

# Strategies for improving the financing of family medicine program: Evidence from Iran

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## Abstract

**Background and Aims:** The impact of health financing on the performance of the entire health system, including access, quality, and efficiency of healthcare, has been emphasized in the Astana Declaration, and the need to strengthen primary healthcare (PHC) and policy integration has been emphasized. After about two decades, the family medicine (FM) program in Iran is still facing great challenges. The aim of this study is to explore strategies for strengthening financing of the FM program in Iran, a vital component of PHC.

**Methods:** A qualitative study was conducted in 2021. Purposeful sampling was used to select 34 policymakers, managers, and experts from various levels of the Ministry of Health, Iran universities of medical sciences, plan and budget organization of Iran, and health insurance organization in Iran. Thirty-four semistructured interviews were conducted to collect data, which were analyzed by content analysis.

**Results:** Through the analysis of interviews, our study has identified five strategies (identification and management of sustainable resources, pooling of sustainable resources, modeling of service provision, payment system model and its implementation process, and FM management structure), and 13 actions for strengthening financing of the FM program in Iran.

**Conclusion:** Our study has identified five strategies and 13 actions for strengthening the financing of the FM program in Iran. These strategies and actions should be considered by policymakers during the review of the FM program in Iran. Without implementation of the suggested strategies and action, allocated resources may be wasted.

## KEYWORDS

family, healthcare financing, physicians, primary healthcare

## 1 | INTRODUCTION

More than 44 years after the Alma-Ata Declaration, policymakers have increasingly recognized the significance of comprehensive, integrated, and coordinated primary healthcare (PHC) within national

health systems, emphasizing the need for its revitalization. The 2018 Astana Declaration by the World Health Organization reaffirmed the vision of PHC outlined in the Almaty Declaration, aiming to achieve sustainable development goals and attain universal health coverage (UHC).<sup>1</sup> Many countries in the Middle East established family

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medicine (FM) program as means to implement the Alma Ata Declaration.

The FM program serves as a cornerstone in successful PHC models, playing a vital role in the development, strengthening, and integration of service delivery systems within health systems.<sup>2</sup> Financing, known as a critical element for health system success, when combined with the PHC approach and essential public health functions, can contribute to the establishment of sustainable and resilient health systems characterized by equity, accountability, quality, and improved efficiency, ultimately leading to UHC and health security.<sup>3-5</sup>

In many countries, current financing models and payment systems primarily focus on hospital services, resulting in increased costs for the entire health system and placing a higher financial burden on households.<sup>6</sup> The Covid-19 crisis has underscored the necessity for a PHC-based health system supported by robust financing mechanisms. Consequently, attention to financing arrangements and service provision is essential to effectively address the evolving health needs of the population.<sup>7</sup> Governments should allocate increased and improved funding to PHC, adopting a comprehensive approach involving all actors and stakeholders, while continually strengthening PHC through monitoring, evaluation, and strategic investments.<sup>8,9</sup> Over the past 40 years since the Alma Declaration, valuable lessons and experiences have been acquired, emphasizing the importance of addressing social determinants of health, leveraging new technologies, and enhancing community engagement to overcome challenges and obstacles in PHC implementation.<sup>10</sup> Following the Astana Declaration, numerous studies have highlighted the importance of multidisciplinary teams led by FM and the necessity of sustainable financing for robust PHC.<sup>11,12</sup> While FM has emerged as a central component of health system reforms in the Middle East and other regions, its implementation has encountered significant obstacles and challenges.<sup>13,14</sup> Two decades ago, Iran introduced the FM program as part of its primary healthcare network reforms.<sup>15</sup> FM focuses on providing PHC services, including preventive care, diagnosis, treatment of common diseases, and management of chronic diseases, and is funded primarily through public sources in Iran.<sup>16</sup> The structure of FM is organized in the form of primary care units, rural healthcare centers and urban healthcare centers, and the Ministry of Health and Medical Education (MoHME) sets policies and regulations for the healthcare and FM system. MoHME and its affiliated organizations monitor quality through inspections, performance indicators, and accreditation.<sup>17</sup> However, during these two decades, the program has undergone various changes and encountered challenges, including financial difficulties that have impacted its achievements.<sup>18</sup> Notably, many households in Iran continue to face significant financial burdens, with out-of-pocket payments accounting for over 30% of total healthcare expenses according to Iran's national health accounts report in 2018.<sup>18,19</sup>

