

Study on the Elasticity of Reward and Performance of Employees at the Slatina County Emergency Hospital

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Abstract

Healthcare systems around the world are failing to produce optimal health outcomes, and successive reforms have sought to make them more effective, fairer and more responsive. In this paper we aim to analyze the elasticity of the evolution of data collected from employees on rewarding and the impact of reward on organizational performance, data collected from patients on human resource performance, non-human resources and performance of services as a whole, as well as the data obtained from the hospital records regarding two indexes of health efficiency, the case mix index and the diagnosis concordance index. The findings indicate that rewarding policies have a positive impact on efficiency: increasing labor productivity in the health sector by increasing employee efforts, loyalty and commitment. Research has shown that strategies to increase the motivation of hospital staff should be used to enhance performance in service delivery, paying particular attention to their effect on end users, patients.

Key words: elasticity, reward, employees performance, work productivity

J.E.L. classification: J33, O15.

1. Introduction

Assessing the ways in which appropriate reward policies can increase the responsiveness of healthcare providers, and therefore patient satisfaction is crucial to delivering effective and quality medical services.

Productivity is a vital component in any organization and the organization's employees are the key driver of productivity improvement. Without a dedicated and enthusiastic workforce, the goal of an optimal productivity level cannot be achieved. Such features of human resources cannot be acquired, they must be developed among the members of the organization. Therefore, management must create an organizational culture and an organizational climate where people are continually motivated to reach their full potential and to develop continuously.

The ultimate goal of each organization is to improve productivity, which is the optimal use of inputs used in the organization (human or non-human resources: material, technological, natural, financial). The efficiency and effectiveness of organizations depends not only on technological and non-technological factors, but also on labor effectiveness. Employees are responsible and involved in all activities of the organization, so increasing their productivity must be the primary focus of the organization. Work productivity plays an important role in any organization, as employees are involved from the beginning to the end of any activity. If labor productivity is higher, it ultimately increases the overall productivity of the organization. Labor productivity can be improved by appropriate reward policies. Labor productivity contributes to increasing the overall productivity of any organization. Reward policies are always considered as crucial in the organization, if they are not managed correctly, they can affect the organization's productivity (Bocean, 2009).

The paper examines how reward policies influence work productivity and employee performance by analyzing the elasticity of variables that define reward, work productivity and employee performance in a public hospital in Romania: Slatina County Emergency Hospital (SCEH). The paper is structured in five sections. The first section discusses the topic of research, and the second section provides the theoretical background on which research is based. The third section presents the methodological framework of the research, and the fourth section outlines the results and discussions based on these results. The final section concludes and provides recommendations in the area of research.

2. Theoretical background

Reward systems play a significant role in promoting strategic goals of organizations (Gerhart and Milkovich, 1988). Traditionally, reward systems have been designed to reward employees with their specific jobs and the activities they have done. Previous research has led to the conclusion that employees are the organization's most important resource, and in order that employees to meet customer needs, organizations must first meet the requirements of their employees (Henne and Locke, 1985; Thierry, 1987; Nebeker et al., 2001; Dessler, 2016).

Human resource management strategies are critical to improving the performance of an organization (Huselid 1995; Mabey et al., 1998). The human resources system is made up of inputs, outputs and results. The inputs are represented by the human resources needed to achieve the production, ie the knowledge, skills and abilities of the employees. These inputs are taken over and transformed into the organizational system in the production process, and the results obtained include productivity, professional satisfaction, retention and absenteeism (Wright and Snell 1991; Wright and McMahan 1992). In order to achieve the expected results, human resources management strategies should aim at attracting, developing, motivating and maintaining human resources (Bocean, 2008; Werner et al., 2012).

Facer and others (2014) noted that several researchers explored the experiences and perceptions of employees about the different components of the reward system. The purpose of our research is to relate them to the productivity or effectiveness of individuals at work and to the efficiency and performance of employees implicitly. Because motivations at work are diverse, conducting additional study on motivation and reward could provide managers with additional resources to motivate employees and increase productivity and performance in the workplace.

In the healthcare area, perceptions of service performance are closely related to the level of patient satisfaction (Williams and Calan, 1991; Cronin and Taylor, 1992; Brady et al., 2002; Akdere et al., 2018). However, there are a number of studies that suggest that patient satisfaction has emerged before quality assurance has been assured (Bitner, 1990; Bolton and Drew, 1994; Kayral, 2014; Akdere et al., 2018). Although there is no full consensus on the relationship between service performance and patient satisfaction, it is widely accepted that the level of satisfaction is determined by the quality of services (Dabholkar, 1995; McAlexander and Kaldenberg, 1994; Kayral, 2014).

