Barriers in the performance-based payment in Iran health system: Challenges and solutions
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Abstract:
BACKGROUND: One of the main goals of hospital management is to attract, maintain, and increase the number of qualified and efficient human resources, and one of the key and most important factors in achieving this goal is to design and implement a fair and efficient payment system. The purpose of this project is to determine the challenges of the performance-based payment system and provide solutions to overcome its obstacles in the city of Tehran.

MATERIALS AND METHODS: This qualitative research sought to perform content analysis so as to explore the experiences and perceptions of a purposeful group of specialists and managers of Tehran’s educational and medical centers (n = 10). Data were collected using in-depth semi-structured interviews and were ongoing until the point of saturation.

RESULTS: On analysis of data by Specialists and managers of Tehran’s educational and medical centers, three main themes including behavior, organization, and rules and regulation were defined alongside seven subthemes includes scheduling, platform, education, quantity-oriented, motivation, implementation, and payment system.

CONCLUSION: In general, it can be concluded that for the successful implementation of any project, the necessary infrastructure must be provided for implementation. In this plan, despite the challenges in the field of behavior, organization, and rules and regulations, the need for necessary training before implementing the plan, special attention to quality instead of quantity, motivating employees to cooperate in implementing the plan as successfully as possible, creating a platform Appropriate before the implementation of the plan and most importantly, the pilot implementation of the plan before its widespread implementation seems necessary.

Keywords: pay-for-performance, payment system, performance-based payment, Iran

Introduction

Justice is a fundamental principle of health care in any country. In a fair health system, there must be justice in financing.¹ Investing and allocating resources optimally to achieve the goal of a healthy human being leads to the development and reduction of poverty in the country. One of the most important factors in the health sector is the adequate and adequate production of financial resources to provide health services.²,³ Increasing resources and optimal allocation of health system resources are one of the major concerns of most governments, both in low-income countries and in middle- and even high-income countries.³

The payment system, which is used as a service to the employees of the service or a system of rights and benefits, is one of the functions of the human resource management system, which is responsible for all payments made by human resources in exchange for organizational work overtime.²,⁴ In fact, the payment system is about financial and nonfinancial rewards...
that human resources receive fairly and fairly in return for doing work in the organization.\[^{5}\]

Inadequacy of wages or unfair and inefficient payment system creates and expands problems such as; employee dissatisfaction, absenteeism, leaving the service, conflicts between staff, strikes, complaints, and other organizational problems.\[^{6,7}\] On the other hand, staff dissatisfaction has a negative impact on patient care and consequently reduces the quality of services provided to patients, increases the length of stay of patients in the hospital, and ultimately increases costs.\[^{8}\]

Factors determining a fair payment have always been of interest to managers; because employees expect to receive good pay for their services and participation in organizational goals. In response to this need, various approaches have been proposed to design an appropriate payment system, including performance-based payment approaches.\[^{11}\] From the perspective of employees and executives, performance management and rewarding employees based on performance results is an important aspect of reward management and is one of the most important strategies for managing and maintaining talent that has become commonplace in performance management.\[^{2}\]

Performance-based payments, also known as competency-based payments, knowledge-based payments, and skill-based payments, focus on the individual. People are rewarded for every new ability that comes with a new job.\[^{8}\] The newer employees are hired, the higher their pay. Some companies believe that learning new skills will increase production for that company.\[^{9}\]

Performance-based payment systems are also among the payment systems in government organizations that should be used according to the need of organizations to improve performance and increase employee efficiency in government departments; however, conditions such as legal barriers or special conditions of government agencies have prevented this payment system from being established in the public sector or, if used in some cases, it has not been done consciously and has not been fully implemented.\[^{4}\]

On the other hand, paying the reward in a systematic way that is as fair as possible is one of the concerns that has always preoccupied the managers and employees of the organization. Rewards that are given to compensate for one’s hard work and move toward achieving organizational goals are powerful drivers for improving employee performance in the organization and can increase satisfaction.\[^{2}\]

For this reason, performance-based management and subsequent performance-based management have been considered by organizations and to achieve these goals, it is necessary to determine criteria and based on it, the performance of each unit or individual in progress. Identify these goals and pay fairly for the performance of each unit and individual.\[^{5}\]

Since the implementation of any new plan in the country’s health system is always faced with many obstacles and executive challenges, and identifying and eliminating these obstacles and challenges can play an effective role in the best implementation of the plan, it was decided that in the present study, we will identify the executive challenges of the performance-based payment plan from the perspective of the managers of Tehran Medical Training Centers and provide solutions and provide the results to the officials and health policy makers of the country, province and managers of these centers in Tehran. Let’s make sure that they use these results to better and more successfully implement the performance-based payment plan in hospitals.

**Materials and Methods**

**Study design**

A content analysis was considered appropriate to promote apprehension of challenges of health systems in pay for performance.

In this method, data were gathered directly from the participants without any pervious hypothesis. The study was conducted between January 2018 all October 2018. Different codes and categories were extracted, using an inductive approach. Subsequently, the derived codes were conceptually classified, considering their properties and dimensions.

