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Implementation Challenges and Unintended Consequences of Performance-Based Payment: A Qualitative Study of Hospital Managers in Iran

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Abstract

Background: Performance-based payment is now widely used to improve efficiency and accountability in healthcare systems. In Iran, this model was introduced under the Health Transformation Plan with the aim of enhancing hospital performance and staff motivation; however, emerging evidence points to notable challenges in its implementation. While previous research has largely examined providers' responses, far less attention has been paid to how hospital managers—those directly responsible for implementing these policies—interpret and manage these incentives in practice. This study explores managers' perspectives on how performance-based payment operates in practice and where they perceive its primary shortcomings.

Objective: To explore how public hospital managers interpret, implement, and critically assess performance-based payment, with a particular focus on its operational challenges and unintended consequences.

Materials and methods: This qualitative study employed a conventional content analysis approach. Semi-structured interviews were conducted with 11 public hospital managers selected through purposive sampling with maximum variation. Data collection continued until thematic saturation was achieved. Analysis followed an iterative process involving open coding, category development, and abstraction of themes. Trustworthiness was ensured using Lincoln and Guba's criteria.

Results: Four main themes emerged: imbalance in motivational drivers, threats to organizational commitment, quality–quantity trade-offs, and structural inefficiencies. Although participants acknowledged the system's potential to differentiate performance and support cost control, they consistently highlighted delayed payments—often extending to 6–8 months—alongside limited transparency in calculation mechanisms and perceived inequities in distribution. These challenges were described as weakening the intended motivational effects of the system and were, in some cases, associated with reduced organizational attachment, increased emphasis on service volume over quality, and tendencies toward dual practice.

Conclusion: The effectiveness of performance-based payment in public hospitals appears to be shaped less by its formal design than by the conditions under which it is implemented. Delayed payments, constrained managerial discretion, and limited transparency emerged as key factors undermining its intended impact. Addressing these requires more timely and transparent payment processes alongside greater organizational flexibility— findings that carry implications for other health systems confronting analogous reform challenges.

Introduction

Health systems worldwide face the ongoing challenge of delivering high-quality, efficient, and equitable services. Among the key determinants of system performance, provider payment mechanisms play a central role, as they directly influence employee behavior, professional motivation, and the quality of

patient care(1). In recent decades, performance-based payment (PBP) has emerged as a prominent reform strategy, particularly in high-income countries, where policymakers have sought to better align financial incentives with organizational objectives (2). However, despite its widespread adoption, evidence regarding the effectiveness of PBP remains mixed, with outcomes varying significantly across settings, suggesting a strong influence of contextual factors(3).

The theoretical foundations of PBP are largely grounded in motivational and agency theories. Motivational theory posits that well-designed financial incentives strengthen the link between effort and reward, thereby directing employee behavior toward organizational goals (4). Agency theory complements this perspective by framing the employer–employee relationship as one characterized by information asymmetry, where incentives serve to align the interests of both parties(4). When effectively implemented, PBP systems may enhance job satisfaction, organizational commitment, and service quality. Conversely, poorly designed or inadequately implemented schemes—particularly those involving delayed payments, lack of transparency, or perceived inequities—can produce adverse outcomes, including burnout, increased turnover intentions, and reduced quality of care (5).

These challenges are particularly salient in the health sector, where working conditions are inherently demanding. Healthcare professionals frequently face heavy workloads, irregular shifts, and significant emotional stress (6). In such contexts, ineffective or unfair compensation systems may exacerbate existing pressures. Evidence suggests that perceived payment inequities are associated with absenteeism, dual practice, and migration from the public to the private sector (6).

Recent studies have further highlighted the complexity of PBP outcomes. While such systems have become increasingly widespread, their impact on provider behavior remains highly context-dependent(7). Reviews of financial incentive models, particularly in low- and middle-income countries, consistently identify delayed or irregular payments as a major implementation challenge (3). Although effective performance appraisal mechanisms can improve job satisfaction and patient outcomes, practical barriers often limit their success (7).

The Iranian Context

Iran's health system has undergone several reforms aimed at improving hospital autonomy and financial sustainability. The New Hospital Affairs System ("Karaneh"), introduced in 1995, was an early effort to increase financial flexibility through revenue generation mechanisms(8). In 2015, this system was replaced by a revised performance-based payment model ("Qasedak"), designed to more explicitly link employee compensation to departmental performance. Under this model, performance-based bonuses and overtime payments were tied to departmental revenues through formal agreements (8).