Evaluating the results the patient obtains from a healthcare service takes time. Evaluating patient outcomes can sometimes be difficult and even impossible. The elements that determine patients' perception of service performance are indirect criteria, such as the relationship between patient and hospital staff, facilities, hospital cleanliness, etc. (Bowers et al., 1994; Donabedian, 1996; Ettinger, 1998; Kayral, 2014; Akdere et al., 2018).

3. Research methodology

In order to examine and explore the perceptions of a public hospital patients on the performance of healthcare services, we conducted a qualitative study of a sample of 100 patients hospitalized at the SCEH, who will participate in a questionnaire survey (based on SERVPERF model). In order to build the sample we used the proportional stratified sampling method as a selection process. The SERVPERF model has five generic dimensions that will be adapted to the case study of the hospital unit, each dimension containing a series of items illustrating individual variables: the quality of the tangible elements (eight individual variables); reliability (six individual variables);

empathy (eight individual variables); responsiveness (six individual variables); assurance (five individual variables). For each individual variable we have defined five levels with associated values: very weak (1), weak (2), medium (3), good (4), very good (5). Based on the applied questionnaire items, we calculated the following aggregate indices:

- IAIP1.cet - aggregate index calculated for tangible elements quality dimension;
- IAIP2.fiab - aggregate index calculated for reliability dimension;
- IAIP3.emp - aggregate index calculated for empathy dimension;
- IAIP4.resp - aggregate index calculated for responsiveness dimension;
- IAIP5.asig - aggregate index calculated for insurance dimension;
- IAIP.PT - aggregate index calculated for total service performance;
- IAIP.PRU - aggregate index calculated for the performance of human resources;
- IAIP.PRNU - aggregate index calculated for the performance of non-human resources.

In order to achieve the objective of the paper, we conducted also an empirical study at SCEH. For this purpose, we selected a sample of 70 employees from all levels of the medical services within the staff of the SCEH. For each item constituting an individual variable there were defined five levels that had attached values: total agreement (5), partial agreement (4), neutral (3), partial disagreement (2), total disagreement (1). Based on the applied questionnaire items, we calculated the following aggregate indices:

- IAIR1. Satisfaction with the way the salary package is structured and managed.
- IAIR2. The salary package communication.
- IAIR3. The salary system is fairly and correct structured.
- IAIR4. The wage package is motivated in the SCEH.
- IAIR5. Salary package encourages performance.
- IAIR6. The contributions and achievements of the employees are recognized.
- IAIR7. SCEH is a better place to work than private medical centers.
- IAIR total. Aggregate index of compensation.
- IAIRPP. Aggregate index of the impact of reward policy on work productivity and employees' performance.

Before conducting the questionnaires, we conducted a pilot study of 33 staff questionnaires and 25 patient questionnaires to assess the intelligibility of the information and questions contained in the questionnaire and to perform a data calibration by providing the possibility of comparing the answers obtained at an interval one year. The pilot study was conducted in November 2017, while the basic investigation was conducted in November 2018. The two series of data are compared using the analysis of the elasticity of their evolution and are the basis for determining the influence of reward on organizational performance in the coming years.

Elasticity refers to the ratio between the relative changes of two variables and not the ratio of their absolute changes. Essentially, the elasticity illustrates the percentage change of the dependent variable as a result of a change in the independent variable by one percent. The concept of elasticity is borrowed from physics and applied in the economy by means of a coefficient, called coefficient of elasticity. The coefficient of elasticity illustrates the change of the dependent variable following the change of the independent variable. The formula of the coefficient of elasticity is as follows:

$$E_{Y/X} = \frac{\Delta Y\%}{\Delta X\%} \quad (1)$$

$$\Delta Y\% = \frac{Y_1 - Y_0}{Y_0} \quad (2)$$

$$\Delta X\% = \frac{X_1 - X_0}{X_0} \quad (3)$$

where:

- $E_{Y/X}$ – the elasticity coefficient of the variable Y relative to the variable X;
- Y_1 - the value of the Y variable in the current period;
- Y_0 - the value of the Y variable in the base period;
- X_1 - the value of the X variable in the current period;
- X_0 - the value of the X variable in the base period;

Elasticity indices will be calculated to test relationships between variables that illustrate reward, work productivity, and employee performance.

