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Challenges of Payment Methods in the Iranian Health System and Solutions: A Qualitative Study

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ABSTRACT

Background: The implementation of different reimbursement methods has various positive and negative effects on the health system of different countries. Identifying the challenges of these methods is essential to improve these reimbursement methods and modify them if required. This article aimed to qualitatively assess the challenges of current hospitals' payment systems in the Iranian health system and determine the required solutions for modifying these payment systems.

Methods: This qualitative study was conducted in 2019. Semi-structured interviews were conducted recruiting 20 experts including operational, middle and top managers working in three different levels of health systems. Data collection was continued until it reached a saturation point. MAXQDA 10 was used for data analysis. The data content analysis method was used to analyze the data and the themes and categories were determined.

Results: The challenges of the payment systems were categorized into four main themes regarding policy, cost, regulatory and functional challenges, and 15 sub-themes. The findings related to the proposed strategies were presented in six main themes consisting of legal solutions, structural reform, cost, quality improvement, service provider and client, and monitoring and evaluation; and 12 sub-themes.

Conclusion: This study showed that the health systems in Iran face various structural and procedural challenges in terms of reimbursement mechanisms. Therefore, it is recommended that policymakers pay attention to these challenges before making any changes. Using hybrid payment systems can be one of the proper solutions.

Key words: Challenges, Provider payment mechanisms, Provider payment methods, Reimbursement system, Qualitative study, Iran

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Introduction

Significant increases in health care costs have prompted communities to seek arrangements to ensure that people are access to health care even they are unable to pay for it (1). Countries' health care financing systems must follow policies and regulations to provide access to care for all individuals regardless of their ability to pay (2).

One of the techniques for controlling and limiting health costs that have been considered by health planners and policymakers is the payment methods to service providers that affect the quality and quantity of health care (3).In payment systems, money obtained from financial resources (such as government, insurance agencies, and patients) is paid to the service provider, which may include an individual (such as physicians or nurses) or an institution (such as pharmacy, laboratory,and hospital) (4).

There are various payment methods in health systems in which different countries use one or more than one of them based on their requirements and capabilities (5,6). The four main methods of payment to service providers include salary, capitation, fee-for-service, and case-based payment (7). Each of these payment systems hasits pros and cons. The fee-for-service reimbursement system in health care encourages care providers to order more services and the system moves more toward volume-driven care rather than value-driven care (8). In the capitation payment system, some settings see patients less frequently and ‘do less’ to patients when they do see them (9). In recent decades, some systems replaced the Diagnosis-Related Groups (DRG)-base reimbursement system. This system needs redesigning the payment system in terms of the true cost of provided services and the actual cost of each patient's treatment (10).The reasons for choosing and applying the DRG-based reimbursement system are the first objectives such as reducing service costs, motivating the efficient use of resources in health systems, which lead to increased efficiency. Moreover, health systems apply this method of the payment system to increase the transparency of the services provided (11).

An appropriate payment system should be designed in such a way to prevent waste of resources and unnecessary services to patients, it also should provide sufficient revenue for service providers so that they have an incentive to provide high-quality services (12,13).

Iran, as a developing country in the eastern Mediterranean with a population of about 80 million, has four governmental social insurance companies. These companies cover approximately 90 % of individuals. These companies have an approximately similar structure, with the mechanism of revenue collection in terms of premiums, pooling resources, and purchasing goods and services (14). The mechanism of payment to providers varies depending on the type of service, the level of service provided, the type of ownership of the institutions and the type of insurance. The payment system for family physicians who provide prevention services is the payroll system. The payment system for services provided in offices and clinics is based on a fee-for-service reimbursement system, but depending on the type of ownership, service providers can receive salaries beside fee-for-service. In the inpatient sector, payments to hospitals, except for ninety cases surgeries to a global budget provider payment method paid,the major payment systemis based onthe fee-for-service reimbursement system (15).