Despite these reforms, the implementation of the Qasedak system has faced substantial challenges. Previous studies have identified key issues, including weaknesses in system design, insufficient staff training, limited employee participation, and broader economic constraints (8). Additional research

highlights behavioral, organizational, and regulatory barriers, such as scheduling difficulties, inadequate infrastructure, motivational concerns, and flaws in payment mechanisms (9). Broader analyses further point to systemic issues, including unrealistic tariffs, dual practice, delays in financial flows, and lack of transparency in payment processes.

Study Gap and Aim

Although existing studies provide valuable insights into the technical and financial aspects of PBP systems in Iran, a critical yet underexplored gap remains regarding the experiences and perspectives of hospital managers responsible for implementation. This is particularly important, as managers play a key role in translating policy into practice, overseeing performance evaluations, managing staff expectations, and navigating resource constraints(10).

Accordingly, this study aims to explore the performance-based payment system in Iranian public hospitals from the perspective of hospital managers. Specifically, it seeks to identify: (1) perceived strengths of the system, (2) key weaknesses and implementation challenges, and (3) major barriers to effective implementation. Using a qualitative approach based on conventional content analysis, this study aims to generate context-sensitive insights that can inform policy improvements and contribute to the broader literature on health financing reforms.

Materials and Methods

Study Design

A qualitative study using a conventional content analysis approach was conducted. This method enables a systematic and rigorous description and interpretation of phenomena derived directly from textual data(11). Conventional content analysis is particularly appropriate when existing theory or literature on a phenomenon is limited, as it allows categories and themes to emerge inductively from the data without imposing predefined frameworks.

Participants and Sampling

Eleven public hospital managers from Iran were recruited using purposive sampling with maximum variation(12). Maximum variation was sought across gender, professional background (clinical and non-clinical), educational level (master's, doctoral, or medical degrees), field of study (management and other disciplines), geographic location (Tehran Province and other provinces), and years of managerial experience.

Initially, 16 eligible managers—currently employed in governmental hospitals and willing to participate—were invited. Eleven agreed to participate (response rate: 68.8%), while five declined due to time constraints and competing professional responsibilities. Sampling continued until data saturation was

reached, defined as the point at which no new codes or themes emerged in consecutive interviews and redundancy in the data was observed (Guest, Bunce, & Johnson, 2006).

Data Collection

Data were collected through semi-structured interviews conducted between August and December 2025. An interview guide was developed by the research team specifically for this study based on the study objectives and a review of relevant literature (see Supplementary File 1 for the English version of the interview guide). It addressed perceived strengths and weaknesses of the performance-based payment system, implementation challenges, and suggestions for improvement. The interview guide was piloted with two managers who were not included in the main study, and minor refinements were made to improve clarity and flow.

Interviews began with a broad open-ended question: “How long have you been working in a managerial position, and how would you describe your experience with the performance-based payment system?” Depending on participants’ responses, probing and follow-up questions were used to explore emerging issues in greater depth.

All interviews were conducted at times and locations convenient for participants, lasted between 25 and 50 minutes (mean ≈ 38 minutes), and were audio-recorded with participants’ consent. Interviews were transcribed verbatim in Persian.

Data Analysis

Data analysis was conducted concurrently with data collection using the conventional content analysis approach described by Elo and Kyngäs(11). Each transcript was read repeatedly to achieve immersion and a holistic understanding of the content. Meaning units—defined as segments of text containing related meaning relevant to the research questions—were identified and condensed.

An open coding process was then applied to assign initial codes to condensed meaning units. Through constant comparison within and across interviews, similar codes were grouped into subcategories based on conceptual similarity. Subcategories were further abstracted into broader categories and, ultimately, overarching themes.

To enhance analytic rigor, two researchers independently coded three transcripts. Discrepancies were resolved through discussion and consensus.

Trustworthiness

Trustworthiness was ensured using the criteria proposed by Lincoln and Guba: credibility, dependability, confirmability, and transferability (13).

Credibility was strengthened through prolonged engagement with the data and investigator triangulation. Three researchers were involved in the analytic process and independently reviewed interpretations before reaching consensus.

Dependability was addressed through a transparent and detailed description of the research process, enabling external reviewers to follow the analytic procedures.

Confirmability was ensured through external auditing. An independent researcher not involved in data collection or analysis reviewed selected transcripts alongside their corresponding codes and coding decisions. The auditor assessed whether interpretations were grounded in the data, and feedback was incorporated into the final analytic structure.