The economic challenges faced by FM in Iran include insufficient and unstable financial resources, the presence of diverse health insurance funds, unrealistic tariffs, lack of coordination in payment systems between primary care and referral levels, and inadequate

monitoring of the financial and payment systems.<sup>20,21</sup> Sustaining the existing situation perpetuates inefficiencies, wastage of financial resources, and undermines the service delivery system. While financing challenges for the FM program have been documented, strategies to address these challenges have not been explored in Iran. The aim of this study is to explore strategies for strengthening financing of the FM program in Iran.

## 2 | METHODS

### 2.1 | Study setting

The healthcare system in Iran is mainly centralized and the MoHME plays an important role in the supervision, governance, management, and administration of healthcare services.<sup>22</sup> The MoHME regulates the healthcare sector, sets healthcare policies and standards, oversees resource allocation, and manages healthcare facilities, including hospitals and clinics.<sup>23</sup> MoHME operates healthcare facilities at the national level and collaborates with provincial and local health authorities to provide healthcare services across the country.<sup>24</sup> PHC services in Iran are provided through a network of healthcare centers that offer basic healthcare services to the public.<sup>25</sup> These centers are located in both urban and rural areas and are operated by the MoHME.

### 2.2 | Study type and sampling

A qualitative study was conducted in Iran. The study participants consisted of 34 policymakers, decision-makers from the Ministry of Health, health insurance organizations, professors from medical sciences universities and research centers, as well as executives of the FM pilot program in various provinces (Table 1).

Sampling was performed using a purposeful method, which is a type of nonprobability sampling. The selection criteria for interviewees included their specialized knowledge in health system financing, experience, and familiarity with the FM program, active participation in the FM program pilot implementation, and representation from relevant organizations and groups involved in the program.

### 2.3 | Data collection

Data were collected through semistructured interviews. One of the researchers conducted face-to-face interviews using an interview guide and open-ended questions in October 2021 to January 2022. The time and place of the interviews were set based on the agreement of the parties and before conducting the interviews, the research purpose was explained orally to the participants. Each interview lasted between 50 and 80 min and was digitally recorded with the respondents' consent. At the end of each interview, the interviews were listened to several times and then transcribed word by word as early as possible.

**TABLE 1** Participants characteristics.

Characteristics	Ministry of Health and Medical Education	Health insurance organizations	Medical universities and affiliated research centers	Executive directors in pilot provinces
Education				
MSc	-	2	-	-
General practitioner	6	1	8	3
PhD	3	2	7	2
Gender				
Male	9	4	11	5
Female	-	1	4	-
Total	9	5	15	5

## 2.4 | Data analysis

In this study, the data were analyzed based on Graneheim and Lundman qualitative content analysis (2004) which was a systematic and clear eight-step method for data processing and analysis as follows.<sup>26</sup> These steps, respectively, included preparing data, deciding on the analysis unit, classification, testing and fixing the coding in a text sample, coding the whole text, checking the coding stability, drawing conclusions from the coded data, reporting the data analysis method, and findings. Data were categorized and analyzed via MAXQDA10 software. To ensure accuracy and validity of the study, criteria such as acceptability, transferability, reliability, and verifiability were employed.<sup>27</sup> Also, reliability of the findings was enhanced by using member checking strategy, which allowed researchers to obtain feedback from some of the research participants. Adequate time was allocated for data collection, and the topic was explored from different perspectives. Revision by supervisors involved additional comments and manuscript reviews by colleagues. Transferability was improved by selecting suitable samples, and data collection and analysis were conducted concurrently. To enhance uniformity, data analysis was performed by different researchers and external observers, leading to consistent findings. The entire research process was thoroughly documented to increase verifiability. Quotes (translated from Persian to English) are consistently used in the results section and provided the basis for formulating category names. Each quote is "tagged" with an identifying code "Interview Person (IP) 1-34."

## 3 | RESULTS

We analyzed 34 semistructured interviews and five themes and 13 subthemes emerged. The five themes are: identification and management of sustainable resources, pooling of sustainable resources, modeling of service provision, payment system model and its implementation process, and FM management structure (Table 2).