**Setting, participants, and data collection**

The study participants included 10 specialists and managers of Tehran’s educational and medical centers. Participants were chosen using a purposeful sampling method with maximum diversity. The sampling was carried out until data saturation occurred, i.e., when the researcher concluded that further interview would fail to provide new information. This qualitative study was done using in-depth and semi-structured interviews beginning with open questions, gradually continuing to more detailed ones. The interviews were taped and lasted from 25 to 74 min. The place and time of the interview were selected by agreement between the interviewer and the interviewee. Field notes were written during interviews to describe and interpret the responses correctly. An informed consent was obtained orally and in writing before the interview after explaining the aim and process of the study. Furthermore, participants were
informed about the purpose of the study, the interview method, confidentiality of their information, and right to withdraw from the study at any time.

Data analysis
The content analysis was used to analyze the data. Systematic stages were followed and simultaneous analysis was undertaken: first, recorded interviews were transcribed verbatim. Then, prior to coding, the transcribed text was read several times for familiarization. Codes and categories were extracted by an inductive process via open coding through line by line reading of the text and devoting relevant codes to it. Then, categories emerged by constant comparison. Peer check and constant comparison were used to reach a consensus in coding. In fact, data analysis was performed simultaneously and continually with the data collection procedure. Concepts were then identified on completion and assuring accuracy of coding.

Results

Demographic of participants
The participants included 3 females and 7 males with mean age of 47.5 ± 3.2 years ranging from 38 to 57 years. The mean duration of working experience was 14.

Main results

A total of seven subcategories were obtained based on data analysis. After several reviewing and summarizing and based on similarities and differences, three main contributing categories were eventually formed through the content analysis methods including (1) organization, (2) behavior, and (3) rules and regulation, which are also presented in Table 1. The categories and corresponding subcategories are described in the following sections.

Organization
Specialists and managers of Tehran’s educational and medical centers say that the lack of a suitable platform for software implementation, the lack of proper timing for this work and the very short time allotted for the entry of information into the software are the main challenges in the field of organization in this project.

Platform
“Unfortunately, at the time of the project, there was no proper forecast for the software platform. The plan has been implemented and we are facing a severe software challenge. Some friends even have trouble working with this software and there is a lot of resistance in running.” (Interview No. 2)

Scheduling
“The short time it took for this new system to complete the whole country was a big problem, so it took at least half an hour to upload the program and the lack of proper infrastructure so that the information in some centers was either not entered or incomplete.” (Interview No. 8)

Behavior
Specialists and managers of Tehran’s educational and medical centers say that lack of knowledge and expertise in the successful implementation of the plan, excessive attention to quantity and lack of consideration of output and quality of work, as well as lack of sufficient motivation of personnel in the good implementation of the plan, are the behavioral challenges of this plan.

Education
“One of the problems we face is that we weren’t given a good education. It took at least a week of class and training, and a trained and experienced person had to be in charge of performing dandelions in the hospital. Introduce Dandelion to your hospital.” (Interview No. 5)

Quantity-oriented
“One thing that is very noticeable in this design is the quality of the work. The output is not included in the design at all. In

| Table 1: Categories and sub-categories of challenges of pay for performance system |
|-------------------------------------|-----------------|-----------------|-----------------|
| Challenge                          | Categories      | Sub-categories  | Codes                        |
| The challenges of pay for performance system | Organization | Scheduling      | 1. Lack of proper software platform forecasting |
|                                    |                 | Platform        | 2. Poor software coverage    |
|                                    |                 |                 | 3. Lack of time to complete the software |
| Behavior                           | Education       | Quantity-oriented | 1. Lack of necessary knowledge and expertise |
| Rules and regulation               | Implementation  | Motivation      | 2. The willingness of personnel to work in high-income sectors |
|                                    |                 |                 | 3. Not considering the quality of work and payment based on time |
|                                    |                 | Payment system  | 4. Employee resistance to work-related changes |
|                                    |                 |                 | 5. Lack of motivation for employee participation |
|                                    |                 |                 | 1. Failure to implement the plan on a trial basis |
|                                    |                 |                 | 2. Lack of transparency of the plan |
|                                    |                 |                 | 3. The dependence of income on the physician |

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fact, working hours make more money. The service standard has not been set, which should have been considered in this plan.” (Interview No. 4)

Motivation
“Generally, in the organization, whenever a new plan wants to be implemented, employees take a stand, especially when it comes to their salaries.

This lack of participation and cooperation creates challenges in the organization.” (Interview No. 6)

Rules and regulation
Specialists and managers of Tehran’s educational and medical centers say that failure to implement the plan on a trial basis, lack of transparency of the plan and ultimately, the dependence of income on the physician has led to major challenges in this project. These challenges are in the realm of rules and regulations.