Transferability was supported by providing rich and detailed descriptions of the study context, participants, and analytical procedures, allowing readers to assess the applicability of findings to other settings.

Findings

A total of 11 public hospital managers participated in this study. Of these, 18.18% (n = 2) were female and 81.81% (n = 9) were male. Participants included both clinical (63.63%) and non-clinical (36.36%) managers and represented diverse educational backgrounds, including Master's degrees (36.36%), PhDs (18.18%), and medical degrees (General Practitioner or Specialist, 45.45%). They were drawn from different fields of study (Management Field, 45.45%; Other Fields, 54.54%) and geographic locations (Tehran Province, 54.54%; Other Provinces, 45.45%). In terms of managerial experience, 63.63% had 10–20 years and 36.36% had more than 20 years of service (Table 1).

Table 1
Demographic characteristics of participants

Personal information		Number	Percentage
Gender	Female	2	18.18%
	Male	9	81.81%
Occupation	Clinical	7	63.63%
	Non-clinical	4	36.36%
Previous level of education	Bachelor's Degree	-	0%
	Master's Degree	4	36.36%
	PhD	2	18.18%
	General Practitioner or Specialist	5	45.45%
field of study	Management Field	5	45.45%
	Other Fields	6	54.54%
place of service	Tehran Province	6	54.54%
	Other Provinces	5	45.45%
years of service	Less than 10 years	-	
	10–20 years	7	36.36%
	More than 20 years	4	63.64%

During data analysis, 130 initial codes were extracted and subsequently reduced to 82 refined codes through iterative comparison and abstraction. These codes were organized into 29 subcategories, 10 categories, and four overarching themes: (1) imbalance in motivation drivers, (2) challenges to organizational commitment, (3) tensions between quality and quantity of work, and (4) structural inefficiencies in the performance-based payment system. Table 2 presents the extracted themes, categories, and subcategories.

Table (2): Extracted themes, categories and subcategories

Theme	Category	Subcategories (Conceptual Labels)
Imbalance in Motivation Drivers	Managerial Influences on Motivation	1. Supervisory attention and support 2. Managerial instability and leadership limitations 3. Workload proportion relative to compensation
	Job-Related Motivators	1. Targeted financial incentives for specific roles 2. Variability of job difficulty across centers 3. Experience 4. Overtime
Challenges to Organizational Commitment	Resistance to Work Structure Changes	1. Shift work schedule 2. Willingness to work night shifts 3. Reluctance to engage in overtime work
	Workforce Exit and Dual Employment	5. Growth of dual-career employment 6. Increased retirement requests among experienced staff
Tensions Between Quality and Quantity of Work	Extended Working Hours	7. Increase in off-shift overtime 8. Neglect of employees' age and career background
	Work Shift Allocation Challenges	9. Workforce allocation challenges across shifts 10. Refusal to cover shifts among capable staff
	Job Errors	11. Increase in errors due to excessive overtime 12. Non-cooperation of experienced staff in working shifts
Structural Inefficiencies in the Performance-Based Payment System	Financial Deductions	1. Determination of final payment after institutional deductions
	Payment Timing and Integration	1. Integration of base salary and overtime payments

Theme	Category	Subcategories (Conceptual Labels)
		2. Inconsistency in payment timing across affiliated centers
	Performance Appraisal Process	1. Multiple determinants influencing compensation 2. Adjustment of overtime impact on performance coefficients 3. Influence of economic and social context on earnings 4. Differential impact of overtime, experience, and education

These themes were: job motivation, organizational commitment, quality and quantity of work, and structural features of the performance-based plan (Fig. 1).

Imbalance in Motivation Drivers

This theme reflects inconsistencies between workload, compensation mechanisms, and managerial practices, which collectively shape employee motivation. The findings revealed that motivation is influenced by two broad categories of factors: managerial influences and job-related motivators.

