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Designing Interactional Pattern of Health Financing Between Ministry of Health and Social Health Insurances in Iran

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Abstract

Background: Social health insurances are created to achieve public coverage in order to access affordable health care services. Therefore, stewardships of health system should intervene to fulfill these objectives.
Objectives: The current study aimed at proposing an interaction pattern between health system and insurances in the field of financing.
Methods: A mixed-method study was conducted in two phases from 2017 to 2018. A qualitative interview was employed to identify dimensions and requirements of the interactions in Iran. In the second phase, the extracted items and dimensions were reviewed by experts using Delphi technique and focus-group discussions in two rounds. The data were analyzed by SPSS software version 22 using one-sample *t*-test.
Results: In the qualitative section, two aspects of interaction ways and mechanisms were determined and finally six themes were extracted. In the first round of Delphi, out of 43 extracted items, 12 items were omitted and 31 items achieved the agreement limit. All 31 items were approved by the experts in the second round of Delphi ($P < 0.05$).
Conclusions: Employment of interaction concepts in the field of financing requires a thorough examination of the conditions of each country and it is necessary to create the required infrastructures to achieve the desired situation. Interaction mechanisms of stewardship and social health insurances are not clear in Iran; therefore, creating constituency committees of uniformity is suggested.

Keywords: Health Care Sector, Insurance Coverage, Insurance Pools

1. Background

Interaction is defined as the relationship between actions to achieve a certain goal (1). In the present study, interaction means the relationship between health system stewardship (in Iran, Ministry of Health and Medical Education) and health insurance funds to provide effective financing performance. Interaction in the provision of continuous services in accordance with the principles of quality and safety and interaction in the stewardship function are other aspects of this concept (2, 3). It is necessary to comprehensively monitor the components of health systems, considering the concept of interactions and impact of each component on others. Since the proper performance of one component, regardless of the impact of other components on it, and the proportionality and interaction between the components do not establish the successful performance of the financing as a unitary health system. Over the years, taking into account the concept of integrity, Mexico initially focused on the delivery of services to the states and the role of policy and stewardship by the Ministry of Health, and then activated effective fields to protect patients' finances and the coverage of community members (4, 5).

Several studies are conducted on financing and the role of stewardship in this area. Gorji et al. referred to the role of stewardship on strategic purchasing of services in Iran as one of the effective factors (6). In another study in Iran, Doshmangir et al. reviewed the family physician program and called for effective definition of the health system stewardship along with effective financial mech-

anisms (7). Munge et al. studied another aspect of the relationship between stewardship and customer service, and investigated the specialized funds to purchase services from hospitals (8). Martin et al. proposed the requirement of stewardship to achieve universal coverage and justice (9). In Nigeria, Ibe et al. expressed the need for effective collaboration of stewardship on the relationship between buyers and providers in the form of a health maintenance organization (10). In the study by Velasquez et al., the role of health system stewardship in increasing the coverage of the population was considered. This action was taken through the coverage of uninsured people. On the other hand, this study stated that stewardship can raise the resources needed in the health sector (11). In Pakistan, coverage of uninsured individuals through the role of stewardship is also experienced (12). The role of the health system stewardship in creating health insurance funds (13), improving the efficiency of health insurance funds (14), increasing financial protection (15, 16), and creating population health insurance (17) were parts of the interactions between the health system stewardship and health insurances in the world.

According to the existence of several health insurance funds in Iran and the lack of uniformity of various insurance funds activities, different risk pooling between funds, unequal income sources and income maintenance accounts, as well as different service packages and purchasing different services, interaction between the Ministry of Health and Medical Education and social health insurance funds is difficult (18).

2. Objectives

Therefore, in order to provide suggestions to overcome the interaction obstacles between the health system and insurance in the field of financing for policymakers and help to formulate operational plans in planning the interaction of the health system and insurance in the field of financing, the present study aimed at providing an interaction pattern between the health system and insurances in the field of financing.

3. Methods

The current mixed-method study was conducted in two phases from 2017 to 2018. The first phase, through qualitative interviews and the second phase by Delphi method and a focused-group discussion led to the final pattern.

