al. (2011)).

We hypothesized that the level of satisfaction of public and private operators for the outsourced activities can affect the outsourcing development in Italian National Health Service. Under this hypothesis, we presented an overview of outsourced activities with regard to specific areas of National Health Service (NHS) and we aimed at identifying the current state and future prospects of partnership between public and private operators analysing the satisfaction of both the operators and their expectation on the future investments on the activities, to assess the degree of correspondence between the services offered by pharmaceutical companies and those required by the ASLs.

For these purposes, we used the results of a survey carried out in Italy on the activities outsourced by territorial health agencies: the ASLs (Aziende Sanitarie Locali, the Italian local health authority). We analysed specific outsourced healthcare services, not related to ASLs core activities (services of medical care and diagnosis). Ancillary services, such as catering, cleaning etc., were excluded. The complementary services analysed in this paper are: clinical trials, epidemiological / observational studies, patient focused projects, management training, data release/ ad hoc research, patient monitoring, social marketing, CME (Continuing Medical Education). These services are taken in charge by pharmaceutical companies, qualified interlocutors having the appropriate level of expertise to carry out such activities. Therefore, we interviewed outsourcing policy makers, within the ASLs, and managers handling the relations with the Public Healthcare within the pharmaceutical companies.

This study is structured as follows. Section 2 shows the framework in Italian Healthcare Public sector, Section 3 describes the research strategy and the data collection. In section 4, we present the empirical analysis and the results. Section 5 concludes.

2. Theoretical framework

Italy, because of its high public debt, is one of the countries hit the hardest by the financial crisis of recent years, and Public Healthcare is a sector more exposed to organizational restructuring. The Italian National Health Service (NHS), in addition to the problems of an aging population and an increasing migration, also faces the recent deterioration of the economic condition of the country (Fattore (2012)).

In the three decades of its short existence, the effort to maintain a high level of service quality required to Italian National Health Service a massive outflow of resources. That mainly weighed in on the national budget, principally because the policies adopted have not always been driven by economic logic. The result was a state of a long term macroeconomic not sustainably situation, that today is no longer acceptable, given the severe economic crisis affecting Italy and decisive measures are required.

In recent years, the political debate on the reorganization and rationalization of public spending in healthcare has been very intense. In the field of healthcare budgets management, literature and policy makers followed two main themes (Macinati (2008a)): 1) Devolution (the transfer or delegation of power to a lower level, especially by Central Government to local or regional administration) and 2) Improvement of public services management efficiency. The demand for greater efficiency in the delivery of public services is a result of heavy public debt crisis of 2011, when the Italian government needed to restructure the whole sector of Public Spending, including the predominant component of health care area. At first, the response of the central government was dictated by the urgency and the gravity of the situation. The measures taken, resulted mostly in "linear cuts" in Public Spending and health spending in particular. Leaving aside considerations about the effectiveness of such policies, some authors highlighted the potential increase in inequality in access to health care and an amplified gap between the Italian regions due to the drastic and sudden reduction in public health expenditure (Cappellaro et al. (2009)).

As an alternative to indiscriminate cuts in public spending, literature long proposed several business instruments to enhance flexibility and efficiency. In particular, regarding the best use of available public administration resources, it is possible to refer to a train of thought that has been developed in literature for several years: managerialism (Fattore (1999)). In the context of a wider decision-making autonomy of public providers, managerialism aims at identifying

the incentives for adoption of innovative and flexible business tools, so far neglected by policy makers. The indication of managerialism had not immediately been transposed into Italian law, but for several years they remained at the level of orientation.

Nowadays, finally, the local decision makers are giving a more managerial orientation to their policies, aware of the evident benefits it brings in terms of increasing efficiency in public activity (Macinati (2008b)). Outsourcing is one of the tools that best fit these needs.

Outsourcing consists in transferring services or operating functions, traditionally performed internally, to a third party service provider and controlling the sourcing through contract and partnership management (Roberts (2001)). Literature provides an extensive repertoire of outsourcing benefits. In particular, there is a narrower subset of researches focused on outsourcing in the healthcare sector. Macinati, in her literature review, (Macinati (2008a)) summarize the main reasons for outsourcing in the public health care in:

- cost reductions and efficiency improvements;
- strategic considerations;
- acquisition of specialized technical skills concentrating resources on the development of internal strategic skills.