In a qualitative study done by Doshmangir et al. (16), the results showed that the mechanisms of payment in the health systems of Iran have no transparency and there is no consistent method for payment in different settings. Various criteria involve in developing a clear process for determining the payment mechanisms. In this study, it is recommended that before developing payment mechanisms and financial incentives; it is required to have the opinions of key stakeholders. The results of another qualitative study showed that there is a gap between the intended policy regarding the payment system and its incentives and its execution (17).

Given the importance of payment systems to service providers, the present study aimed to investigate the challenges of payment systems in

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theIranian health system as well as the strategies for addressing these challenges.

Materials and Methods

This study was a qualitative study conducted in 2019. To recruit the study population, the purposive sampling method was applied and experts working in the health sector or insurance companies who had the desire to participate in the study and to share their experiences were invited. The characteristics of the participants are summarized in Table 1.

The guiding questions for the semi-structured interviews were determined based on the relevant studies and finally approved by the research team. Each interview lasted between 30 and 60 minutes. Interviews were continued until data saturation and saturation was reached with 20 interviews. The researcher wrote the recorded information verbatim on paper after each interview as early as possible. This was done after listening to the recordings several times. Moreover, note-taking was done by the researcher while recording during the interview. In the findings section, the letter "P" with the number means the interviewee who is quoted.

Data analysis

Content analysis was used to extract the concepts in the text of the interviews and to determine their repetition and relationships, and to infer the facts underlying the perspectives of the experts. Content analysis was performed in both deductive and inductive ways. The purpose of the deductive analysis is to extract the themes and sub-themes, while at the same time to expand the study framework. MAXQDA 10 was used for data analysis. Before starting the data transfer and adjustment process, the researcher became familiar with its scope and diversity and gained an overview of what was collected. All stages of the interview, including listening to the recorded audio, transcription and reading the transcripts were performed by the researcher. Also, all the recorded interviews and discussions were reviewed by the researcher once again and the possible questions were identified. Then, the content summary form for each interviewee was gradually completed throughout the process. The transcribed text was indexed using the codes associated with the themes and sub-themes. The researcher was re-contacted with the interviewees to clarify the information, and the interviews were then sent to the interviewers for evaluation to ensure the accuracy of the material presented and the authenticity of the content of the interview. To determine the themes and sub-themes the "compare and contrast" approach was used. This approach is based on the idea that themes represent how texts are either similar or different from each other. To do this, one of the researchers conducted a carful line-by-line analysis. By the bottom-up approach, the first sub-themes are determined and then the main themes are identified. The solutions proposed by the participants were reviewed by all researchers and the themes and sub-themes were approved by the researchers.

To achieve the validity and accuracy of the data, the following criteria were assessed: Credibility, Dependability, and Conformability. To ensure credibility, the extracted themes were checked with participants in the study. They expressed their perspective on the extracted concepts; moreover, they answer the questions and issues raised by the research team at various stages of the study. The conformability was ensured by maintaining documentation throughout the research process. Furthermore, the data was assessed to ensure that the findings accurately represent the information that the participants provided. The researcher also sought the perspective of another study team about the findings to ensure conformability.

At all stages of the study from data collection until the end of the analysis and reporting the findings, issues such as informed consent, anonymity, the confidentiality of information, and the right to withdraw from the study at any time were observed.

This research has been approved by the ethical committee of the research deputy of Kerman University of Medical Sciences (ethical code number IR.KMU.REC.1398.43).

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Table 1. The characteristic of the participants

Level	Position	Frequency
Top managers	Ministryof Health	3
	Health insurance	6
Middle managers	Faculty member ofuniversities	6
	Health insurance	3
Operational managers	Hospital	2

Results

The findings on the challenges of Iranian payment system are presented in Table 2. These challenges were categorized into four main themes and 15 sub-themes.

Policy Challenges

One of the challenges that most interviewees reported is the failure in the custodianship of the health systemfrom providing and purchasing services. In other words, Iran's Ministry of Health is the purchaser, the provider, the supervisor, and the payer of the health system. "The biggest problem is that the custodianship of the health system is not separated from the provider. That is, the health system trains the human resources of the health sector, develops policies and also pays for services that are provided" (P.7).