In the first stage, the factors influencing financing in the field of insurance and health, effective and new strategies, as well as the existing capacities were identified and categorized by conducting qualitative studies (content analysis) and individual interviews with knowledgeable experts. First, there were three initial interviews, which their titles and topics were extracted. All interviews and meetings were recorded and immediately analyzed. Coordination with organizations and individuals involved in gathering views, outlining goals and setting time, and eventually scheduling were conducted. View gathering was performed from September 2017 to March 2018. All face-to-face interviews were performed by the researcher and each session lasted 30 - 60 minutes. Snowball interviews continued to reach data saturation. The interviews were attended by 18 experts. Before the interview, interviewees signed written consent form to participate in the study. The interviews were recorded by two electronic devices. Participants' important statements were noted by the interviewer at the same time. The interviews were transcribed immediately. The notes, as well as important key points extracted from each interview, were briefly recorded in a special form. The forms also included the interviewee's characteristics, academic rank at the university, position, the date, time, and location of the interview, non-linguistic reactions and emotional states associated with the interview, and other essential information. At the end of each interview, each of the completed profile forms and the related audio file was coded to facilitate retracking. In order to use this form in the analysis process, the form was presented to the interviewee to confirm or possibly make corrections.

In the Delphi section, a questionnaire consisting of two parts was used to collect information. The first part of the questionnaire consisted of questions that examined the demographic characteristics of respondents such as age, gender, degree, marital status, work experience and position. The second part of the questionnaire was designed based on the findings of the qualitative interview and after extraction of effective aspects in the interaction between the stewardship and social insurance funds the items were approved or rejected using Delphi technique. Moreover, 43 and 31 interactive mechanisms were questioned in the first and second rounds of Delphi, respectively. The Delphi technique of the suggested pattern was placed on the opinion of professors and experts in order to reach an agreement. On the other hand, in order to validate the pattern, two focused group discussions were held, each session with six participants, in order to validate the primary pattern (first session) and determine the interactive paths (second session). In the first session, the components of the pattern were discussed prior to the start of Delphi stage, the items were grouped, their arrangement was changed, and the pattern was generally confirmed. In the second session formed after Delphi stage, the interactive paths were

determined and the final pattern was presented. During this meeting, the dimensions of the pattern, categories, and interactive paths including the Supreme Council of Insurance, Cabinet, and the responsibilities of different deputies in creating interaction were examined and identified.

The study population in the qualitative stage included experts of insurance and health financing. Sampling was not done at this stage, and the study on the population continued to saturate the data. The viewpoints of 18 participants were used in the qualitative interview stage. In Delphi stage, the number of population and sample included 20 experts referred to in the qualitative section. At least six participants attended each session in the focused group discussions held during the two sessions.

In the current study, the conceptual framework method was used to analyze the qualitative data. The conceptual framework consisted of five main steps including: familiarizing, identifying a conceptual framework, listing, drawing a table, preparing a map, and interpreting. The data were extracted from questionnaires collected from the samples by SPSS software and Independent Samples *t*-test was performed at the agreement level of 70%.

The qualitative data analysis was performed by content analysis and MAXQDA software.

4. Results

Among the studied samples, 10% were female and 90% male. According to the level of education, 70% had a specialist degree, 25% master's degree, and the rest were general practitioners. In the work experience variable, 25% had 1-10 years, 60% about 11-20 years, and 15% about 21-30 years experience (Table 1).

Table 1. Describing the Demographic Variables of Respondents

Variable, Type	Frequency, No. (%)
Gender	
Female	2 (10)
Male	18 (90)
Level of education	
Specialist	14 (70)
General practitioner	1 (5)
Master's degree	5 (25)
Work experience, y	
Under 10	5 (25)
10 - 20	12 (60)
21 - 30	3 (15)
Total	20 (100)

4.1. Qualitative Findings

4.1.1. Interactive Paths

4.1.1.1. The Members of the Supreme Council of Insurance Were not Dynamic

One of the issues raised by the Supreme Council should consist of the Ministry of Health and the purchasers, and also from people's representative, now where is the representative of people at the Supreme Council of Health Insurance? We do not have their representative.

4.1.1.2. The Role of the Plan and Budget Organization at the Supreme Council of Insurance

Recently, low attendance of the Plan and Budget Organization at the Supreme Council of Insurance was an issue, which is being reformed: "On the other hand, the Plan and Budget Organization unfortunately does not play an effective role in the insurance council. However they improved their role in past two years. Formerly, the Plan and Budget Organization used five or six experts in the insurance council that had no authority to prevent deviations (p2)".

4.1.1.3. Instability of the Chairmen of the Supreme Council of Insurance

In the case of the chairmen of the Supreme Council of Insurance and the secretary of the council, changes were also significant: "What was resolved is that the head of the council was transferred from the Ministry of Welfare to the Ministry of Health and the secretary of the council, who was the Deputy Minister of Social Affairs of the Welfare Minister, is now the secretary of the council appointed by the Minister of Health (p1)".