4. Results and discussions

In order to assess the impact of reward policies on labor productivity, employee performance and performance of services provided by Slatina County Emergency Hospital, it is necessary to calculate the elasticity of variables that indicate the extent to which two variables in a causal relationship co-vary. In our research we will use as dependent variables a series of aggregate variables expressing patients' perceptions of service performance as well as two indicators of medical efficiency that are of increased relevance in terms of efficiency in general and especially the efficiency of human resources. These are: IAIP1.cet, IAIP2.fiab, IAIP3., IAIP4.resp, IAIP5.asig, IAIP.PT, IAIP.PRU, IAIP.PRNU, CMI (case mixed index), DCI (diagnosis concordance index - rate of concordance of diagnosis at admission with diagnosis from discharge).

The independent variables used to calculate the elasticity coefficients are cost indicators (payments for staff, payments for goods and services, total budget), aggregate variables expressing employees' perceptions of reward policies, and the impact of reward on employee performance, aggregate variables that express patients' perceptions of service performance, and the two selected health efficiency indicators (CMI and DCI).

In table 1, we calculate the coefficients of elasticity in relation to the cost indicators (payments for staff, payments for goods and services, total budget) and the two selected health efficiency indicators (CMI and DCI).

Table no. 1. Elasticity of performance indicators in relation to costs indicators and health efficiency indicators

	Payments for staff	Payments for goods and services	Total budget	CMI	DCI
Absolute values 2017	126164424	46794894	178634	1.32	0.74
Absolute values 2018	167774667	48908974	231288	1.38	0.78
Relative change ($\Delta Y\% = \frac{Y_1 - Y_0}{Y_0}$)	32.98%	4.52%	29.48%	4.55%	5.41%
CMI	0.1378	1.0061	0.1542	1	0.8409
DCI	0.1639	1.1965	0.1834	1.1892	1
IAIP.PT	0.2539	1.8535	0.2841	1.8422	1.5491
IAIP.PRU	0.3379	2.4666	0.378	2.4515	2.0615
IAIP.PRNU	0.0956	0.698	0.107	0.6938	0.5834
IAIP1.cet	0.0547	0.3996	0.0612	0.3971	0.334
IAIP2.fiab	0.2994	2.1854	0.335	2.1721	1.8265
IAIP3.emp	0.2227	1.6258	0.2492	1.6159	1.3588
IAIP4.resp	0.4611	3.3665	0.516	3.346	2.8137
IAIP5.asig	0.2787	2.0347	0.3119	2.0223	1.7006

Source: Developed by the author based on collected data

From the analysis of the data in Table 1 it can see a relative inelasticity of the variance of the performance indicators (both those of medical efficiency and those perceived by patients) in relation to the indicator expressing the payments for staffs. A rather large increase in wages did not result in a proportional increase in performance and efficiency indicators in 2018 as compared to 2017. This phenomenon is driven by the spectacular increase in payments made to staff (a change of 32.98% in 2018 compared to the year 2017), which surpasses the relative changes in performance indicators (located at the level of numerator in the coefficient of elasticity). The substantial increase in wages should have effects in the coming years on performance and efficiency indicators.

A fairly good elasticity is found between performance indicators and payments made for purchases of goods and services. Elasticity coefficients have an over-unitary values, with two exceptions (elasticity coefficients of the aggregate index calculated for the performance of non-human resources and the aggregate index calculated for the size of tangible elements in relation to payments made for the procurement of goods and services). These developments are not generated by a better use of goods and services in order to ensure performance, but rather by the fact that the total amount spent on goods and services has shown a relatively small change relative to staff costs or total budget. This finding is reinforced by the sub-unitary values of the aggregate index elasticity coefficients calculated for the performance of non-human resources and the aggregate index calculated for the quality dimension of the tangible elements in relation to the payments made for the procurement of goods and services. These sub-unitary values indicate an inelasticity, revealing a not very good perception of the evolution of the tangible elements quality dimension and generally of the performance of the non-human resources used by the hospital.

The elasticity coefficients calculated by reporting performance indicators and health efficiency indicators to the total budget record similar values to the coefficients obtained in the case of payments for personnel costs, as more than 70% of the total budget is staff expenditure.

From the analysis of the elasticity coefficients calculated by the reporting of the performance indicators and the indicators of the medical efficiency to the two selected indicators of health efficiency (CMI and DCI) it can also be observed the poor allocation of non-human resources. The elasticity coefficients of aggregate index calculated for the performance of non-human resources and the aggregate index calculated for the dimension of the tangible elements in relation to CMI, respectively the DCI, have sub-unitary values indicating an inelastic evolution showing poor material resource endowment of the hospital and a low influence of non-human resources in terms of increasing medical efficiency.