Health system policymakers are often physicians, therefore, when developing policies, and making the legislation and decisions it is important toconsider the benefits of these groups of providers, which is a serious failuretothe health of the country, as several interviewees said."The next issue is a conflict of interest, both at the individual level and at the institutional level, that is, those who make decisions in the ministry, are the same groups of physicians who are active in the health sector, therefore, when decision-makingor approving decision naturally and unconsciously consider their benefits"(P. 15).

One of the problems that has affected health system policy and which has affected payment systems is the difficulty in tariffing health services. "The difference in tariff between the public and private sectors and the high tariff of the private sector is a serious disadvantage. Although, in high-level documents, it is mentioned that these two tariffs should be close together, unfortunately, due to these differences physiciansprefer to work for the private sector and have practice for them"(P.15).

The next challenge is the lack of standardization and the existence of clinical guidelines and lack of a framework for using the guidelines, therefore, insurance companies do not make use of these guidelines when reimbursing the provided services. "Until we don't design a clinical guideline, we can't have strong monitoring, so our quality of service is going down, so no other payment system will come to fruition" (P.20).

Another challenge is the lack of proper linkage between different health system officialsproviding health services at a different level in the country. "We have a per capita payment system at the first level, but the problem is that when the patient comes from the first level to the second level, it has nothing to do with the first level. The cost that the patient paid at first level has nothing to do with the costs of the second level" (P.5).

Some believed that the main problem of payment systems in the country is the lack of attention to other officials of the health system and therefore payment systems could not function properly. "The payment system alone cannot be a measure of one's judgment. The payment system in the whole health domain is meaningful, each payment system has its advantages and disadvantages, so you cannot alone make good or bad judgments about payment systems" (P.10).

Cost Challenges

These challenges relate to the costs that payment systems have brought to the health system. One of the problems that most interviewees pointed out was that the country's payment systems impose

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unnecessary costs on the patient. This problem mainly arises because unfortunately the information of the patient and the service provider is not equal, and this makes the physicians a decision-maker for the patient who shouldrecognize the patient's need. As a result, due to the increase in physician-induced demand, which is one ofthe consequences of thefee-for-servicereimbursement system in physicians lead patients into consuming too much care.Therefore, it results in increasingpatient costs. "These demands lead to both financial and physical problems for patient" (P.5).

The next challenge that the interviewees mentioned was that the fee- for- service reimbursement system, which is the dominant payment system in the country, also imposes unnecessary costs on the insurance companies. This problem is mainly because in this system the entire risk of payment is transferred to the insurance organizations and this increases the demand for physicians, which is mainly because of the income incentive. "In the fee-for-service reimbursement system, because the whole risk is on the insurer side, we no longer have control over the resources and costs. For example, in this system, what the doctor says and records in the patient's record have to be paid by the basic insurance agencies, even the hospital, doctors and staff may provide more services to increase hospital income" (P.11).

The fee-for-service reimbursement system, which is the dominant payment system in Iran, has increased the costs of insurers because of the increased liabilities of the insurance organizations. This causes those organizations to have problems in their payments to reimburse institutions and lead them not to pay their bills on time. As a result, this has increased the dissatisfaction of service providers. "If insurers pay their providers on time, undoubtedly, fee-for-service is good for our doctors. Because when they provide more service, they get more revenue. However, with the restrictions that insurance currently has, like budget deficits, deficits created after the transformation plan which lead to delayed payments, undoubtedly cause dissatisfaction among the providers" (P.2).

The next challenge for payment systems is the increase in costs of the health system, mainly due to inappropriate consumption, depreciation, and consequently the waste of health system resources, and lack of controlling costs by the relevant agencies. "The fee for service reimbursement system is a retrospective payment system that renders the unnecessary services, thereby increasing the burden on the health system" (P.9). "The current payment system is rapidly wasting the resources and facilities of the hospital because of overusing these resources" (P.4). There is an incentive for more services which increases thecosts" (P.13).