4.1.1.4. The Existence of a Route Like the Supreme Council of Insurance in Other Countries

In other countries, parallel committees have the duty to coordinate between service purchasers and providers: "We need to simulate; for example, the German insurance system that is similar to ours. They have insurance of social organization; however, their number is not the same as ours. They have hundreds of insurance organizations competing with each other. They have a joint committee that coordinates these two together (p3)".

4.1.1.5. The Various Roles of Supreme Council Insurance Members and Their Impact on the Supreme Council Performance

Several roles of the members of the Supreme Council of Insurance remain a great impact on the performance of Supreme Council: "The point is that the members' role

makes some problem. The Ministry of Health is both the provider and the steward; the social security organization is both the insurer and the provider then they want to resolve the problem by these providers (p6)". In the context of interaction, it is important to integrate this policy and prevent this dispersion of insurance policies (p10).

4.1.1.6. Interactive Path of the Cabinet: Vagueness of the Path

There are various perspectives on the role of the health system stewardship in the cabinet: "For some years, the Ministry of Health played a key role; however, at least 1% could come to the Parliament by lobby. Then it could transfer purposefulness and could get some other credits. They did not allow any parliamentary approvals such as drug subsidies that were targeted (p5)".

4.1.2. Interactive Mechanisms

4.1.2.1. Covered Population

One of the interviewees, in an endorsement of covering the uninsured population in order to reach the public coverage goal stated: "I want to give you a service. I say Sir, do you have insurance or not? I will cope with you in both cases. For example, when I talk about the health evolution plan and I say population coverage should be increase, it means risk pooling. (p8)".

4.1.2.2. The Importance of Operational Unity

The number of insurances, besides the occurrence of problems in the field of insurance stewardship, create challenges for the proper implementation of health system stewardship: "In fact, insurances do not and did not response well to the main policymaker of the health system in Iran (the Ministry of Health), and did not have ... They went their own way and said that they were accountable to the Ministry of Welfare". The Minister of Health also went his own way ... (p13)".

4.1.2.3. The Importance of the Database

The existence and formation of a single database to concentrate the total number of insured individuals from different organizations is very important to start interaction: "If we want to merge, the information system that is the basis of a single database is very much required ... (p14)".

4.1.2.4. Separating the Purchaser from the Seller

Insurance experts focus on preserving the separation of insurance from the Ministry of Health, mainly as an insurance purchaser, and in order to carry out the task of monitoring and realizing the strategic purchasing: "When you purchase a service, you will have the power to choose and bargain; there is a possibility of monitoring the quality and quantity (p16)"; on the other hand "formerly, when the Ministry of Health provided services to the social security insurers and received its premium, there was no serious monitoring on the medical documents; since the money was paid to hospitals of the Ministry of Health ... (p17)".

4.1.2.5. Different Methods of Calculating and Receiving a Premium

One of the most important challenges of funds and health system stewardship interaction was different percentages of premium insurance for different groups of people, different maximum ranges for the premium, and different methods to calculate the premium: "What we are looking for now is, first, to make a single percentage. Secondly, removing the maximum range. We can make it progressive one day (p12)".

4.1.2.6. Different Premiums, but the Same Package of Services

Using similar services with different premiums is accepted, that is, individuals should pay different premiums in terms of financial ability, but receive the same services: "... Now employees of Iranian insurance pay 25000 Tomans per month. But employees of Social Security should pay 30000 Tomans per month. In a year the differences will be 60000 Tomans, but both of them (employees of Iranian insurance and Social Security) receive the same services ... (p11)".

4.1.2.7. Interaction by Maintaining Separation or Aggregating Financial Resources

One of the important aspects of aggregating funds is the aggregation and consolidation of financial resources: "Aggregation of resources is prioritized to the other factors that I have mentioned. It should be put into a fund (p18)".

4.1.2.8. Increasing Financial Sustainability and Reaching the Principle Law of Large Numbers in Insurance

The large numbers law is a fundamental concept in insurance theories. It is said that power is in numbers, and essentially basic insurances are relevant in this law, the more the coverage of the population, the better distribution of risk and costs: "... Now among different groups there are different risks. What is said in the aggregation is that different people with different risks are placed in the same level, and this is good for the insurance (p18)".