Managerial Influences on Motivation

Participants emphasized that supportive supervision, interpersonal relationships, and managerial attention play a critical role in enhancing motivation and psychological well-being. One participant explained how the presence of caring officials and empathetic leadership could compensate for difficult working conditions:

"Our center does not have a significant income compared to general hospitals due to its mono specialty and the conditions of the patients who refer to it. But fortunately, due to the presence of caring officials and managers and the strong relationship they have with the employees, despite the difficult nature of the work conditions, it is very suitable for the employees in terms of mental and emotional well-being. The sense of empathy between employees and official and supervisory attention and support have a great impact on employee performance." (Participant 7)

However, managerial instability and limited authority were identified as key barriers. Participants reported that frequent turnover and restricted decision-making capacity reduced managers' ability to motivate staff and implement effective strategies. This issue was compounded by the paradox of high responsibility without corresponding authority:

"The problem we have now is the lack of authority for the manager and the high level of responsibility, while at the same time the short management period. This problem also applies to managers and supervisors. When a manager does not have the authority to reward beyond routine matters, he will not be able to utilize the surplus of human resources. The short management life will reduce the ability to carry out accurate planning and gain sufficient knowledge of employees." (Participant 4)

Another major concern was the mismatch between workload and compensation. Participants emphasized that when the volume and difficulty of work were not proportionally reflected in payment, motivation decreased significantly. The performance-based payment system attempted to differentiate payments according to workload and difficulty, but managers reported challenges in accurately capturing these variations across departments.

Job-Related Motivators

Job-related factors affecting motivation included financial incentives, job difficulty, experience, and overtime. Targeted financial incentives for specific job categories were perceived as inequitable and contributed to widespread dissatisfaction. Participants noted that the absence of representation from certain occupational groups in decision-making processes exacerbated these perceptions of inequity:

"Among support personnel, the problem of distinguishing some job categories is more tangible. It is not very logical to consider every job based on tables, data coefficients and their performance as the same. The main reason for this is the lack of representatives from these groups when making decisions to consider payment conditions." (Participant 7)

Variability in job difficulty across hospitals and departments was also emphasized. Factors such as patient volume, population coverage, geographic location, service complexity, and departmental conditions influenced perceptions of fairness in compensation. This variation was particularly evident in nursing roles, where working conditions differed substantially even within the same hospital:

"Considering the fact that a nurse only deals with IVs, medication and monitoring the patient, this is not the only factor that determines the amount of compensation. A nurse may work in each department in the same hospital under completely different conditions, for example, what a nurse does in the pediatric department is different from what a nurse does in the women's surgery department performs completely different conditions." (Participant 6)

Experience and overtime emerged as interacting determinants with significant implications for motivation. While the performance-based payment infrastructure theoretically accounted for years of service, participants reported that this factor was not sufficiently weighted in practice. The Productivity Improvement Law, which provided special benefits for night workers, had paradoxically reduced the relative income of experienced staff:

"Considering issues such as the Productivity Improvement Law, which provides special benefits for night workers, the income of these experienced workers has actually decreased significantly compared to their peers, which is also due to the nature of performance-based pay. It is true that in the performance-based pay infrastructure, people's years of service are taken into account, but it is not an important factor." (Participant 7)

In many cases, less experienced employees earned higher income due to greater overtime participation, which negatively affected the motivation of senior staff. This situation was further complicated by mandatory overtime policies that compelled younger staff to work extra hours, creating pay disparities that senior employees perceived as unjust:

"Employees are compelled to work overtime—something they do not actually desire, given that they could earn higher wages in the private sector. Although this overtime is involuntary, it positively impacts performance-based pay. It is often the younger, less experienced staff who work these extra hours; consequently, a less experienced employee may end up with higher total earnings. Even though the overtime is mandatory, the resulting pay disparity tends to demotivate the more experienced staff." (Participant 8)

Theme 2: Challenges to Organizational Commitment

This theme captures factors that weaken employees' attachment to the organization, including resistance to work structures and increasing turnover tendencies. The findings revealed two interrelated categories: resistance to work structure changes and workforce exit with dual employment.

Resistance to Work Structure Changes

Resistance to shift work arrangements, particularly under conditions of staff shortages and mandatory overtime, was frequently reported. Participants described how delays in overtime payments, often extending to six or seven months, intensified dissatisfaction and resistance among nursing staff and diagnostic unit personnel:

"Nursing managers and diagnostic unit officials had many problems in arranging shifts in the wards at the beginning of the Qasedak system. For example, when a nurse from a ward requested leave, due to nursing staff shortages, the head nurse forced other nurses to receive overtime to fill the empty shifts. And since this money was also paid with a delay of 6–7 months, nurses and other staff resisted filling the shifts." (Participant 7)

Reluctance to engage in night shifts and overtime was particularly evident among nursing staff covered by the Productivity Improvement Law. Participants noted that the non-functional overtime component of the Dandelion Plan had increased the financial attractiveness of night work, creating a paradoxical situation where employees preferred night shifts over overtime assignments. This shift in preferences was further influenced by the availability of alternative employment opportunities in the private sector:

"The Dandelion Plan, by considering the non-functional overtime item, had a positive impact on the amount of night workers' income, which led to a greater demand for night work than in the past and decreased the demand for overtime. Because they could obtain income from work in private hospitals." (Participant 6)

The reluctance to engage in overtime work was primarily attributed to delays in payment integration. Participants argued that the unification of payment timing for regular work and overtime, combined with government regulations, had created significant disincentives. One manager proposed that separating overtime payments and minimizing payment delays could encourage staff retention:

"The issue of employee disinclination has become more tangible than before, so that we are witnessing the departure of young workers from centers to private centers, at least as a second job. These employees are not willing to work extra shifts in government centers, the reason for which is the delay that has been created due to the regulations of government centers in performance-based payment and the unification of the time of payment for work and overtime. Separating the number of rials for overtime and payment with the minimum possible time will encourage and retain personnel." (Participant 3)

Workforce Exit and Dual Employment

Dual employment has increased significantly, with employees seeking secondary jobs to compensate for financial uncertainty. Participants attributed this trend to the mismatch between work demands and income, as well as the growth of opportunities in the private sector. The Dandelion Plan and associated payment delays were identified as contributing factors:

"In many units, before the Dandelion and the long period of overtime received by personnel, the number of dual-job workers was far less than now." (Participant 8)

Early retirement among experienced staff emerged as a growing concern. Participants reported that financial pressures, delayed payments, and legislative benefits such as the Radiation Rights Law and hardship allowances had encouraged experienced employees to leave public sector positions. This trend was particularly problematic because many retirees continued working in the private sector, representing a significant loss of expertise from the public healthcare system:

"Cases such as the Radiation Rights Law and the hardship of nursing work have caused some employees to want to apply for retirement from government centers and, in most cases, work in the private sector. Given the delays in payment, employees sometimes and inevitably apply for retirement to compensate for living expenses, despite their interest in their workplace, which in most cases the university has agreed to." (Participant 4)

These patterns indicate weakening organizational commitment and reduced retention capacity in the public sector, with potentially serious implications for human resource sustainability.

Tensions Between Quality and Quantity of Work

This theme highlights the perceived trade-offs between increased workload and the quality of healthcare services. The findings revealed three interrelated categories: extended working hours, work shift allocation challenges, and job errors.

Extended Working Hours

Financial incentives linked to overtime encouraged extended working hours. While this sometimes-improved productivity, it also created inefficiencies and fatigue. Participants noted that the performance-based payment system had, in some respects, reduced unnecessary presence in the workplace. Previously, administrative staff had become accustomed to remaining in the office until evening hours without clear justification, but the new system incentivized more efficient use of time:

"The current performance-based plan has been good in terms of controlling personnel costs. For many years, hospital administrative staff have been accustomed to working until the evening, the reason for this was the lack of competitiveness in overtime and bonus payments. They knew that by increasing their attendance hours, they would not harm the salaries of others, and this method existed for many years. After the performance-based plan, employees have become less inclined to work overtime without reason and simply be physically present. They often try to leave after office hours, because they have realized that in general, they will not receive more income with their attendance." (Participant 9)

However, the system also created new challenges, particularly for experienced employees. The integration of overtime and performance-based pay had limited managers' ability to provide incentives based on expertise and quality of work. Under the previous system, overtime hours were often allocated to experienced staff as a form of recognition, but the competitive nature of performance-based pay prevented such practices. This neglect of employees' age and career background was perceived as a significant oversight:

"The unification of overtime and performance-based pay has limited managers and officials in giving incentives to employees. This is more relevant to experienced employees. Usually, in the previous system, overtime hours were considered for such people, but now, due to the competitive nature of performance-based pay, they cannot be paid. This group of employees usually provides higher quality work than less experienced employees, which is often not covered by performance-based pay items." (Participant 10)

Work Shift Allocation Challenges

Difficulties in allocating staff across shifts were a recurring issue. Participants reported that the performance-based payment system tended to prioritize workload volume over quality. This created tensions between organizational needs and employee preferences:

"It seems that the performance-based payment system tends to be more inclined towards the volume of work than the quality. It is a very good and motivating approach to cover the needs of the organization's

human resources, but it should also be considered that continuous overtime does not reduce the quality of work." (Participant 1)

Reluctance among skilled staff to cover fewer desirable shifts was compounded by the availability of private sector opportunities with more timely payments. This situation had created significant staffing challenges in public hospitals, particularly for evening and night shifts, placing additional pressure on remaining public sector employees:

"The cooperation of personnel in working shifts and interacting with officials is one of the issues that ultimately increases the quality of work. The crowding of experienced forces in certain shifts causes non-attendance in unconventional shifts and certainly the quality-of-service provision in evening and night shifts is reduced compared to the morning." (Participant 7)

Job Errors

Increased workload and excessive overtime were associated with higher rates of errors, particularly among staff directly involved in patient care. Participants noted that quality and quantity of work could not both be optimized simultaneously, and the dominant approach of the performance-based plan—focusing on increasing both quality and quantity—created inherent tensions:

"In terms of quality and quantity of work, it is not possible to have two options at the same time 100%. The dominant approach of the performance-based plan is to increase the quantity and quality of work. What happens in practice is that as the workload increases, for various reasons such as lack of commitment of personnel, habituation to the previous way of working, lack of cooperation of personnel in increasing efficiency and issues like this, the quality of work is overshadowed by the quantity." (Participant 11)

Participants also noted that the non-cooperation of experienced staff in working certain shifts negatively affected service quality. These errors were being examined in hospital safety committees, indicating systematic concerns about patient safety and care quality.

Structural Inefficiencies in the Performance-Based Payment System

This theme reflects systemic challenges related to the design and implementation of the payment model. The findings revealed three interrelated categories: financial deductions, payment timing and integration, and the performance appraisal process.

Financial Deductions

Institutional and insurance-related deductions were identified as significant factors reducing employees' final income. Participants explained that performance-based payments were cleared only after insurance company deductions, which directly and negatively impacted employee earnings. This was particularly relevant for revenue-generating and treatment departments:

"Applying deductions to a department separately on the income of that department has a very positive controlling effect on the number of deductions. Employees' awareness of the fact that any error in the entry or provision of services directly affects their own payment, makes them pay more attention to the issues." (Participant 1)

While awareness of deductions improved accuracy in some cases, it also contributed to dissatisfaction, particularly when deductions were perceived as arbitrary or excessive.

Payment Timing and Integration

The integration of overtime and performance-based payments, combined with delays, was a major concern. In the modern hospital management system, employees previously received three separate payments: continuous payment (salary), non-continuous payment (overtime), and performance-based payment. Under the performance-based system, non-continuous payments—including performance and overtime—were paid simultaneously with significant delays. Participants emphasized that delayed payments reduced real income value due to inflation and created financing difficulties for hospitals:

"Combining the time of payment for work and overtime is not in the interests of employees in principle. There are two reasons for this. One is the economic issues of the society, where the inflation rate will affect the value of the money received by individuals, and the current value of the rial received is less than the rial value received six months ago. Second, because the payment document for the Qasedak is larger than the previous method, financing it will be more difficult. If insurance companies do not cooperate in reimbursing hospitals and the cost of the Qasedak is not covered, employees will actually suffer." (Participant 3)

Inconsistency in payment timing across affiliated centers further exacerbated dissatisfaction. Participants reported significant variation in payment intervals even among centers affiliated with the same university:

"There is a difference in the time interval of performance-based payment between different centers. There is even this difference between centers affiliated with a university. For example, our center will receive performance-based payment from 8 months ago this month, but another center in our university will receive performance-based payment from 5 months ago. The unity of procedure that the university and the Ministry of Health have considered to standardize the payment method is very good, but the gap between two centers in a university constantly makes the staff discuss why, and there is always a wave of dissatisfaction with the delay of lower-income centers compared to other centers." (Participant 1)

Performance Appraisal Process

Compensation was influenced by multiple interacting variables, making the system complex and often unpredictable. Participants acknowledged the comprehensiveness of the Dandelion Plan but noted challenges in its implementation:

"The Dandelion plan has been very comprehensive and meticulous in its structure. Considering all human resources in a department, from nurses to security guards and services, and calculating their income from the same department is a very effective task in increasing employee motivation." (Participant 3)

However, the adjustment of overtime impact on performance coefficients created significant tensions. While the Dandelion Plan considered a performance coefficient of 2.5 for overtime to encourage extra work, managers sometimes attempted to reallocate resources by reducing coefficients for new employees to compensate experienced staff. This practice created dissatisfaction among less experienced employees:

"The Dandelion plan has a positive view of controlling personnel costs. By considering a performance coefficient of 2.5 for overtime, Dandelion also tries to encourage people to work overtime. Unfortunately, in many departments, officials and managers, in order to place more value on the services of experienced employees who cover a smaller volume of overtime, try to compensate experienced employees with rials by reducing the performance coefficient of new employees, which causes dissatisfaction among new employees and more overtime." (Participant 5)