Even though outsourcing may have many potential benefits, there are also several disadvantages that the previously mentioned author (Macinati (2008a)) summarizes in:

- cost savings lower than expected and not available over the long term;
- Public Healthcare providers over-dependent on the vendor or liable for the vendor's actions;
- Public Healthcare losing control over the standard of service delivering.

A further problem concerns the collaboration between demand and supply of outsourcing. In our work we intend to provide an overview of the Italian situation in relation to this problem.

The actors involved in outsourcing partnerships, on the Public Healthcare side, primarily are the great Italian health companies, such as Hospitals and ASLs . In this work we have chosen to consider only this latter and, in effect, ASLs differ from hospitals because they both deliver care, but ASLs also deliver services, which are the object of our study.

In the public sector, specifically in the healthcare area, outsourcing consists overall in contracting-out: the public decision maker commits the services production/supply to private external companies. The range of services that NHS and in particular ASLs already contract-out is very wide, but the outsourced activities may be included in 4 main categories (Macinati (2008a)):

- Ancillary Services
- Diagnostic Services
- Essential Services
- Community Services

Actually, the major advantages of outsourcing are that ASLs can concentrate economic resources and know-how on core business activities (in the case of Public Healthcare, they primarily consist of medical and diagnostic services), so they can commit to specialized external the complementary activities (ancillary clinical activities and community services). For this reason the services analysed are fully included in the definition of complementary activities (clinical trials, patient focused project, social marketing, CME etc.).

Given the specific technical skills required for the provision of such activities, the key partners for collaboration are pharmaceutical companies operating in Italy.

We have now defined the main subjects of this research, in the following section we present the methodology used in the analysis.

3. Methods and Data collection

In this research, we aimed at obtaining evaluation of both the partners (ASLs and pharmaceutical companies) involved in outsourcing and the expected investments in these activities to evaluate its current in the Italian Healthcare System and the future development. The research hypothesis was set up using a five-point Likert-type scale (from "very dissatisfied" to "very satisfied"). A descriptive analysis was performed, and the association between satisfaction and the remaining variables was measured for the two groups. The amount of data available was not large enough and we could not apply the most advanced satisfaction analysis tools (Parasuraman et al. (1994), Fornell et al. (2005)). On the other hand, we could use the Student's t-test for two independent samples to compare the ASLs' and Pharma's satisfaction (Kumar et al. (2013)). This test is robust enough for the sizes of our samples (Lehmann and Romano (2006)) and we could test the difference between the means of ASLs' and Pharma's satisfaction.

3.1. The questionnaire

A survey was carried out to collect data on activities outsourced by ASLs and supplied by pharmaceutical companies. The questions affected the current state of outsourcing and the future prospects. The data was collected in 2010. The questionnaire, customized on ASLs and pharmaceutical companies, was structured with closed-ended question, with single and multiple responses. The CATI method was used.

The common questions interested:

- the frequency of collaboration between ASLs and pharmaceutical companies;
- the mean value, in euro, of each collaboration (both present and future);
- an evaluation of these collaborations.

The ASLs were asked to indicate the person in charge of the decisions regarding outsourcing. Pharmaceutical companies were asked to indicate the subject, within the company, in charge of the relations with the ASLs regarding outsourcing, and to identify the position of the subject directly contacted within the ASLs.

Lastly, complementary services mentioned in section 2 were recorded. In the questionnaire the following 8 types of relevant activities were identified:

1. Clinical trials;
2. Epidemiological/observational studies, aiming to gain knowledge on incidence, aetiology, diagnosis and treatment of diseases or on their opposite, i.e., the state of health.
3. Patient focused projects.
4. Managerial training.
5. Data release/ ad hoc research.
6. Patient Monitoring (compliance to treatment).
7. Social marketing.
8. CME (Continual Medical Education).

We chose these activities because ASLs have the responsibility to provide them, but they do not represent a core business service for Public Healthcare: this is a classic example of services economically convenient to outsource.