Regulatory Challenges

Regulatory challenges are challenges that arise due to lack of supervision and quality control of services and there is no linkage between the current payment mechanisms and the resultsor outcomes of services. Paying attention to these issues and trying to resolve them can improve the quality of health care and patient satisfaction. One of the regulatory challenges cited by the interviewees is the lack of proper regulatory and punitive mechanisms and the lack of linkage between current payment mechanisms and the outcome of provided services. "There is no linkage between the reimbursement and Hospital Quality" (P.12), "Insurer does not formulate a framework for qualityand do more audits instead of quality control" (P. 13).

On the other hand, because in the current payment systems there is inadequate monitoring for providing services based on clinical guidelines, diagnostic and therapeutic institutions are focusing more on increasing the number of services rather than the quality of service, which results in patients' dissatisfaction. Some instances are: "Concurrent patient visits" (P.6), " Crowding in office and long waiting time" (P.1), "The patient spends money for services without benefit" (P.6), Long waiting lines "(P.4), making decisions based on the service

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providerperspective, not based on evidence" (P.4), "in fee-for-servicereimbursement system in which the primary focus is on the quantity of service rather than the quality of service" (P.5).

Operational challenges

These challenges are those that existed mainly like the current payment systems and as a result of lack of regulation by policymakers and lack of proper control and oversight of the regulation in the Iranian health system. One of the challenges of the payment system is imposing unnecessary services to patients, largely due to the lack of clinical standards on one hand and the gap between the income of the institutions and the rate of service delivery on the other hand. "One of the challenges that fee- for -service raises is the issue of induced demand, as the physician's income is from the amount of service provided which may render the service overwhelming and occasionally may cause harm to the patient." (P.11).

Other challenges that the fee-for-service reimbursement system poses are its negative impact on the quality of service provided.The interviewees addressed effects such as "increasing the likelihood of nosocomial infections due to prolonged hospital stay" (P.2), "Long waiting time and patients' frustration "(P.5 and P.20)," patient harm due to complications of unnecessary medications and services and overusingof services "(P. 4 andP. 5).

Restricting patients' access to services due to long waiting lists and restricting access to services due to the limited resources and insufficient hospital facilities (including beds, equipment, and supplies) is another addressed challenge. "Negative payment systems like per case and fee-for-service reduce access. That is, we restricted access to services for some patients because we increased the unnecessary services to others. We give more services to one came across to get more money, and since our resources are limited, ultimately we faced with limited access for others"(P.6).

Proposed solutions

The findings related to the solutionsare presented in six main themes and twelve sub-themes (Table 3).

Regulatory solutions

The most important proposed solution in the field of regulatory solutions is reforming and positioning the Ministry of Health as the macro-policy maker in the field of health. "The role of the ministry as stewardship is forgotten. It always decides in the provider's best interest. If the ministry of health does not becomestewardship, the prospective payment system cannot be beneficial" (P.7).

Realizing the existing legal capacity and enforcing strategic purchasing are the second set of regulatory solutions proposed by the interviewees. "Strategic service purchasing was mentioned in the Fifth Program Act that unfortunately neither the Ministry of Health nor the Ministry of Cooperatives and Insurance companies did not apply. If it did, it could certainly reduce costs and save insurance funds and lead payment system from fee for services to the strategic purchasing that would not have happened"(P.2).

Structural Solutions

The payment system is not a magical formula of reform and it is essential to establish a monitoring and evaluation system alongside the use of any payment system. At the same time, the use of a specific type of payment system is not responsive and requires different payment mechanisms with different characteristics depending on the conditions governing the structure of each health care system. "Payment systems in every country have several advantages and disadvantages; therefore, it is recommended to use a hybrid method. We must offer different payment systems to different organizations in terms of the health conditions of the country" (P.6).

Moving towards a prospective payment system, namely the global budget, the implementation of DRG was one of the important solutions to address the problems of current payment systems reported by the participants. There were various reasons for moving towards changing the

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payment system. One of the reasons is to control the costs of the health sector. "I think we have to go for global payment system and gradually go for DRG; if we change the system to DRG, the places that providevery expensive services, are forced to move within the framework, to control costs and to save a lot of resources "(P.9).