4.1.2.9. Overlap of Insurances

However, other issues, including the difference between the value and credit of insurance cards and the lack

of concentration of the number of insured people and the weak information infrastructure, also makes people join other insurances. According to some interviewees, legal issues are one of the causes of overlaps: "... Some of these overlaps are caused by rules and regulations. For example, a person is a government employee and his wife is covered by the social security insurance. The same person is covered by two insurances; therefore, the statistics overlap ... (p15)".

4.1.2.10. Incomplete Risk Pooling Between and Inside the Funds

"The ministry has the least interference in the pooling; the only place where they interfere was the integration argument, saying that those that are going to be merged should be in a single place (p7)".

4.1.2.11. Paying Attention to Health Rather Than Only the Treatment Cost

The treatment-centered nature of the current insurance organizations is one of the drawbacks, which many experts point out: "... The principle is that insurance is based on treatment rather than health. The approach of all insurances is treatment rather than health. If you want to solve the problem, then you should change it to health insurance, which is a change in the nature, in the service providing model, and in the programs that it runs... (p18)".

4.1.2.12. Supplementary Insurance

Strengthening and upgrading the basic health insurance package can help to clarify the basic and supplementary insurance borders and implement the actual definition of supplementary insurance: "... Our supplementary insurances do not work properly. Unreasonable performance of basic insurance made the overlapping of basic insurance with supplementary insurance ... (p12)".

4.1.2.13. Creating Competition in Providers with a Single Purchaser

Some interviewees believed that moving toward a unit purchase and its opportunities could create competition among providers: "... But we can create this competition in the providers. This is its advantage, since we are dealing with an insurance company, everyone is trying to increase its quality in order to have a contract with them... (p11)".

4.1.2.14. Increasing Purchaser's Bargaining Power

A considerable benefit of insurance funds interaction and moving toward a unit purchase is to increase bargaining power with the provider: "If money is gathered in a single place, there will be a better purchase (p9)".

4.1.2.15. Unification and Promotion of Laws, Regulations, Bylaws, and Directives

One of the differences between insurances, which cannot be solved, is a difference in the details of regulations and guidelines: "When management is integrated, it definitely includes more advantages for the providers and it is easier to know what the concepts are (M 13)".

4.1.2.16. Determining Tariff

Tariff setting mechanisms are also controversial: "Who should determine tariff? The purchaser; tariff should not be set by the seller. The Ministry of Health insists on setting tariffs. If tariff is defined according to the resources; then, the purchaser has resources (p 4)".

The themes and sub-themes of the qualitative findings are shown in Table 2.

In the current study, 43 items were extracted from qualitative interviews and other resources and proposed at the first session of the focused group discussion, and then the initial framework of the interactive pattern was presented. In the first round of Delphi, as shown in Table 2, the mean scores of most items in the study (except 12 items) were above the numerical value of 3.5 (agreement limit) ($P < 0.05$). At the end of the first phase of Delphi, out of 43 items, 12 items were deleted and the remaining 31 items were re-evaluated. Table 2 describes the main variables by using central indexes and dispersion. In the second round, the mean scores for all items in the study were above the numerical value of 3.5, that is 70% agreement rate of the experts ($P < 0.05$), and the pattern items were confirmed (Table 3). The confirmed items were proposed at the second session of the focused group discussion and the interactive paths were determined and, finally, the interactive pattern of stewardship and health insurance funds was presented (Figure 1).

5. Discussion

Based on the current study findings, achieving non-structural reforms in health financing is possible through coordinated approaches and creating interactions among influential collections. These approaches are derived from three areas of resource gathering, risk accumulation, and purchasing of services in an adaptive way. In this regard, some studies showing that increase coverage is one of main goals of reforms. In Turkey, implementation of universal coverage and equity promotion in health (19), and increase the covered population in Latin American countries (4) are examples of stewardship intervention in financing of health systems. In Iran, before implementing the reform plan, the number of uncovered populations