The results of the study are presented below, categorized into different areas and subareas.

## 3.1 | Identification and management of sustainable resources

### 3.1.1 | Evaluation of existing resources and identification of new resources

The participants in the interview highlighted the importance of evaluating the financial resources of the health system, particularly the allocation of funds to PHC. Such an assessment can uncover the challenges and potential opportunities in financing PHC. It can provide evidence to policymakers and stakeholders to garner political support and ensure the sustainability of financial resources. Additionally, this evaluation helps estimate the necessary resources and identify new sources of funding specifically for family medical financing. Two participants commented thus:

Evaluation and transparency are very important in the health and financial system. When the input and expenditure of the health system are carefully evaluated, transparency will increase and the components of the health system will be more compatible.... (IP17)

Any reform we want to implement in the programs should take into account the country's contexts, and we must consider the discussion of resource sustainability. The costs and revenues must be transparent. In terms of resource provision, the first step can be resource creation. (IP3)

### 3.1.2 | Marking resources for the FM program

Certain participants emphasized the significance of earmarking resources for FM and entrusting its management to the health insurance system. According to their viewpoint, incorporating FM's financial resources into government budgets and managing them through the health insurance system can prevent the diversion of these funds toward other programs and contribute to resource

**TABLE 2** Factors affecting the financing of the family medicine program.

Theme	Subtheme
Identification and management of sustainable resources	Evaluation of existing resources and identification of new resources
	Marking the resources of the family medicine program
	Determining the evaluation process of managing resources and expenses and outputs
Pooling of sustainable resources	Identifying methods of aggregating government resources and insurance
	Determining the executive process of playing the role of insurance in pooling resources
Modeling of service provision	How to establish service delivery units in the PHC network structure
	Updating service package standards, required manpower, physical space, and service provider units
	Revision of the system of registration and reporting and monitoring and evaluation using the technology platform
Payment system model and its implementation process	Evaluating the burden of referrals and the economic burden of services that can be provided at different levels
	Determining the tariffing process of the system of providing health services based on family medicine
	Reforming the payment system toward a mixed payment system on a per capita basis
Family Medicine management structure	Determining the expected functions resulting from the implementation of the family medicine program
	Determining the process of the monitoring and evaluation system at the national and provincial levels

Source: kabir et al.<sup>15</sup>

sustainability. Moreover, entrusting the management of financial resources to the health insurance system enhances the efficiency and effectiveness of these resources while preventing wastage. The participants elaborated on this when they said:

In the urban family medicine program, resources should be spent on program development, inflation and needs seen in the program. The resources defined for the family medical plan should not be spent in any other way and program, this is possible when the resources are available to the insurance and not the Ministry of Health. (IP1)

In the discussion of resource allocation, the vice president of development manages the money, and it's possible for the family doctor's funds to be used elsewhere. The money must be earmarked, just like construction lines, and tampering with it should lead to termination. (IP15)

### 3.1.3 | Determining the evaluation process of managing resources and costs and outputs

The interviewees further highlighted the importance of establishing a process to evaluate the management of insurance resources and costs over a specific period, overseen by the country's budget organization. Additionally, conducting economic evaluations of the outcomes stemming from the implementation of the FM program was emphasized. This process serves two purposes: enhancing the

monitoring of the health insurance system and fostering responsibility and accountability. Furthermore, economic evaluations of program outcomes contribute to transparent decision-making regarding FM financial resources and their allocation, ultimately facilitating resource sustainability. Some interviewees said:

In the previous administrations of the ministries, universities used family resources as a source of income. Therefore, it is important to establish a clear and transparent process for allocating resources, determining appropriate channels for evaluation, and ensuring accountability in the use of these resources. (IP27)

We should have a dedicated fund for the family medicine program, and this special fund should be clearly defined, equipped with a solid execution mechanism, subject to continuous monitoring and evaluation, and vested with specific authorities for resource allocation. (IP16)