Compared to those who disagreed with prospective payment systems, some believed that this method cannot be the only solution. In other words, this method alone could not be useful for resolving current health problems. Until we do not prepare the required infrastructure for prospective payment system infrastructures the problem will not be resolved. "What do we have to admit is what are we going to do with DRG? Or what is the usage of this system? Do you know that if the philosophy of the diagnosis-related groups is not properly understood, or if the DRG infrastructures and components are not properly deployed in the system, the problem will be doubled and we work in vain" (P.20).

Reforming payment systems structure in terms of regional measures and indices is another proposed solution. Moving from the national payment system to the regional payment system will help. Moreover, considering the level of health systems in payment help to have a rationalized payment system. "We experienced a global payment system, we are experiencing a national payment system. We didn't go to the regional payment system, as we have variations in geographical and climatic situations and diversity in patients, center conditions, and referrals.I believe various factors including geographical factors are important. For example, we should consider deprived and non-deprived areas" (P.7).

Cost Solutions

Cost and Tariff solutions are solutions that examine the pricing and tariffing the health services in the country to address the disadvantages of existing payment systems. The first set of cost and tariff solutions proposed by the participants is the need to update and actualize health sector tariffs and correct pricing of services based on the correct expenses as the basis of payment systems. Some participants complained about different tariffs in the public, private and charity sectors and suggested that steps should be taken to harmonize the tariffs in these sectors and reduce the cost of hoteling in charity hospitals. "The difference between the public and private sectors and the high tariffs for the private sector is a serious disadvantage. The fact is that we should bring the tariff in these sectors together" (P.15).

The establishment of a cost-based accounting system to modify the cost of services as a complementary solution was recommended. Classifying the centers to pay based on their cost-based pricing will be beneficial. “Todays, we do not have a standard mechanism for calculation of the cost of health services. The following four elements are required for calculation, the purpose of the provided services, the sources of cost, the market and the frequency of the patient. For years, there has been no agreement on how to calculate the price in the ministry of health"(P.17).

Quality Improvement Solutions

Solutions for quality improvement are those strategies that can be used to enhance the quality of clinical care provided for the patients. These strategies mainly emphasize the development and use of clinical protocols and guidelines to standardize health care and improve patient health outcomes. Developing and designing customized clinical protocols and guidelines with considering the business plan and cost-effective approach creates a clear road for delivering standard care for policymakers. “We should start to design guidelines, but it is not enough only to design a guideline. The important factor is to have an institutionalized guideline and have a plan for its implementation" (P.20).

Considering the definitive outcomes of patient health as a distinct component of the payment system was reported bythe interviewees. Payment based on the health of the patients as an outcome of provided care by physicians or hospitals is important. “We do not have any monitoring

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system now, for example, we do not monitor how many patients out of 20 ones of a care provider after surgery were re-hospitalized. The quality of the provided service is not monitored, not on behalf of our insurance companies or behalf of the ministry. It is no business of these two authorities to see whether the money they paid could improve patient health. There should be a linkage between the physicians' salaries and their performance outcomes" (P.17).

Service providers and receivers solutions

These solutions include strategies that propose more involvement of physicians as a performer in the health systems and patients as receivers of the services for policymaking. Training physicians and engaging them to reform payment systems, in particular reducing health system costs, has an important role in addressing the problems of payment systems. On the other hand, payment systems need to move toward strategies that enhance providers' incentives to maintain public health. "Doctors are your main customers, until; you do not involve physicians with no conflict of interest in decision making you cannot succeed. Physicians, nurses and hospital managers should continuously inform about training programs and guidelines and strategies so that they can co-operate with national and regionaldiscussions "(P.19).

Service recipients play an important role in reducing health care costs and addressing health problems.The health system with investment in people and training and culturingthem will faster achieve the goals of developing and improving payment systems. "People are the ultimate consumers of the health system.Health and insurance policymakers need to have a plan for changing people's culture to promote them to accept the referral system. They need to inform families to go to the doctor's on time. The per capita index of drug use in Iran is a very bad indicator. The consumption of salt, soda, and sugar is bad" (P.3).