Implementation
“It would have been better if the project had been piloted at the outset to identify all of its challenges and then enter the final implementation phase. In this way, the dominance of the personnel would be increased and there would not be so much confusion.” (Interview No. 10)

“The plan was very vague when it was implemented. It was not clear to us at all and we were really confused.” (Interview No. 7)

Payment system
““In the previous system, overtime and work were separate, but in the dandelion, the two became one, and this was the biggest problem of this plan, which caused a lot of protests and knocked down the plan. It was mixing overtime and work. And still after “How many years have passed since the staff asked them how much their overtime work has been done and how much of that work is done? And they still don’t know what their overtime hours are. Employees are very sensitive about overtime and overtime money.” (Interview No. 1)

Discussion
Since the implementation of any new plan in the country’s health system is always faced with many obstacles and executive challenges, and identifying and eliminating these obstacles and challenges can play an effective role in the best implementation of the plan, it was decided that in the present study, we will identify the executive challenges of the performance-based payment plan from the perspective of the managers of Tehran Medical Training Centers and provide solutions and provide the results to the officials and health policy makers of the country, province and managers of these centers in Tehran. Let’s make sure that they use these results in order to better and more successfully implement the performance-based payment plan in hospitals.

According to the study’s findings, performance-based payment plan challenges were generally categorized into three main categories and seven subcategories. In terms of organization, the lack of a proper platform as well as the correct and timely timing for the implementation of the plan led to confusion among the staff as well as the lack of proper implementation of the plan. In a study conducted by Jabbari et al. In 2018 entitled “Identifying Executive Challenges of Performance-Based Payment from Medical and Educational Hospitals Administrators’ Perspective and Offering Solutions in Isfahan,” the findings show that the weakness of technology and Lack of proper context leads to challenges. The sooner a plan is implemented without the right timing, the more likely it is to fail.[9] In a study conducted by Condo et al., The findings showed that the development of a suitable platform in the implementation of the plan and the creation of the required capacities before the start of the plan is considered as an effective factor in the realization of the performance payment plan.[10]

In terms of behavior, lack of training, quantity-oriented and lack of motivation in staff can be called key challenges. Lack of knowledge of successful implementation impairs any plan. Greengarten and Hutherford, in their study of performance-based payments at the Canadian Healthcare Organization, cited insufficient training of managers and staff as a serious weakness of the performance-based payment plan.[11]

Employee participation is a guarantee for the successful implementation of any program. Conversely, employee nonparticipation can be challenging. There can be many reasons why employees do not participate, including; lack of adequate training, delays in payment, and a huge difference in their salaries and the comparison of their salaries with other employees of the organization in other groups.[12]

Kondo et al. in their study, entitled “Establishing a Performance-Based Payment Process in Healthcare Services Systems” conducted in 2016 in the United States, developed motivational criteria in employees and linked payments to these criteria are considered as an effective factor in the realization of the functional payment plan.[10] In the study of Greenart and Hutherford, the lack of sufficient time to justify employees by the manager, and the lack of a strong and coherent mechanism to accurately assess employee performance and determine their functional differences, leads to poor employee participation.[13] In a study conducted by Jabbari et al., The findings showed that employee participation is a guarantee for the successful implementation of any project. There are
important factors influencing employee participation, one of which is motivating employees. In this study, it was mentioned that the lack of motivation in employees to implement a performance-based payment plan has led to employee resistance and failure of the plan.[3]

Furthermore, paying too much attention to the quantity of work and not paying attention to the output of employees’ activities leads to a decrease in the quality of work.

In terms of rules and regulations, the nonimplementation of the plan on a trial basis, the lack of transparency of the plan and the dependence of the revenue of the department on the physician’s activity have led to dissatisfaction with this plan.[8] If the income of the ward depends on the doctor’s performance and the nurse is not directly involved in generating income, if the doctor works less due to travel, employment in other centers, education, etc., but the ward has a high bed occupancy, the income deduction and financial resources, especially overtime, will not be offset, and this will discourage other clinical staff.[11,14] These challenges are rooted in a lack of proper oversight. Supervision has also been emphasized as an essential principle for the successful implementation of any plan in the Canadian health-care system in the study of Eldridge (1).

**Conclusion**

In order to meet the changing needs of society and increase efficiency, effectiveness, quality, and justice, the health system of any country must always implement reforms at the national and regional levels to create new policies and policies or to reform previous policies.

Managers, agents, and political representatives in the health sector who play a key role in adopting a new policy or reforming a previous policy need comprehensive yet accurate information, so assessing the challenges of each project can help improve the performance of managers and policymakers. In general, it can be concluded that for the successful implementation of any project, the necessary infrastructure must be provided for implementation. In this plan, despite the challenges in the field of behavior, organization, and rules and regulations, the need for necessary training before implementing the plan, special attention to quality instead of quantity, motivating employees to cooperate in implementing the plan as successfully as possible, creating a platform appropriate before the implementation of the plan and most importantly the pilot implementation of the plan before its widespread implementation seems necessary. Also in this plan, considering the importance of Article 1 of the instructions for paying the performance of nonphysician staff, signing a memorandum of understanding between the manager of the executive unit and the head of the hospital is required before any payment and resources allocated to nonphysicians should be increased by at least 30%.

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**Conflicts of interest**

There are no conflicts of interest.

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