## 3.2 | Pooling of sustainable resources

### 3.2.1 | Identifying methods of pooling government resources and insurance

According to the participants, it is crucial to identify and establish methods for pooling the financial resources allocated by the government for the FM program, with the consensus of relevant stakeholders. Currently, these resources are distributed across

various entities such as the Ministry of Health, Social Security, University of Medical Sciences, and Health and Social Insurance. Some participants emphasized the need to consolidate all sources into a single virtual fund, while others recognized the operational challenges and suggested consolidating resources into two or three larger funds. Overall, reaching an agreement on the approach to consolidate these resources can significantly contribute to improving the performance of the FM program. The participants commented as follows:

Sustainable resources are partially funded by insurance. Government shares are not paid on time. Governments should commit to paying the family doctor's fees to be well managed. No matter how stable the resources are, if the allocation is not done on time, the accumulation of resources will face problems and the resources are managed in an island way and there is no proper monitoring of its price and performance. (IP20)

In fact, we should establish a three-way agreement between insurance, the Ministry of Health, and the Budget and Planning Organization to manage resources in the healthcare system according to the policies of the healthcare domain. This way, we can ultimately benefit from a more efficient and acceptable management. (IP18)

### 3.2.2 | Determining the executive process of playing the role of insurance in pooling resources

According to the respondents, the absence of a designated custodian for managing the aggregated financial resources has led to inefficiencies in resource utilization. The lack of agreement between two main insurance companies (Iran health insurance organization and social security insurance organization) and the Ministry of Health regarding financial resource management has posed challenges for insurance companies. To address this issue, it is crucial to clearly define the executive role of insurance companies in pooling resources through a memorandum of understanding with the Ministry of Health. This would establish a framework for effective collaboration and coordination between the involved parties, ensuring efficient management of financial resources. When interviewed two participants commented:

Insurance must play its main role as a strategic buyer of services and provide financial management to insurance companies. It must have independent cost management and resource management. Insurance has strategic purchasing power. For which target group and at what price, we should have a registration and reporting system, a monitoring and evaluation system,

and a payment system. This is even though the Ministry of Health does not have a written plan. (IP14)

Unfortunately, one of the problems is that insurance companies have a limited role in resource management. They don't play an effective role in the process, approaching the matter with a traditional mindset and a one-sided perspective. (IP11)

## 3.3 | Reorganization of service provision

### 3.3.1 | How to deploy service units in the PHC network structure

The participants of the study highlighted the importance of establishing FM service units within the PHC network and ensuring the authentication process for both governmental and nongovernmental units. They expressed their concerns that the current provider units lack a people-centered approach and suggested that the establishment of provider units should be reevaluated in response to contextual changes. Additionally, considering the growth of nongovernmental provider units and the community's acceptance of these units, the capacities of these service providers can be utilized for the FM program within the PHC structure, provided that they meet the established standards. This approach can help enhance the accessibility and effectiveness of FM services.

Respondents commented:

We need to define a structure. From the minister's office, the minister himself should be at the head of the work, and all the interdepartmental colleagues up to the university president's office should be mutually defined. Also, at the level of city health centers, a structure should be defined under the auspices of a family doctor. (IP9)

We have not been successful in monitoring performance and quality control of healthcare service delivery units in the Family Physician Program in Mazandaran. The structure needs to be revised and rigorously implemented. (IP17)

### 3.3.2 | Updating service package standards, required manpower, physical space, and service provider units

The participants of the study emphasized the significance of establishing a process for updating the health service needs within health packages, as well as defining standards for service packages, manpower, and physical infrastructure. They highlighted that the failure of FM to adequately address the demands and needs of

people's health services, as well as the lack of attention and preparedness for changes such as the Covid-19 crisis, can significantly impact the program's performance and even lead to its failure. To address this issue, it is crucial to identify and determine service package standards, manpower requirements, and physical infrastructure based on the evolving demands and health needs of the population. By aligning FM with the changing health landscape, it can better respond to the diverse health challenges and ensure the provision of effective and efficient care. Some participants said:

The specified service package must be leveled. Once the leveling is done, the description of the leveling tasks based on the service package should be determined. The experience of dealing with Covid-19 showed the priorities of the health system and service packages should be revised. (IP3)

If service packages are based on people's needs, the burden of disease, and public demand, the assessment and monitoring indicators for the quality of service are determined based on these factors. (IP5)

