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EVALUATING THE IMPACT OF REWARD POLICIES ON EMPLOYEE PRODUCTIVITY AND ORGANIZATIONAL PERFORMANCE IN HOSPITALS

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Abstract

Managers from healthcare area considered employees' reward and performance as key elements of the work due to the challenges posed by the emigration phenomenon of employees, which leads to reduced patient satisfaction and a poor image of health care units. The number of jobs available in health care continues to increase, while the total number of employees in the medical sector has fallen. Satisfactory reward is a continuing concern for organizational managers, especially from the healthcare industry. The purpose of this paper is to build methodological support to explore reward policies that managers from healthcare areas can implement to improve employees' productivity and organizational efficiency in providing healthcare services. In the research, data collection will consist of direct observations and investigations made at a hospital level. Research findings could improve the quality of patient care, as highly motivated hospital staff can have a more patient-friendly interaction, leading to improved quality of care and better outcomes. In addition, the results could improve relations between managers of health organizations and external stakeholders that affect organizational social responsibility (National Health Insurance Agency from Romania, local community, NGOs advocating for patient rights, trade unions, etc.).

Keywords: Healthcare Area, Reward, Productivity, Performance, Hospitals

1. Introduction

Individual and collective reward and productivity of employees are the central drivers of the activity in any type of organization. In the medical sector, due to the challenges posed by the phenomenon of emigration of employees, identifying policies and ways to retain and motivate talented human resources are essential to provide a quality medical act to increase patient

satisfaction and improve the precarious image of medical care units, especially those from the public health system.

One of the strategies to improve the working environment and to increase work efficiency is to motivate human resources. Mechinda and Patterson (2011) highlighted the fact that healthcare workers are making an extra effort for health care users (patients) when workers are happy with the job they are in, have the satisfaction of their work. According to Bocean (2009), motivation includes various forms and ways of putting into practice. Hunter (2012) shows that individuals are different depending on the type of motivation they react to. Staff from health care area have different needs than employees from other industries, while the level of motivation of these employees depends on the perception of job features and the importance of these characteristics (Bocean, 2008).

Medical organizations are social systems “where human resources are the most important factors affecting the quality of organizational care, efficiency and effectiveness” (Souliotis *et al.* 2014, pp. 232). The health system faces internal pressure that comes from several challenges: the lack of certain types of specialists in certain areas, the emigration of specialists in countries with competitive reward programs, the increasing responsibilities for quality medical care (Brooks, 2015).

The issue of employee reward, which requires significant financial and material resources from healthcare organizations (Brooks, 2015), continues to be a major concern for hospital managers in Romania. The general problem of the Romanian medical system is that the inadequate motivation of the employees at the level of the hospital in Romania has a negative effect on the productivity or efficiency of the organization. The specific problem of the Romanian medical system is that some managers of hospital institutions do not have strategies to reward employees to improve their performance, factor which adds to the relatively poor financial resources in influencing the productivity or efficiency of the organization.

The purpose of this paper is to build a qualitative research tool to explore the effects of the different components of the reward system that could be implemented at a hospital level to improve employee performance. Data for this study were collected from the records of the Slatina Emergency County Hospital (Romania). The findings of this paper could help to provide more efficient medical services by improving the reward system. The results could also provide managers with a perspective to develop strategies to improve the performance of health care workers' jobs in order to increase productivity. Improving employee productivity could benefit patients and potentially lead to lower taxpayer spending.

The paper contains six sections. The first section is an introduction, while the second section presents the research methodology. The third section is represented by an exploratory research on qualitative models for organizational performance assessment in hospitals. The fourth section proposes the SERVPERF model to assess patient satisfaction (patient perception of hospital performance). The fifth section proposes a qualitative model for evaluating the impact of reward policies on employee productivity and organizational performance in hospitals. The sixth section concludes the research.

2. Research Methodology

The design of research in this paper involves the realization of a single case study. Such research allows an in-depth analysis of its general context (Yin, 2014). The methods to be used to achieve the research objectives include surveys on employees and patients as well as direct observations.

The objective of the case study is to provide a tool for exploring the perceptions and experiences of hospital staff and patients about the impact of reward policies on productivity or individual effectiveness and organizational efficiency. The fundamental question on which the model is based is the following: what are the reward policies that managers from health care area can use to improve individual productivity or efficiency and to ensure organizational efficiency?