Table 2. Themes and Sub-Themes of Qualitative Findings

Interaction, Theme	Sub-Theme
Interaction path	
Supreme Council of Insurance	The members of the Supreme Council of Insurance are not dynamic
	The role of Plan and Budget Organization at the Supreme Council of Insurance
	The instability of the heads of the Supreme Council of Insurance
	The existence of a route like the Supreme Council of Insurance in other countries
	The existence of various roles of members of the Supreme Council of Insurance and its impact on the Council performance
Cabinet	Interactive path of the cabinet: vagueness of the path
Interactive mechanisms	
Underlying factors	The importance of operational unity
	Paying attention to health rather than only the treatment cost
	Unification and promotion of laws, regulations, regulations, and circulars
Collecting resources	Covered population
	The importance of the database
	Different methods of calculating and receiving a premium
	Different premiums, but the same package of services
Risk pooling	Interaction by maintaining segregation or aggregation of financial resources
	Increasing financial sustainability and achieving the principle of large numbers of insurance
	Overlap of insurances
	Incomplete risk pooling between and inside the funds
Purchasing	Separation of purchaser from seller
	Supplemental insurance
	Creating competition between providers with a single purchaser
	Increasing purchaser's bargaining power
	Determining tariff

was high. After implementing the plan, this amount decreased; however, it did not lead to full population coverage. In the study by Raeisi et al., conducted before the reform plan, it was pointed out that despite many efforts and approval of numerous laws and the expansion of medical insurance in the country, unfortunately a significant number of people in Iran still have no medical insurance, and a significant part of therapeutic costs are paid directly from the pocket. Therefore, both the population coverage domain and coverage package of services in Iran are inappropriate (20).

The dispersion of databases and overlap in the statistics of insurers are currently among the major challenges in population insurance. Currently, there is a great cooperation in the Ministry of Welfare to create a single database for the Social Security Organization and Iranian Health Insurance Organization, which should be extended to all insurance organizations. The creation of a single basic insurance package for all insurers is another important area in this policy. Furthermore, there are significant differences between insurance organizations in terms of services covered by the package and, more importantly, the depth of service or the level of financial protection insurance. Although the single basic insurance package is announced several times since 2007, unfortunately, it was not very successful in practice.

The current study findings showed that performance capabilities of most research items were not desirable and this interaction was not easy. Therefore, there should be sufficient and acceptable benefits to engage in the interaction. Such a disagreement is one of the obstacles to start interactive policies over the years of development plans. In this regard, the health system stewardship of Iran, which has a large volume of service delivery, should have an appropriate approach in providing services. Furthermore, the current problems on the supply side should be accepted, including smuggling medicines and medical equipment into Iran, lack of implementing clinical guidelines, lack of control over the quantity and quality of the provided health services, lack of establishment of leveling, referral system, and family physician, lack of control over the overall costs of health system and, more importantly, the fee-for-service payment system along with patients' free access to receive health services. Otherwise, the