In Table 2. there are presented the elasticity coefficients of the performance indicators (IAIP.PT, IAIP.PRU, IAIP.PRNU, IAIP1.cet, IAIP2.fiab, IAIP3.emp, IAIP4.resp, IAIP5.asig) and medical efficiency (CMI and DCI) relative to other performance indicators.

Table no. 2. Elasticity of performance indicators in relation to other performance indicators

	IAIP1.cet	IAIP2.fiab	IAIP3.emp	IAIP4.resp	IAIP5.asig	IAIP.PT	IAIP.PRU	IAIP.PRNU
Absolute values 2017	3.67	3.68	3.71	3.43	3.59	3.62	3.61	3.65
Absolute values 2018	3.74	4.04	3.98	3.95	3.92	3.92	4.01	3.76
Relative change ($\Delta Y\% = \frac{y_1 - y_0}{y_0}$)	1.81%	9.87%	7.35%	15.21%	9.19%	8.37%	11.14%	3.15%
CMI	2.518	0.4604	0.6188	0.2989	0.4945	0.5428	0.4079	1.4414
IDG	2.9944	0.5475	0.7359	0.3554	0.588	0.6455	0.4851	1.7141
IAIP.PT	4.6386	0.8481	1.14	0.5506	0.9109	1	0.7514	2.6553
IAIP.PRU	6.173	1.1287	1.5171	0.7327	1.2123	1.3308	1	3.5336
IAIP.PRNU	1.747	0.3194	0.4293	0.2073	0.3431	0.3766	0.283	1
IAIP1.cet	1	0.1828	0.2458	0.1187	0.1964	0.2156	0.162	0.5724
IAIP2.fiab	5.4694	1	1.3442	0.6492	1.0741	1.1791	0.886	3.1308
IAIP3.emp	4.0689	0.7439	1	0.4829	0.799	0.8772	0.6591	2.3291
IAIP4.resp	8.4252	1.5404	2.0706	1	1.6545	1.8163	1.3648	4.8228
IAIP5.asig	5.0921	0.931	1.2515	0.6044	1	1.0978	0.8249	2.9149

Source: Developed by the author based on collected data

From the analysis of the data in Table 2, we can say there is a high elasticity of the performance indicators (both those of medical efficiency and those perceived by patients) in relation to the indicator IAIP1.cet. A more pronounced variation in the aggregate index calculated for the tangible quality dimension would lead to a significant increase in performance and efficiency indicators,

which confirms the need to provide material resources to the hospital to achieve better performance. The elasticity coefficients calculated for performance indicators (both those of medical efficiency and those perceived by patients) in relation to the indicators that express the other dimensions of services (IAIP2.fiab, IAIP3.emp, IAIP4.resp, IAIP5.asig) record mixed values due to the relative significant variations of these indicators.

Relevant are the values of the aggregate index elasticity coefficients calculated for the total services performance calculated in relation to the aggregate index calculated for the performance of human resources (1.3308) and the aggregate index calculated for the performance of the human resources calculated in relation to the aggregate index calculated for the responsive dimension (1.3648).

These values indicate a significant influence of human resources in increasing the performance of services and an influence on the size of hospital staff responsiveness in increasing the performance of human resources. The values of the elasticity coefficients of the performance indicators (both those of medical efficiency and those perceived by patients) in relation to the IAIP.PRNU indicator are overly similar to the values of the IAIP1.cet indicator, which underlines the need for investments in non-human resources.

In Table 3, there are calculated the elasticity coefficients of the performance indicators (IAIP.PT, IAIP.PRNU, IAIP.PRNU, IAIP1.cet, IAIP2.fiab, IAIP3.emp, IAIP4.resp, IAIP5.asig) and medical efficiency (CMI and DCI) against indicators that capture employees' perceptions of reward policies and their effect on performance.

The elasticity coefficients of the performance and medical efficiency indicators in relation to the way the salary package is structured and managed (IAIR1) indicates a relatively high elasticity of the IAIP.PRNU and IAIP4.resp. The structure and management of the salary package has a significant influence on the performance of human resources and mainly on the responsiveness dimension. However, it can be noticed that the structure and management of the salary package does not have any significant influence on the indicators of performance and medical efficiency, the values of the coefficients of elasticity being generally sub-unitary.