In order to answer the main research question and to ensure validity, a questionnaire consisting of multiple choice closed questions will be created in which the employees of Slatina County Emergency Hospital will answer. The major topics proposed in the questionnaire are reward system variables, characteristics of rewarding employees in the Slatina County

Emergency Hospital; and the effects of reward policies on individual productivity and organizational performance.

Also, in order to answer the main research question and to ensure validity, a questionnaire consisting of multiple choice closed questions will be created in which the patients of Slatina County Emergency Hospital will answer. The major topics proposed in the questionnaire are tangible elements, reliability, empathy, responsiveness, and assurance.

3. Qualitative Models for Organizational Performance Assessment in Hospitals

Despite scientific and technological developments, health systems face challenges and problems such as patient dissatisfaction and inefficiency of services. Hospitals affect the effectiveness of health systems. Assessing hospital performance is “beneficial to payment systems, policymakers, hospitals and doctors” (Rahimi *et al.* 2014). Performance indicators are “used to measure individual effectiveness and organizational efficiency, reflecting overall performance” (Constantinescu *et al.* 2008, p. 167).

Various models for assessing hospital performance are proposed in the healthcare literature. The results of previous research showed “that all studies have used several indicators to measure productivity and performance in hospitals. It could be said that hospitals work well when they consider more dimensions of their performance” (Rahimi *et al.* 2014, p. 201). Researchers used different models to evaluate hospital performance, among the most important being: DEA (Data Enveloping Analysis) (Chuang *et al.* 2011; Gautam *et al.* 2013), BP-ANN (Back propagation, artificial neural networks) (Li *et al.* 2013), Pabon Lasso (Rahimi *et al.* 2014), Balanced Scorecard (Basu *et al.* 2010), and AHP (Analytical Hierarchy Process) (Sinimole, 2012).

Following our research, we consider that among the models available for performance assessment, the BSC and AHP models include several relevant indicators, making evaluation of employee productivity and hospital performance multidimensional.

4. Using SERVPERF model to assess patient satisfaction

To evaluate hospital performance, we chose the Analytical Hierarchy Process as a model, integrating the SERVPERF model of organizational quality and performance. SERVPERF is based on the theoretical model of gaps and “defines the quality of services as the difference between what is expected from a service and the actual perception of the service” (Brochado, 2009, p. 176).

The SERVPERF model has five generic dimensions that will be adapted for the case study of the hospital, each dimension containing a series of items that will illustrate individual variables:

- tangible elements: physical facilities, equipment, personnel (8 items);
- reliability: the ability to perform the promised service in a reliable and precise manner (6 items);
- responsiveness: the desire to help patients and to provide prompt services (6 items);
- assurance: knowledge and satisfaction of staff and increasing the ability of the staff to deliver trust (5 items);
- empathy: care, individual attention (8 items).

Table 1 shows the questionnaire items for the five generic dimensions. For each item constituting an individual variable, there are five levels that have values attached: Very Low (1), Poor (2), Average (3), Good (4), Very Good (5). Following the application of the questionnaires to the respondents will result a series of indices related to each individual variable.

Table 1. Items of the questionnaire on patient perceptions and experiences about service quality and organizational efficiency

Major subjects	Items
Tangible elements	<ol style="list-style-type: none"> 1. The cleanliness and appearance of the hospital environment 2. Quality of medical equipment 3. Food quality for patients 4. The quality of salon facilities 5. Procedures for payment of hospital services 6. Guard and security of the hospital 7. Visiting program 8. Comfort of the waiting area (facilities for families and visitors)
Reliability	<ol style="list-style-type: none"> 1. Effectiveness of physicians in the treatment and subsequent assessments 2. Relevance of recommended tests 3. Procedure for conducting the tests 4. Clarity of doctors' explanations given to patients about their condition 5. Clarity of instructions provided by nurses 6. Effectiveness of doctors in dealing with emergency situations
Empathy	<ol style="list-style-type: none"> 1. Availability of medical information 2. Recording and hospitalization process 3. Waiting time to get prescription drugs 4. Waiting time to see your doctor 5. Programming process for consultation 6. The patient's patience in diagnosing the patient 7. Patience shown by nurses 8. The politeness of all staff (including nurses, personal cleanliness)
Responsiveness	<ol style="list-style-type: none"> 1. The doctor's response to patients' requests 2. Presence of doctors on duty during the night 3. The response of nurses to patients' demands 4. The medical care process (very comfortable and fast) 5. Cooperation and usefulness of administrative staff 6. Promptness of ambulance services
Assurance	<ol style="list-style-type: none"> 1. Designing the hospital building (safety and comfort) 2. Trust given by doctors 3. Degree of confidentiality between physician and patient 4. Image and the reputation of the hospital 5. Trust given by all staff