### 3.3.3 | Revision of the system of registration and reporting and monitoring and evaluation using the technology platform

The participants highlighted the critical need for revising the data recording system and enhancing the service monitoring and evaluation system through the integration of advanced technologies. They recognized the pivotal role of data recording in facilitating integrated care and fostering coordination across different levels of service delivery. By establishing a robust evidence base, data recording can significantly contribute to informed decision-making processes. Leveraging integrated technology in data recording can facilitate information integration, enhance the effectiveness of service monitoring and evaluation systems, and ultimately improve the efficiency, responsiveness, and delivery of appropriate healthcare services to patients. Two participants commented thus:

There is a flawed bargaining system between the network and the insurer. Insurance does not have proper access to information and the network cannot properly process and analyze the information it has. (IP23)

IT is crucial, and we should have all financial and health transfers in the system. Another point is that we should be relative, not absolute. We shouldn't be absolutist. Just taking one step forward at the primary level means we have made progress. We should start from the easier places step by step and gradually move the work forward. (IP14)

## 3.4 | Payment system model and its implementation process

### 3.4.1 | Evaluation of the burden of referrals and the economic burden of services that can be provided at different levels

Participants expressed concerns regarding the disorganized and complex nature of the health system market. They emphasized the significance of evaluating the referral burden and the economic implications of services provided at various levels. This evaluation aims to identify and monitor the flow of financial resources within the health service delivery system. By assessing these aspects, policymakers can gain insights into the financial dynamics of the system and work toward establishing a more streamlined and efficient healthcare market.

The participants commented as follows:

In the allocation of resources, we say that our system should be such that the services that are at the base of the pyramid, but the resources of the health system at the third level, are being swallowed. The provider at the highest level of service may be better, but we need to direct resources to the law, that is, at level 1. We need to calculate the cost at different levels for accurate planning. (IP22)

At level 1 and level 2, there is a staggering difference in the payment system. At level one, we have a per capita system, but at level two, we have a fee-for-service system. Regarding referrals, when moving from level 1 to 2, we should pay attention to the induced demand. We should either see it as a financial package or not pay separate attention to it. (IP24)

### 3.4.2 | Determining the tariffing process of the system of providing health services based on FM

The research participants expressed the need for a comprehensive review of the tariff setting for health services. Currently, disparities in tariffs between the government and nongovernment sectors have resulted in income discrepancies between doctors working in FM and those in the nongovernment sector. This disparity directly impacts the service delivery system. To address this issue, the participants recommended establishing minimum and maximum tariff levels for doctors and healthcare team members within the FM model. Such measures can positively influence motivation levels and encourage better performance among healthcare providers. In an interview one participant said:

There should be a review of the tariff system based on the cost of services to doctors and contracting parties' institutions that have based their admission process

on the implementation of the family medicine program and referral chain. (IP16)

### 3.4.3 | Reforming the payment system toward a mixed payment system on a per capita basis

The participants stressed the need to reform the traditional payment system and transition toward a mixed payment system based on a per capita basis in the FM model. They highlighted the importance of identifying the factors that influence this payment system. By identifying these influencing factors, it becomes possible to establish performance indicators for doctors and healthcare team members. This approach can enhance the strategic purchasing of insurance from doctors, prevent the misallocation of financial resources within the service delivery system, and ultimately improve the efficiency and effectiveness of the FM program. Some interviewees said:

We should pay them in a mixed manner, that is, we should have the same per capita, this is what the Cochrane systematic review says, and it says that one of the most ideal payment situations for doctors in the world, according to the systematic review that has been done, is to have CAP-P4P, that is, in exchange for promotion Community health, give a per capita amount to the doctor based on the indicators of health improvement and relate the discussion to his performance, based on a series of other indicators that you monitor the way he practices medicine and pay in the form of PFP. (IP27)

The payment system currently requires fundamental reform. We should consider various details regarding payment to family doctors. Currently, they discuss how to pay the doctors themselves. What can we do to make doctors more concerned about costs? (IP7)

## 3.5 | FM management structure

### 3.5.1 | Determining the expected functions resulting from the implementation of the FM program

The participants highlighted the importance of defining the expected functions and outcomes of program implementation to facilitate decision-making processes at the city, provincial, and national levels. They emphasized the need to determine the necessary limits of authority in this regard. To achieve these goals, it is crucial to strengthen and enhance the technical, administrative, financial, and civil capabilities of the provincial health center. By bolstering the position of the health center, it becomes possible to improve overall governance and ensure effective decision-making throughout the implementation process.