The issues regarding outsourcing activities, already in place and future, have been presented differently to respondents.

ASLs were asked what activities they have and have intention to outsource. Pharmaceutical companies were asked to indicate what might be, for the Public Healthcare policy maker, the most interesting activities to be placed in outsourcing (among those already in place and among those which have yet to be put in place). In fact, we assumed that the answers to this question are influenced by the relationships between respondents and Public Healthcare.

3.2. Respondents

On the demand side, all 146 ASLs operating in Italy in 2010 were contacted (source: Ministry of Health [1].) 34 ASLs responded to survey, covering about 12 million of users (nearly one-fifth of the Italian population).

On the supply side, 44 pharmaceutical companies participated in the survey. They summarized approximately €6 billion annual turnover in Italy and cover about 30% of the pharmaceutical product sales, slightly less than €20 billion (source IMS Health 2010).

As the data obtained included a self-selected subset of the population, it was not possible to draw inferential conclusions from the analysis. On the other hand, the survey enabled to outline an overview of the state of outsourcing in the Italian Public Healthcare System.

4. Results

4.1. Structural data

Respondents were characterized with respect to their size. We grouped the ASLs into three categories (small, medium, large) according to the number of residents: 61.8% of the ASLs were small sized, 23.5% were medium sized, 14.7% were large sized.

The 44 private companies were classified by the turnover produced in Italy in three classes. The groups were defined as follows:

Less than €10 million of turnover: Small Company

Between €10 and 100 million of turnover: Medium Company

More than €100 million of turnover: Large Company.

Small companies represented 43.2% of respondents. 31.8% of companies were medium and 25.0% were large.

4.2. Descriptive analysis

From the analysis of annual frequency and average financial value of collaboration, we could draw a first indication of the state of the partnership between ASLs and pharmaceutical companies.

55.6% of respondent ASLs outsourced up to a maximum of 5 activities per year. Respondents indicating an average value for activities (outsourced on the whole Italian pharmaceutical market) exceeding €900,000 were 14.3%. 28.4% of ASLs declared an average value between €300,000and 900.000; the remaining 57.1% declared a value under €300,000.

Nearly one third of the pharmaceutical companies undertook collaborations with almost one of the 146 Italian ASLs less than 6 times per year, while the remaining 65.9% had 6 or more opportunities for collaboration.

70% of respondents claimed to have outsourced business for an average value of less than €300,000. 10% of them indicated a value between €300,000 and 900,000and the remaining 20% indicated a value greater than €900,000.

In order to expand the analysis, the average value of the outsourced activities was related to the remaining variables (Table 1).

With regard to the size, only small ASLs outsourced activities for a high average value (25%). A quarter of small ASLs and the totality of the big ones collaborated only for a medium value (between €300,000 and 900,000); half of the small ASLs and the totality of the medium ones outsourced services for an average value of less than €300,000.

ASLs outsourcing with low frequency (less than 6 times a year) also had a low level of investment in outsourcing (never more than €300,000). ASLs carrying out 6 or more collaborations were distributed on all classes of expenditure, exceeding €900,000 in 20% of cases.

These results suggest that ASLs still tend to not invest large sums of money in outsourcing. Only one out of seven respondent ASLs exceed €900,000 average expenditure, and in all cases they are small ASLs, having activated many collaborations during the year (Table 1).

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[1] Ministry of Health, http://www.salute.gov.it/ (Retrieved: 16/12/2013)

Table 1. Distribution of the variable "Value of the activities outsourced by the ASLs" in relation to the variables "Size" and "Frequency of use of outsourcing".

		Value of the activities outsourced by ASLs		
		Up to €300,000	Between €300,000 and €900,000	More than €900,000
Size	*Small*	50.0%	25.0%	25.0%
	Medium	100.0%	0.0%	0.0%
	Large	0.0%	100.0%	0.0%
Frequency of use of outsourcing	*Up to 5 times a year*	100.0%	0.0%	0.0%
	6 or more times a year	40.0%	40.0%	20.0%
Total*		**57.1%**	**28.6%**	**14.3%**

*(34 respondent ASL collaborating with the whole pharmaceutical market)

Source: B-asc Research Centre. Based on research data.