Source: Adapted after Rahimi *et al.* (2014)

Sitnikov (2014) shows that SERVPERF's main goal is to determine the customer's perception of service quality by providing an overview of individual employee productivity and organizational performance. It has been widely used and tested in the public institutions environment, and therefore we have found it suitable for a public hospital.

5. Qualitative model for evaluating the impact of reward policies on employee productivity and organizational performance in hospitals

In the questionnaire applied to the employees, an item will be used to explore the perceptions of employees of the Slatina County Emergency Hospital regarding the reward policies of the hospital, the item having defined 19 sub-items (individual variables) that characterize the rewarding policies. These sub-items cover the following themes: structuring the salary package; managing the salary package; transparency of changes affecting salary packages; equal rewards for the same type of work; the inequality of pay; informing and engaging of employees in formulating, discussing and implementing reward policies; ignorance of salary problems in the organization; satisfaction with salary earnings in relation to the work done; motivation offered by financial rewards; increasing the financial reward's leading to improved future performance; the

effect of financial rewards on the working environment and the organizational climate; the competitiveness of rewards at national level; the competitiveness of rewards at international level; appreciation of work and achievements; recognizing the contribution to organizational success and efficiency; the importance of specific job for success and efficiency; the structure of the reward system's improving employee motivation and organizational efficiency; wage's motivating to contribute to the success and effectiveness of the organization; the public hospitals' being a better place to work than private medical centers.

For each sub-item constituting an individual variable, there are five levels that have attached values: total agreement (5), partial agreement (4), moderate (3), partial disagreement (2), total disagreement (1). Following the application of the questionnaires to the respondents will result a series of indices related to each individual variable. They will be aggregated into a general index called Reward Policies Index (RPI).

Also, an item of the questionnaire will aim to record the perceptions of the employees of Slatina County Emergency Hospital regarding the effects of reward policies on individual productivity and organizational performance. These sub-items cover the following themes: motivating employees to work better; improving the punctuality of employees at the workplace and reducing the employee absenteeism; improving the employees' desire to make additional guards; increasing employees' commitment to the organization; enhancing employees' willingness to achieve new skills and implementing these skills at work; creating a healthy work environment and improving the health of employees; creating a very good working relationship between management and employees in order to increase performance; making employees feel valued and give everything they can; attracting and motivating qualified staff to work better; rewarding the employees involved to reward high efforts and performance.

For each sub-item constituting an individual variable, there are five levels that have attached values: total agreement (5), partial agreement (4), moderate (3), partial disagreement (2), total disagreement (1). Following the application of the questionnaires to the respondents will result a series of indices related to each individual variable. They will be aggregated into a general index called the effect of rewarding on productivity and performance (ERPP).

To test the multidimensional model of measuring reward policy effects on employee productivity and organizational performance, we will look at the correlations between the Reward Policies Index (RPI) and the individual variables that define the rewarding policy effects on employee productivity and organizational performance.

The equation that will define the impact of reward policies on individual productivity and organizational performance from employee perspective ($IRPP_a$) will include as variables the indices obtained in employee perceptions on the effects of reward policies on individual productivity and organizational performance, and as parameters the values calculated on the basis of the coefficients of the correlation between the indices of reward policies (RPI) and the individual variables defining the effects of reward policies on employee productivity and organizational performance (1).

$$IRPP_a = a_1 \times E_1 + a_2 \times E_2 + \dots + a_9 \times E_9 + a_{10} \times E_{10} \quad (1)$$

$IRPP_a$ – the impact of reward policies on individual productivity and organizational performance from the employees' perspective;

E_1, E_2, \dots, E_{10} – indices obtained in the case of employee perceptions about the effects of reward policies on individual productivity and organizational performance;

$a_1, a_2, \dots, a_9, a_{10}$ – parameters illustrating the weighting of the correlation coefficients between the RPI and the individual variables that define the rewarding policy effects on employee productivity and organizational performance.

$$a_i = \frac{c_i}{T_c} \quad (2)$$

c_i – the correlation coefficients between the reward index (RPI) and the individual variables defining the rewarding policy effects on employee productivity and organizational performance;

T_c – sum of correlation coefficients.