When interviewed two participants commented:

To implement the family medicine program and the referral chain at the national, provincial, and city levels, we need to organize and form a suitable management structure. This structure includes a set of organizing and implementation actions. (IP14)

A new structure should address the required technical areas and executive processes through coordination, organizing operational activities at the county level with defined programs and actions. (IP34)

### 3.5.2 | Determining the process of the monitoring and evaluation system at the national and provincial levels

The participants stressed the importance of establishing a top-down monitoring and evaluation system at both the national and provincial levels to assess the program's performance across various levels of the service delivery system. They emphasized that such evaluation and feedback mechanisms play a crucial role in preventing inefficiencies, identifying areas of improvement, and ensuring transparency in the program's outcomes. By implementing a comprehensive monitoring and evaluation process, it becomes possible to monitor the program's functions effectively, address shortcomings, and optimize resource allocation. The participants elaborated on this when they said:

After the city, the most important area of planning and implementation is the health center of the province. In fact, by monitoring and evaluating the existing situation, the provincial administration should, while prioritizing and influencing the activities, determine the areas that can play a role as the owners of the process to determine the duties of each in a coherent structure, the same at the national level. (P5)

The structure should outline responsibilities and boundaries, and accountability should be clearly defined so that decision-making at the county level can be facilitated based on delegated authorities. (IP33)

## 4 | DISCUSSION

The objective of this study was to explore strategies for strengthening financing of the FM program in Iran. The findings reveal that successfully implementing the FM program requires revising and improving resource identification, resource pooling, service delivery methods, payment system models, implementation processes, and

management structures within PHC financing. Health financing policies play a crucial role in achieving UHC, and each country's progress toward this goal is influenced by its healthcare financing methods.<sup>28,29</sup> The financial arrangements within health service delivery systems greatly impact the delivery of PHC, encompassing the funding received, fund transfer methods, and incentives provided for payment to healthcare providers.<sup>6</sup>

Moghaddam et al. identified challenges in the FM program, including insufficient overall financial resources, unstable funding, and a lack of coherence in the management of the financing system system.<sup>20</sup> In Iran, strengthening the country's health financing system necessitates increasing financial resources through prepayments, unifying the structure and policy of health insurance, enhancing efficiency, and improving the quality of health services.<sup>21</sup> The study participants emphasized the need for evaluating and identifying strategies to augment sustainable resources. Insufficient financial resources for PHC are common in developing countries, where revenues are often collected sporadically and through out-of-pocket payments.<sup>30</sup> This fragmentation impedes resource mobilization and consolidation, resulting in financial and service delivery challenges for the healthcare system.<sup>31</sup> Additionally, Bazyar et al. highlighted the lack of sufficient regulations to transfer or redistribute mutual subsidies between numerous health insurance funds in Iran.<sup>32</sup>

During interviews, participants emphasized the importance of pooling resources and achieving stakeholder agreement on resource pooling and management. Integrating health insurance funds can promote equity in healthcare financing, reduce inequality in access and utilization of health services, enhance risk pooling, improve cost control, and increase the strategic purchasing power of health services.<sup>33</sup> Furthermore, analyzing health costs can help identify and address inefficiencies in expenditure.<sup>34</sup> The study participants stressed the importance of consolidating resources under a specific and single trustee for effective financial resource management. The division in the leadership and management of the family medical program between the Ministry of Health, the Ministry of Welfare, and the health insurance organizations is one of the challenges of the financial management of the family medical program.<sup>35</sup> The present study highlights the need to strengthen and improve the technical, administrative, financial, and civil standing of provincial health centers, while defining the necessary levels of authority to facilitate decision-making processes at the local, regional, and national levels. The experience gained during the Covid-19 pandemic further emphasizes the importance of comprehensively reviewing health priorities, particularly in utilizing government funds to strengthen PHC.<sup>36</sup> The study underlines the significance of revising health service packages, service delivery standards, and infrastructure. Defining the package of PHC services is an opportunity to define the boundaries between primary care, specialized outpatient services and secondary care in defining the package of healthcare services and what is included in it.<sup>37</sup>

The study also stresses the importance of uniform tariffs in both government and nongovernment sectors, transitioning from traditional payment methods to a mixed per capita payment system.