Monitoring and Evaluation Solutions

The last set of proposed strategies suggested by the interviewees focuses on monitoring and evaluation solutions. Providing realistic, unbiased monitoring by insurers and the Ministry of Health to change the behavior of service providers as well as ensuring adequate and quality service delivery by service providers is an important recommendation in this area. "Appropriate agreement should be made between the providers, the Ministry of Health and the insurance companies regarding monitoring and instead of formal monitoring and sometimes inaccurate deductions, both parties agree on realistic monitoring that assures that they have good health care for patients provided by doctors and the hospital" (P.13).

For a payment system to function properly and to be committed to its implementation, a system of reward and punishment must be established to have optimal incentives for the successful implementation of payment systems. "In our payment system, whether to person or to the organization, we need to consider a good reward and punishment system. If a hospital, for example, creates patient records in such way to receive more resources, treats certain patients to gain more profit, reject hospitalization of patients with certain conditions which are difficult to cure, or refer patients outside of the institution to buysome equipment, all should be considered in payment system as reward and punishment" (P.15).

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Table 2. The challenges of the current payment systems of Iranian hospitals

Main themes	Sub-themes
Policy challenges	The failure in thecustodianship of the health system Conflict of interest Unrealtariffs Lack of guidelines Lack of consistency between different payment systems Lack of proper linkage between officials
Cost challenges	Imposing unnecessary costs to the patient Imposing high costs to insurance companies Delay in payment of claims and dissatisfaction of providers Increasing health system costs
Regulatory challenges	Lack of proper supervision and punishment mechanism Dissatisfaction of individuals
Operational challenges	Imposing unnecessary services to the patient Reduce service quality Restrict access to services for some patients

Table 3. Problem Solving Solutions for Current Payment Systems of Iranian Hospitals

Main themes	Sub-themes
Regulatory solutions	Separation in the custodianship of the health system Realization of strategic purchasing
Structural solutions	Moving towards hybrid payment systems Move towards a prospective payment system Considering regional measures and indices
Cost solutions	Actual tariffs and accurate pricing of services Establishment of cost-based accounting system
Quality improvement solutions	Development and localization of clinical guidelines Considering patient outcome in the payment system
Service providers and receivers solutions	Training physicians and encouraging their participation in improving payment systems Training patients and culturalization
Monitoring and Evaluation Solution	Strong surveillance based on clinical guidelines

Discussion

The findings of the present study indicate that the most important challenges of the current payment system include policy, cost, regulatory and operational challenges.

The results of the present study showed that the lack of a clear separation in custodianship of health systemform service provider and receiver, and the inadequate role of the Ministry of Health, the conflict of interest in policymaking, the inappropriate tariff system in the country and the large difference between public and private tariffs, and the lack of clinical guidelines are important challenges for policymaking. Behzadi, in his study which was conducted in 2017 showed thatthe separation of service receiver and provider and misunderstanding and the improper relationship between these two sectors cause a gap (18). Moreover, Takin et al. (19), in examining the experience of the separation of service receiver and provider in employing family physician and rural health insurance showed that the separation not only failed to change the situation but also led to misunderstanding, and lack of appropriate cooperation. In the health system of Iran, the decisions are made by physicians who are the providers. Behzadi in his study showed thatthe global budget provider

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payment method did not allow this system to work properly (18). Since policymakers are often physicians and make benefit from private sectors, they are agreed to have higher tariffs in this sector. The high tariff in the private sector is a big incentive for a physician to lead patients to the private sector and get money under the table. Lack of scientific and rational basis for defining tariff is a challenge reported by several studies (18,20,21). Lack of standards and guidelines for clinical practice and lack of proper structure to apply these standards to implement quality promotion programs and lack of use of these clinical guidelines by insurance for payment to health institutions are problematic issues. As a result, insurers pay for providers, regardless of whether the patient has recovered from the condition that received care for it or has suffered from a complication. For this reason, fake documenting in fee- for -service reimbursement system and a variety of compensation mechanisms are being used by service providers to raise revenue and lead to ongoing tension and litigation between insurer organizations and health centers. Grimshaw et al. (22), Study showed that policymakers can play an important role in preserving health resources by designing and implementing clinical guidelines, andconsequently, changing provider behavior. Davari et al. (23), in their research, cited the lack of clinical guidelines as one of the factors contributing to the increase in health care costs in Iran. In their study, Ebrahimpour et al. (20), cited the lack of clinical guidelines as one of the problems of achieving sustainable insurance coverage in Iran.