Table no. 3. Elasticity of performance indicators in relation to human resource reward indicators

	IAIR1	IAIR2	IAIR3	IAIR4	IAIR5	IAIR6	IAIR7	IAIR total	IAIRPP
Absolute values 2017	3.42	3.38	3.11	2.85	4.17	4.24	3.97	3.55	4.35
Absolute values 2018	3.76	3.41	3.02	3.29	4.33	4	4.46	3.72	4.42
Relative change ($\Delta Y\% = \frac{Y_1 - Y_0}{Y_0}$)	9.94%	0.89%	-2.89%	15.44%	3.84%	-5.66%	12.34%	4.79%	1.61%
CMI	0.4572	5.1212	-1.5707	0.2944	1.1847	-0.803	0.3683	0.9492	2.8247
IDG	0.5437	6.0901	-1.8679	0.3501	1.4088	-0.955	0.4379	1.1288	3.3591
IAIP.PT	0.8423	9.4342	-2.8935	0.5424	2.1824	-1.4793	0.6784	1.7486	5.2036
IAIP.PRNU	1.1209	12.5549	-3.8507	0.7218	2.9042	-1.9687	0.9028	2.327	6.9248
IAIP.PRNU	0.3172	3.553	-1.0897	0.2043	0.8219	-0.5571	0.2555	0.6585	1.9597
IAIP1.cet	0.1816	2.0338	-0.6238	0.1169	0.4705	-0.3189	0.1463	0.377	1.1218
IAIP2.fiab	0.9931	11.1238	-3.4117	0.6395	2.5732	-1.7443	0.7999	2.0618	6.1355
IAIP3.emp	0.7388	8.2754	-2.5381	0.4758	1.9143	-1.2976	0.5951	1.5338	4.5644
IAIP4.resp	1.5298	17.1354	-5.2555	0.9851	3.9638	-2.6869	1.2322	3.176	9.4513
IAIP5.asig	0.9246	10.3565	-3.1764	0.5954	2.3957	-1.624	0.7448	1.9195	5.7123

Source: Developed by the author based on collected data

Instead, the aggregate index illustrating communication on the wage package (IAIR2) in relation to performance and medical efficiency indicators determines broader evolutionary elasticity coefficients, meaning the importance of communication on performance and the margin of hospital management in terms of improvement communication on the wage package. Although medical staff has benefited from significant wage increases, there are still quite significant complaints about wage policies, which shows that communication policy is not very effective.

Because IAIR3 aggregates (the pay system is structured equitable and fairly) and IAIR6 (recognition of employee contributions and achievements) have experienced relatively negative changes, it can be said that they have a negative impact on performance indicators and medical efficiency. As a result of the increase in salaries only of medical personnel and not the auxiliary staff, the ineffectiveness of the reward system has increased, which has dissatisfied the employees, and has a negative impact on performance.

The elasticity coefficients of the performance and efficiency indicators in relation to the IAIR4 aggregate index (wage package is motivating) register a sub-unitary values, which reveals a rather low margin in employee motivation. Increasing motivation in previous years as a result of wage increases will has beneficial effects on performance indicators but reduced elasticity indicates that it will not have the same effects in the future. Similar developments have both performance and medical efficiency indicators in relation to the aggregate IAIR7 index (SCEH is a better place to work than private medical centers).

Based on the analysis of the elasticity coefficients of the performance and efficiency indicators in relation to the aggregate index IAIR5 (salary structure encourages performance) and the aggregate index IAIRPP1 (reward policies have a significant and direct impact on employee productivity and performance) we may notice a significant influence of rewarding policies on performance. High values of the coefficients of elasticity are recorded especially by the variables IAIP.PT, IAIP.PRU, IAIP4.resp, IAIP2.fiab, revealing a high sensitivity of employees to performance rewards. Any measures taken to encourage performance through various rewards will lead to higher performance levels with the variables studied indicating high elasticity.

As regards the elasticity coefficients of the performance and efficiency indicators in relation to the total IAIR aggregate index, which captures the overall perception of employees on reward policies, one can also see increased elasticity emphasizing the influence of reward policies on medical performance and efficiency. The only sub-unitary values are recorded by the aggregate index calculated for the tangible element quality dimension, the aggregate index calculated for non-human resource performance and CMI. In the case of the two aggregate indices, the explanation comes from the object of measuring the two indices, namely the performance of resources that are not related to human resources and their reward. CMI has some non-human component related to the material resources needed to solve the complex cases, therefore the elasticity is sub-unitary, however close to the value 1.