The influence of economic and social context on earnings was also identified as a source of unpredictability. Participants noted that many factors affecting employee income were outside organizational control, including insurance company deductions, fluctuations in patient volume, and temporary departmental closures due to equipment failure:

"There are many variables to determine the amount of money people receive, some of these variables are within the control of the organization and to some extent employees can predict the amount of money they will receive by measuring their performance. But there are also factors outside the organization that determine the amount of money they will receive and cannot be predicted. For example, the number of deductions that the insurance company makes to the hospital's financial files. Or, for example, the increase in the number of patients in government centers due to the high tariffs in the private sector or the failure of the CT imaging unit, which causes the temporary closure of the department and a decrease in the department's income." (Participant 1)

Predictability of income emerged as a central concern. Participants emphasized that uncertainty regarding payment amount and timing undermines satisfaction and financial planning. Employees expressed a strong desire to understand how their payments were calculated and to receive reliable estimates of their earnings:

"Personnel are very keen to know the approximate amount they will receive, because they plan on the numerical amount and the payment time, and if the amount or time is not predictable, they will be dissatisfied. They are even keen to know how to calculate their payment, and with this perspective, they are not satisfied with just receiving a report of the amount received in detail for performance and non-performance. There are always personnel reasons in this area." (Participant 1)

The differential impact of overtime, experience, and education on earnings was a significant source of perceived inequity. While overtime was a major determinant of earnings, experienced employees often felt disadvantaged. The performance coefficient assigned by managers was identified as a critical factor influencing motivation and perceived fairness. Participants emphasized that meaningful differentiation among employees based on performance was essential for both fairness and motivation:

"The performance coefficient that a manager gives an employee has a great impact on the level of his positive attitude towards his performance. Giving a real score leads to efficiency. When a manager gives him a good score in a situation of dissatisfaction with his employee's performance, this employee has no incentive to improve his performance, and the opposite is true, when a good employee is given a low score, the incentive to provide good service decreases." (Participant 3)

However, participants also reported instances where performance scores were manipulated to satisfy experienced employees, creating perceptions of injustice among less experienced staff:

"An item that affects the amount of money people receive is their performance coefficient. When all employees are given the same maximum number to determine the amount they receive, it is unfair to those who perform well, and distinctions must be made between employees. Of course, we have seen cases where, for example, a head nurse gave high performance scores to satisfy experienced employees, and unfortunately, less experienced employees, who are generally part of the project, were given low scores simply because they were less experienced and wanted to receive more money than experienced employees, while this is not the nature and philosophy of performance pay." (Participant 4)

Summary of Findings

The findings reveal that the performance-based payment system generates complex and sometimes contradictory effects on motivation, organizational commitment, and work performance. While the system aims to enhance productivity and financial transparency, its implementation has introduced structural inefficiencies, perceived inequities, and unintended behavioral consequences.

Key challenges include imbalance between effort and reward, reduced predictability of income, increased reliance on overtime, and weakened organizational commitment. The neglect of employees' age and career background, combined with delayed and unpredictable payments, has created significant dissatisfaction among experienced staff and increased turnover intentions. The tensions between quality and quantity of work, particularly the increase in errors due to excessive overtime and the reluctance of experienced staff to cover certain shifts, raise important concerns about patient safety and service quality.

The findings also highlight the complexity of the performance appraisal process, with multiple determinants influencing compensation in ways that are often unpredictable and perceived as inequitable. The differential impact of overtime, experience, and education on earnings, combined with

the potential for managerial manipulation of performance coefficients, has created perceptions of injustice that undermine the system's intended motivational effects.

Overall, the findings suggest that without careful redesign and alignment with workforce realities, performance-based payment systems may fail to achieve their intended goals and may instead exacerbate dissatisfaction, turnover, and quality concerns. These findings underscore the need for a re-evaluation of the implementation mechanisms of the payment system, with simultaneous attention to both financial and human dimensions. The predictability of income, fairness in performance evaluation, and recognition of experience and expertise emerge as critical factors that must be addressed to achieve the system's objectives while maintaining workforce satisfaction and service quality.

Discussion

The findings of this study indicate that although pay-for-performance (PBP) systems are conceptually designed to enhance motivation and improve performance, their effectiveness is substantially shaped by the gap between policy design and implementation realities. This gap is manifested through a set of interrelated themes that collectively undermine the motivational function of the system.