Another important finding of the study was that the country's payment systems have imposed unnecessary costs on patients, insurers and consequently, the country's health system. Ebrahimpour et al. (20), in their study concluded that an Iranian dominant payment system which is fee-for-service has high administrative costs. Gorge and colleagues also pointed to the high cost and lack of attention to individuals' health of Iran's payment system (24).

One of the problems of the payment system that emerged in this study is the lack of determining a reward and punishment system and the lack of relation between the current payment mechanisms with the results and consequences of provided services. On the other hand, in the current payment system, due to inadequate monitoring regarding providing care based on clinical guidelines, diagnostic and therapeutic centers are focusing on increasing the number of services over the quality of service to increase revenue. Behzadi also pointed out in his research that the lack of a monitoring mechanism and the determining appropriate punishmentmechanism for the performance of the service provider is one of the limitations of the global budget provider payment method (18).

One of the most important operational challenges that Iranian payment systems create in the field of hospitalization is imposing unnecessary services by physicians on patients, and its negative impact on the quality of provided services, the restriction of patient access, the long waiting list and the restriction of access of patients to services due to the limited resources and insufficient hospital facilities. Ebrahimpour, et al. (20), and bastani et al. (21), also pointed out the high level of imposing unnecessary services. Hassanzadeh has also shown that various services were not based on evidence-based guidelines (25). On the other hand, Behzadi in his research addressed the rise of DRG Creep, early discharge, and transfer of cost from the inpatient to the outpatient sectors as important operational problems (18).

In this research, the participants proposed some strategies to tackle the payment system challenges such as separating custodianship of health system from provider, making strategic purchasing, moving toward hybrid payment systems, moving toward prospective payment systems, establishment of cost-based accountings and correct tariff of services, establishment of cost-based accounting, and development, customization of protocols and guidelines, considering the outcome of the services, and also training the physicians and involving them in making decisions

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and monitoring based on clinical guidelines.

Numerous papers and researches have focused on the necessity of reforming payment systems in Iran (18,20,26,27). Contrary to the findings of the present study, Ebrahim Pour et al. (20), believed that a single payment mechanism can reduce management costs. Behzadi, on the other hand, concluded in his research that the elimination of the global budget provider payment method and the implementation of the DRG-based reimbursement system will be costly because of the lack of necessary infrastructure. Reforming the global budget payment system and simultaneously moving towards providing required infrastructures for diagnosis-related groups at the right time were considered the best solution (18). The findings of this study, similar to those of Babashahi et al. (27), suggested the use of hybrid payment systems for the Iranian health system.

In this study, the snowball sampling method was used to find the participants; this may result in missing some experts. Another limitation of the study was that the author did not use a theoretical framework to categorize the data. However, a careful step by step analysis was done to determine the themes. Therefore, this kind of detailed analysis helps the researcher focused on the data themselves rather than simply on theoretical flights of fancy.

Conclusion

The findings of this study showed that payment systems in Iran faced various challenges and its success requires proper planning for dealing with these challenges. Given, the current problems in the Iranian payment system, reforming the payment system is very necessary and inevitable and it is better to take steps to implement it as soon as possible. However, it is also a big mistake to have an unplanned change. Because in the current payment system in Iran there is a gap between the intended policy regarding payment system and its execution.On the other hand, using a single payment system as an ideal payment system does not seem to be the ideal solution, and it is better to use appropriate payment systems at different levels of services.

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Conflict of interests

None declared.

Authors' contributions

Barouni M designed research; Mohsenbeigi E conducted research; Ahmadian L analyzed data; Saberi Anari H and Mohsenbeigi E wrote manuscript. Mohsenbeigi E had primary responsibility for final content. All authors read and approved the final manuscript.

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