Considering the distribution of private sector companies (Table 2), for pharmaceutical companies we have not found a particular differentiation in investments: most of the respondents collaborated with the public sector for a value not exceeding €300,000.

Table 2. Distribution of the variable "Value of the activities outsourced from the pharmaceutical companies" to ASL in relation to the variables "Size" and "Frequency of use of outsourcing".

		Value of activities outsourced by pharmaceutical companies		
		Up to €300,000	Between €300,000 and €900,000	More than €900,000
Size	*Small*	66.7%	11.1%	22.2%
	Medium	66.7%	16.7%	16.7%
	Large	80.0%	0.0%	20.0%
Frequency of use of outsourcing	*Up to 5 times a year*	72.7%	9.1%	18.2%
	6 or more times a year	66.7%	11.1%	22.2%
Total*		**70.0%**	**10.0%**	**20.0%**

*(44 respondent pharmaceutical companies collaborating with the Local Health Care organizations)

Source: B-asc Research Centre. Based on research data.

The distribution does not change considerably if we take into account the size of the companies and the outsourcing frequency. More than two-thirds of private respondents collaborated for minor activities (not exceeding €300,000), independently of size and outsourcing frequency. We could relive that the percentage of large companies outsourcing for less than €300,000 is 80.0%, and none of them collaborated for a medium value.

For private operators, a substantial relationship between the value of activities carried out and the variables taken into account was not detected. Size is the only variable which shows some relation. It should be noted, in fact, that the distribution of the outsourcing value indicated by pharmaceutical companies is much more concentrated than ASLs on minor activities (up to €300,000).

Our research interests required, in addition to the survey on the average extent of investment outsourced in the past, an investigation into the future prospects. The levels of foreseen investment vary in opposite directions. Pharmaceutical companies predicted an increase in investment in outsourcing: the share of big investments (larger than €900,000) goes from 20.0 to 22.2% of the respondents, as well as investments in the middle class (from €300,000 and 900,000) vary from 10.0 to 16.7%.

With regard to the ASL instead, the forecasts of the respondents indicated a drastic resizing. One out of ten respondent ASLs planned to invest more than €900,000 (whilst 14.3% of them claim to have invested the same amount in the past). The percentage of middle investments (between €300,000 and 900,000) decreases from 28.6% to 10.0%, regarding the respondents forecasts. Less than €300,000 investments were carried out by less than 60% of respondents but are expected from 80.0% of them. In the following paragraphs we use the analysis of satisfaction to propose an explanation for this result.

4.3. Outsourcing operators evaluation

The research findings pointed out the differences between the satisfaction level of public and private operators. They are in contradiction with the results of the analysis on prospected investments.

The mean satisfaction for public companies, on a five-point Likert-type scale, was equal to 3.8 but for private companies was equal to 3.4. In fact, most of the Pharmaceutical companies were moderately satisfied (52.4%), slightly more than 40% of the respondents were "satisfied" or "very satisfied". About 7% of respondents said they were "very dissatisfied". On the contrary, no ASL respondent is dissatisfied. More than half of the public operators were satisfied, and 12.9% of respondents said they were very satisfied. About a third of public companies said they were slightly satisfied for outsourcing.

Table 3. Independent Samples Student's T-Test for equality of means of "Satisfaction" variable.

	Levene's Test for Equality of Variances		T-test for Equality of Means							
									95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
Equal variances assumed	1.640	0.204	2.870	73	0.005	0.475	0.166		0.145	0.805
Equal variances not assumed			2.952	70.354	0.004	0.475	0.161		0.154	0.796

Source: B-asc Research Centre. Based on research data.

The size of the two groups is large enough to test the difference between the means using the Student's t-test for two independent samples. We found a statistically significant difference in the means at 99% level (Table 3).

In order to further investigate the reasons for the low satisfaction of the private operators, we analysed it, taking into account the typology of contacted public interlocutors. The respondent Pharmaceutical companies which contact regional Departments and / or General Managers, are less satisfied. The proportion of subjects "at least satisfied" (a term aiming to cover all subjects satisfied and very satisfied) represent only 34.8% of respondents.