Furthermore, it emphasizes the need to establish effective communication and coordination between FM centers and hospitals, leveraging the potential of the nongovernmental sector. In many low and middle income countries, the private sector is an important source of PHC provision and integrating the private sector into PHC platforms requires mechanisms to channel public funds to the private sector, including effective regulation, contracting capacity, and a broader set of purchasing institutions, including accreditation.<sup>38,39</sup>

Different mechanisms for funding collection, budget allocation and management, and payment mechanisms pose significant obstacles to achieving an integrated service delivery system. Therefore, coordination and integration within the health financing system are vital for service coordination across different levels of care.<sup>40,41</sup>

Transforming the payment system from traditional methods to a mixed payment systems greatly impacts healthcare financing and the integration of service delivery at various levels. Implementing and monitoring the mixed payment systems enhances accountability, facilitates performance measurement of healthcare providers, and fosters transparency between buyers and service providers.<sup>42</sup> Challenges in monitoring the financial resources of the FM program include the lack of trained inspectors for evaluation and the absence of scientific criteria and tools, such as reliable checklists.<sup>43</sup> A robust data registration system is vital for creating integration within the service delivery system at different levels, supporting the mixed payment systems, and enhancing the efficiency of service delivery and financing systems. It is evident that changes in the financing system alone are insufficient, and a robust information system enables monitoring healthcare provider performance, responding to population health needs, and implementing a mixed payment system that strengthens service delivery performance.<sup>44,45</sup> In general, to improve the current situation, it is suggested to determine the authority framework required for the management of financial resources in the implementation of the FM program. While explaining the role of insurance, allocable and marked resources should be identified and payment systems should be modified. Appropriate scientific methods should be adopted to calculate the cost of the service and its economic evaluation to estimate the required tariffs. To ensure the implementation of the results of the study, it should be included in the strategic and operational plans of the Ministry of Health, and the extent and manner of implementing the solutions should be continuously monitored and evaluated.

The strengths of this study lie in its comprehensive approach to addressing an issue prevalent in many developing countries. By proposing solutions, this study provides these countries with a pathway to improve their financial systems for implementing FM. Despite practical findings, this study has limitations. The sample size was limited and purposefully selected for qualitative analysis; thus, caution should be exercised when generalizing the results to other countries. Additionally, some participants faced initial cooperation challenges, which were resolved through follow-up and highlighting the study's significance.



## 5 | CONCLUSION

Our study has identified five strategies and 13 actions for strengthening the financing of the FM program in Iran. The findings of this study emphasize the need for a comprehensive review of PHC financing to ensure the successful implementation of the FM program. These strategies and actions should be considered by policymakers during the review of the FM program in Iran. Without implementation of the suggested strategies and action, allocated resources may be wasted. In the future, it is suggested to conduct research on the role of nonhealth sectors of the government in strengthening PHC and FM.

### AUTHOR CONTRIBUTIONS

**Mohammad Javad Kabir:** Data curation; formal analysis; project administration; supervision. **Sajad Moeini:** Conceptualization; data curation; formal analysis; investigation; writing—original draft; writing—review and editing. **Alireza Heidari:** Data curation; formal analysis; methodology; writing—review and editing.

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The Medical Ethics Committee of Academy of Medical Sciences of the Islamic Republic Iran (AMS) approved the study protocols with the reference number “IR.AMS.REC.1400.012.”

### CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

### ETHICS STATEMENT

Ethical approval was obtained and approved for the study from the Ethics Committee at the Academy of Medical Sciences of the Islamic Republic Iran (AMS). The approval was given with reference number IR.AMS.REC.1400.012. All ethical considerations such as obtaining oral consent, maintaining data confidentiality at all stages, the possibility of withdrawal at any stage, optional participation in the study, recording the interviews using the code without naming, and mutual decision about the time and place of the interview were observed.

### TRANSPARENCY STATEMENT

The lead author Sajad Moeini affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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