A central finding was the weak perceived linkage between performance and payment. Remuneration was often perceived as being influenced more by organizational position and tenure than by actual performance. This perception undermines both distributive and procedural justice and reduces motivation, particularly among high-performing staff. This finding is consistent with prior evidence suggesting that, in the absence of transparency and predictability, performance- based payment systems fail to generate effective incentive signals and may not lead to sustained improvements in performance(14, 15).

Another important finding relates to managerial adjustments of performance scores aimed at maintaining organizational balance. While such practices may serve as short-term strategies to reduce conflict, they ultimately weaken performance differentiation and erode the credibility of the payment system. This reflects an inherent tension between managerial pragmatism and the incentive logic underpinning performance- based payment systems, as highlighted in previous implementation studies (15).

Payment delays emerged as a critical factor, particularly when compounded by economic instability. In such contexts, delayed payments not only generate dissatisfaction but also contribute to financial uncertainty, reduced professional focus, and the adoption of coping strategies such as dual practice. Evidence indicates that financial sustainability and timely disbursement are essential prerequisites for the effectiveness of performance-based payment systems(3, 7).

Furthermore, structural complexity and lack of transparency in payment calculations were identified as key drivers of perceived inequity. Misalignment between workload, job difficulty, and compensation—especially among staff in non-revenue-generating units—further intensified dissatisfaction. This finding

aligns with existing literature emphasizing that incentive systems must be aligned with job characteristics and contextual realities to function effectively (3, 6).

Overall, the interaction between economic instability, delayed payments, and structural opacity creates a reinforcing cycle that erodes trust in the payment system, diminishes motivation, and limits overall system effectiveness. These findings suggest that the challenges observed are not solely related to policy design but rather emerge from the complex interplay of financial, organizational, and implementation factors.

Strengths and limitations

A key strength of this study is its focus on hospital managers as primary actors in the implementation of performance- based payment systems, enabling an in-depth understanding of operational challenges. Additionally, examining these issues within a specific economic context provides valuable insights into how such systems function under conditions of economic instability.

However, several limitations should be acknowledged. Participants may have exercised caution in expressing challenges or underreported certain issues due to organizational sensitivities. To mitigate this concern, confidentiality was strictly ensured throughout the study. Time constraints and workload pressures may also have influenced participation; this was addressed by offering flexible interview arrangements. Furthermore, to minimize reporting bias, leading questions were avoided, and the study objectives were clearly explained to participants.

Conclusion

The effectiveness of performance- based payment systems depend less on their conceptual design and more on implementation quality, transparency, financial sustainability, and perceived organizational justice. When the link between performance and payment is weakened and payments are delayed—particularly in economically unstable contexts—the system may fail to motivate staff and may instead contribute to reduced organizational commitment and altered work behaviors.

Improving the effectiveness of such systems requires strengthening the alignment between performance and payment, reducing delays, and enhancing transparency in payment mechanisms. These measures are essential for rebuilding organizational trust, improving staff motivation, and ultimately enhancing the quality of healthcare services.

Abbreviations

PBP
Performance-Based Payment

Declarations

Ethics approval and consent to participate: Ethical approval was obtained from the Institutional Review Board (IRB) / Ethics Committee of Shahid Beheshti University of Medical Sciences (ID: IR.SBMU.RECTECH.REC.1405.502). All methods were carried out in accordance with relevant guidelines and regulations, and the study was conducted in accordance with the Declaration of Helsinki. All ethical principles were strictly observed: written informed consent was obtained from all participants, participation was voluntary, confidentiality and anonymity were maintained, and no personal data were disclosed.

Consent for publication: Not applicable. This manuscript does not contain any individual person's data in any form (including individual details, images, or videos).

Availability of data and materials: The datasets generated and/or analyzed during the current study are not publicly available due to the confidential nature of the interview data and the assurances of anonymity provided to participants, but are available from the corresponding author on reasonable request.

Competing Interests: The authors declare that they have no competing interests.

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Authors' contributions: Tahereh Sabouri Aghbolagh Rostam Khan conceptualized the study, conducted the interviews, and performed the data analysis. Marzieh Babaee and Soleiman Ahmady designed the methodology, Vahideh Zeynali and Nasrin Shaarbafchizadeh and Somayeh rajabzadeh drafted the initial manuscript. All authors contributed to data interpretation and provided critical revisions for important intellectual content. All authors read and approved the final manuscript.

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Figures



Figure 1

theme of research

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