In order to test the reliability of determinations on the impact of reward policies on individual productivity and organizational performance, we will calculate the correlations between the Reward Policies Index (RPI) and the individual variables defining the impact of reward policies on individual productivity and organizational performance from a patient perspective.

The equation that will define the impact of reward policies on individual productivity and organizational performance from patient perspective ($IRPP_p$) will include as variables the indices obtained in case of perceptions of patients on individual productivity and organizational performance, and as parameters the values calculated on the basis of the correlation coefficients between the Reward Policies Index (RPI) and individual variables that define patient perceptions of individual productivity and organizational performance (3).

$$IRPP_p = b_1 \times P_1 + b_2 \times P_2 + \dots + b_{32} \times P_{32} + b_{33} \times P_{33} \quad (3)$$

$IRPP_p$ – the impact of reward policies on individual productivity and organizational performance from a patient perspective;

P_1, P_2, \dots, P_{33} – patient perceptions of individual productivity and organizational performance;

b_1, b_2, \dots, b_{33} – the parameters illustrating the weighting of the correlation coefficients between the Reward Policies Index (RPI) and the individual variables that define patient perceptions of individual productivity and organizational performance.

$$b_j = \frac{d_j}{T_d} \quad (4)$$

d_j – the correlation coefficients between the Reward Policies Index (RPI) and the individual variables that define patient perceptions of individual productivity and organizational performance;

T_d – sum of correlation coefficients.

In the study of the impact of reward policies on individual productivity and organizational performance from a patient perspective ($IRPP_p$), partial analyzes can also be made according to the five dimensions of SERVPERF model used for evaluation of individual productivity and organizational performance from a patient perspective: tangible elements, reliability, empathy responsiveness, assurance.

The two series of correlations will be compared and will be the basis for determining the influence of motivation on organizational performance in the future. Factorial analysis will allow for those factors that have a greater impact on performance to be intensified, allowing managers to identify those factors that are most effective in boosting their employees' performance. Also, the differences among the three general indices: $ERPP$, $IRPP_a$, $IRPP_p$ will be analyzed.

The quality of medical care remains a permanent concern for the hospital. Their level (high or low) depends on the access to the hospital's medical services and, last but not least, on the amounts available to the hospital to secure various expenses. Patient perception of the quality of medical services is another concern of the institution because this perception can seriously balance the income and expenditure budget of the hospital. It is therefore important to constantly focus on providing high-quality care to patients.

5. Conclusion

Managers from healthcare area must face the challenge of retaining employees and keeping them motivated. They need to identify and implement reward strategies that keep current employees and attract potential enthusiasts. This paper proposes a research on the relationship between employee reward and productivity, as well as on the reduction of the gaps in the literature regarding the implementation of the social changes necessary for the operation of the hospital

institutions in maximum efficiency conditions. Research results could provide managers from healthcare area with a view to developing reward policies to improve performance and increase productivity.

The purpose of this paper is to provide a methodological framework for a qualitative case study to explore the rewarding policies that could be implemented to improve employee productivity and implicitly, overall organizational performance. In this regard, we built two questionnaires: one addressed to hospital staff, another to patients. The questionnaires will be applied during the same period. The questionnaire addressed to employees will contain themes concerning reward and its effects on individual productivity and organizational performance. The Patient Questionnaire is based on the SERVPERF model and contains five dimensions that illustrate patient perception of service quality and organizational performance.

The experience of the first author in managing a hospital in the Romanian health system and the desire to help other managers to understand the importance of rewarding employees and their effects on productivity are trumps in the conduct of the research process. Research results can help managers in healthcare organizations in Romania identify factors that can improve motivation and implicitly the efficiency and effectiveness of health care employees.

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