Private operators contacting regional Departments and / or General Managers were the less satisfied respondents. The proportion of subjects "at least satisfied" (a term that aims at covering all subjects reported to be "satisfied" or "very satisfied") only reach 34.8%. This percentage was slightly exceeded in the group of private operators contacting the ASL General Manager: among them, the "at least satisfied" respondents reach a share of 39.1%. In addition, in both cases, no operator said to be very satisfied. The best result was obtained in the case of subjects cooperating with the operating units of training, where the percentage of subjects "at least satisfied" is around 66.6%, of which 8.3% are very satisfied. Respondents interacting with the Health Director, with pharmaceutical services managers, hospital activities managers, local activities managers or with the Treasurer declared to be "at least satisfied" in a percentage between 48% and 58%.

We deduced that the satisfaction derived from transactions with operational decision makers (operating units of training, Treasurer, managers of local activities) was more satisfying compared to the one with executive managers (Departments and General Management, etc.).

To further analyse the factors influencing satisfaction, we took into account the association between this variable and some important analysis factors. The association was measured using Cramer's V index, a symmetric indicator

derived from chi-squared statistic and widely used to provide indications on unstructured association between nominal / ordinal variables.

Cramer's V was computed by taking the square root of the chi-squared statistic divided by the sample size and the length of the minimum dimension of the joint frequency table (the smaller of the number of rows or columns). For construction, the Cramer's V, takes values between 0 and 1, extremes included. V is equal to 0 if and only if there is independence between the characters, it is equal to 1 if and only if there is perfect connection, or at least one of the two characters perfectly depends on the other.

Table 4. Association calculated using the Cramer's V, for the variable "Satisfaction" with the variables "Size" and "Frequency of use of outsourcing".

		Cramer's V for Satisfaction
Size	*ASL*	0.326
	Pharma	0.319
Frequency of use of outsourcing	*ASL*	0.262
	Pharma	0.272

* Source: B-asc Research Centre. Based on research data.

Table 4 summarizes the main results of the analysis. For all variables taken into account, the index shows a level of association that is not very pronounced, generally between 0.20 and 0.35, compared to the theoretical maximum of perfect connection equal to 1.

The higher level of association concerns satisfaction in relation to the size (Table 4), but the value of Cramer's V for the association between satisfaction and size in the ASL context is not very large: it is equal to 0.326; calculated for the pharmaceutical companies, the same index reaches the value of 0.319. In the analysis of the annual frequency, the index values are lower (0.262 and 0.272 for the ASL and for pharma companies).

These findings indicate that the size of the company/ASL influence satisfaction but this effect isn't so high.

5. Conclusion

Outsourcing is becoming increasingly popular in the context of efficiency optimization for the Public Healthcare sector. The primary aim of this work is providing an overview of the outsourcing satisfaction of specific operators of the Italian National Health Service and the outsourcing trend in order to identify prospects for future cooperation between the public and private operators.

Results suggest that the ASLs still do not invest large amounts of money in outsourcing and even pharmaceutical companies mainly indicate activities which do not exceed €300,000 (70%). Moreover, the expected outsourcing investments for the two categories vary in an opposite way. The pharmaceutical companies expect an increase in the level of average investment in outsourcing, while the ASLs predictions indicate a drastic resizing.

These fluctuations certainly depend on the need of cost reduction and of "linear cuts" in public spending; but the strategic alliance between outsourcer and outsoursee, that allows to create a relationship of mutual and long-term trust, consents to determine the organizational structure transformation of the NHS and achieves greater efficiency.

Public administration should not break the outsourcing relationship flows with private companies for short-term cost savings, at the expense of long-term efficiency. The pharmaceutical companies have already gone down this path by introducing the figure of the market access (MA) manager or Public Affairs Managers (PAM) inside their organization, in order to make the relationship with the Public Healthcare sector more structured. It could be strategic for the public health policy makers to create an equivalent professional to make the cost saving plan of public healthcare services really effective and efficient. Moreover, it would be useful for pharmaceutical companies and local health authority to further develop the skills of the MA manager.

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