In order to strengthen the reliability of the research and to check the validity of the results we determined a compound elasticity, dividing the performance indicators (IAIP.PT, IAIP.PRU, IAIP.PRUNU, IAIP1.cet, IAIP2.fiab, IAIP3.emp, IAIP4.resp) and medical efficiency (CMI and DCI) to the average of the relative changes of the seven aggregate indices illustrating perceptions of reward policies (IAIR1, IAIR2, IAIR3, IAIR4, IAIR5, IAIR6, IAIR7). The calculation formulas of simple elasticity and composite elasticity are as follows:

$$E_{Y/IAIR_total} = \frac{\Delta Y\%}{\Delta IAIR_{total}\%} \quad (4)$$

$$E_{Y/IAIR_compound} = \frac{\Delta Y\%}{(\Delta IAIR1\% + \Delta IAIR2\% + \dots + \Delta IAIR6\% + \Delta IAIR7\%)/7} \quad (5)$$

In table 4 are calculated and compared the two forms of elasticity (simple and compound). It can be seen that the recorded values are relatively close, which validates the reliability of the results.

Table no. 4. Simple elasticity and compound elasticity of performance indicators in relation to total aggregate index of reward policies

	Simple elasticity	Compound elasticity	Differences between compound and simple elasticity
CMI	0.9388	0.9492	0.0104
DCI	1.1164	1.1288	0.0124
IAIP.PT	1.7294	1.7486	0.0192
IAIP.PRU	2.3015	2.327	0.0255
IAIP.PRNU	0.6513	0.6585	0.0072
IAIP1.cet	0.3728	0.377	0.0042
IAIP2.fiab	2.0391	2.0618	0.0227
IAIP3.emp	1.517	1.5338	0.0168
IAIP4.resp	3.1411	3.176	0.0349
IAIP5.asig	1.8985	1.9195	0.021

Source: Developed by the author based on collected data

The compound elasticity is higher than the simple elasticity due to the influences of the individual variables that make up the aggregate IAIR total index, but the differences between the two data series are low, falling within a margin of 3.5%.

Following research into the elasticity of employees' perceptions of reward policies and patient perceptions of work productivity, employee performance and service performance, we came to the deduction that the perceptions of employees of Slatina Emergency County Hospital on the reward system are directly related to patient perceptions of employee productivity and performance as well as performance and hospital overall.

5. Conclusions

In order to have efficient and quality health services, in all aspects, patients should be considered as consumers to whom healthcare providers have to meet their requirements to ensure that they will visit the hospital again and thereby increase income-generating activities. Consequently, health care providers need to be concerned about patient satisfaction being stimulated by resource allocation mechanisms to meet patients' needs.

In this paper we intend to analyze the elasticity of the evolution of data on reward and the impact of reward on organizational performance as well as on medical efficiency indicators.

Firstly, in order to evaluate the impact of reward policies on work productivity, employee performance and performance of services provided by Slatina County Emergency Hospital, we calculated the elasticity of the variables expressing patients' perceptions of service performance, as well as two indicators of medical efficiency.

The analysis of the resulting calculations revealed a relative inelasticity of the variance of the performance indicators (both those of medical efficiency and those perceived by the patients) in relation to the indicator expressing the payments for personnel expenses, phenomenon determined by the spectacular increase of the payments made to staff, which outweighs the relative performance indicator changes. The substantial increase in wages should have effects in the coming years on performance and efficiency indicators.

The sub-unitary values for elasticity coefficients of the aggregate index calculated for the performance of non-human resources and the aggregate index calculated for the quality dimension of tangible elements in relation to payments made for the procurement of goods and services indicate an inelasticity, revealing a poor perception of the evolution of tangible elements quality dimension, and generally the performance of non-human resources used by the hospital. From the analysis of the elasticity coefficients calculated by the dividing the performance indicators and the indicators of the medical efficiency to the two selected indicators of health efficiency (CMI and DCI) it can also be observed the poor allocation of non-human resources.

From the analysis of the elasticity of performance indicators and medical efficiency in relation to the aggregate index that captures the overall perception of employees on reward policies (total IAIR), we observed an increased elasticity that emphasized the influence of reward policies on medical performance and efficiency.

Following the research conducted within the SCEH we came to the conclusion that appropriate reward policies can increase hospitality response to patients' needs and patient sensitivity, thus demonstrating a link between responsiveness and health workforce performance. The impact of adequate reward policies on patient satisfaction could be even greater if they are explicitly communicated to hospital management.

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