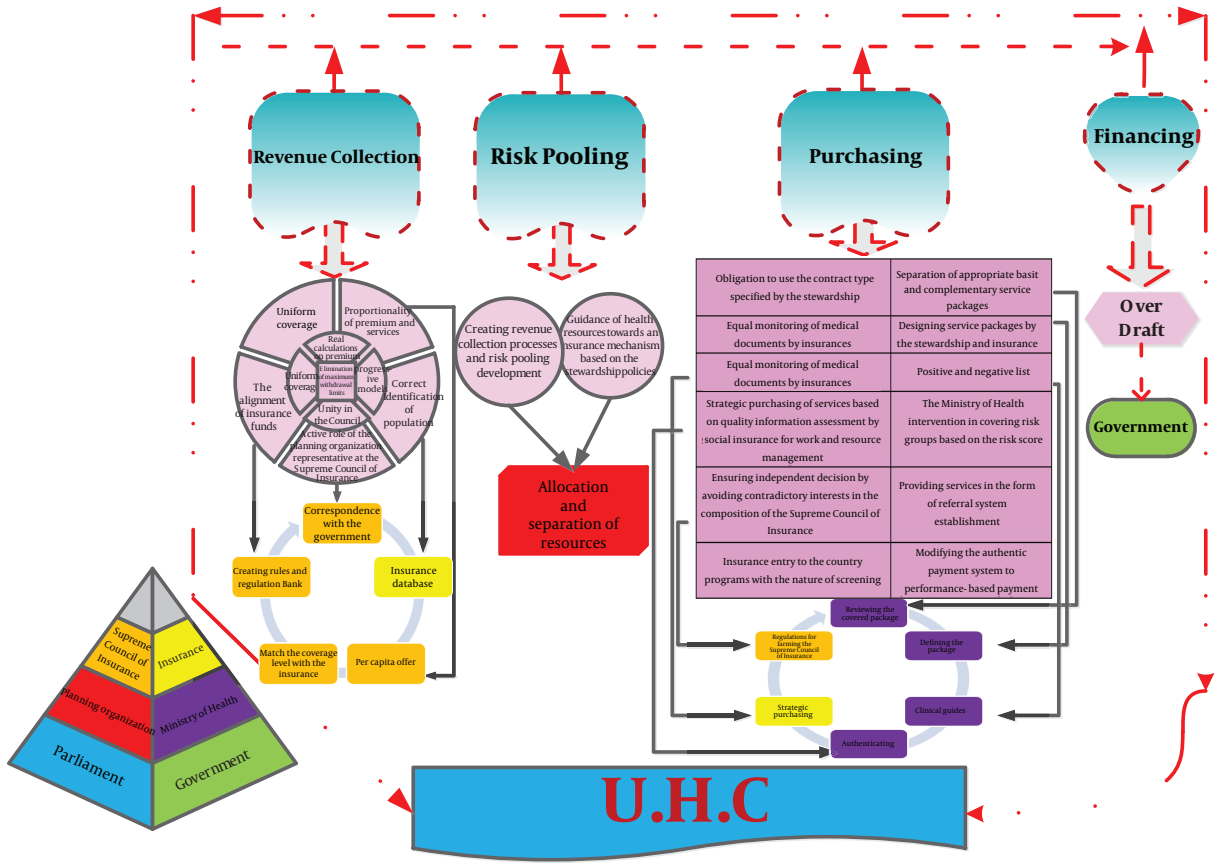

Figure 1. The interactive pattern of stewardship and social insurance funds in Iran

implementation of interactive policies solves the problem, and also increases health system concerns that cause the dissatisfaction of insured people.

Separation of insurance, as a service purchaser, from the Ministry of Health, as a service provider is emphasized in the scientific literature. Existence of some problems, when the insurance organizations were under the supervision and structure of the Ministry of Health, led to the required law in 1989. Therefore, the social security organization was required to provide medical services and obligations to its insured people. Furthermore, in the Welfare and Social Security Comprehensive Structure System Act, adopted in 2004, the separation of purchaser from the seller occurred as a structural modification to address the expected implications of this policy, namely the purchase of qualified services from the provider, reinforcement of supervision and control of service purchasing, and increase competition among providers to attract customers. The separation of purchaser from the seller is defined in which the purchaser, as a person who decides which services should be provided by the provider, is separated from the provider who should provide the services and outputs agreed upon (21).

Moreover, the integrated purchasing system is another major issue in this area. In the present study, the increase in the purchaser's bargaining power through the integrity of service purchasing was approved by the basic insurance with the mean and standard deviation of 4.4 ± 0.68. Mbau et al. reported that there was limited practical experience of effective purchasing services in low and middle income countries, and this issue was investigated in Kenya, in particular. The findings showed that Kenya did not enter in strategic purchasing; moreover, the government (at national and provincial levels) does not properly play its stewardship role in line with the function of purchasing services for the poor and has not had adequate accountability and allocation (22). Furthermore, Mbau et al. mentioned the aspect of purchasing services and cooperation between insurance and the government as the health system stewardship. In Kenya, which is a low-income country,

the weakness of integrated purchasing is addressed as one of the disadvantages of purchaser-provider disconnection.

Effective performance of the components of the health system leads to optimal health care management (4). The interaction of these components with each other, as well as their communication within themselves ultimately shapes the health outcomes of the community (23). The present study aimed at providing an interactive pattern of the Ministry of Health and Medical Education as a health system stewardship and social welfare funds in the field of health financing in Iran. Lack of interaction between insurance and stewardship in the health system of Iran is mainly due to the gradual development of insurance for different groups of people over time. Past experiences of Iran in health system reforms show that the appropriate economic conditions are never a prerequisite to start and launch successful plans in this area. This may implicitly suggest that the conditions and political support in the country to implement and launch major health plans are more important than economic conditions. However, the interactive approach and starting with items at a lower cost are beneficial. Since steps are taken in the field of creating a single database, in other countries, public health coverage is often provided in response to major social, political, or economic changes. Although economic growth is considered as a tool to support the development of public coverage, it seems that it is not a necessary condition to start and adopt public coverage. Commitment of Brazil for public coverage took place in a period of renewed democracy and in a long period of low economic growth. Thailand began public coverage in 2002, after the economic crisis in Asia, and when it was still fragile. However, economic growth is one of the most important factors contributing to the continued development of public coverage in many countries. The recent expansion of public coverage in the countries of Ghana, Indonesia, Peru, and Vietnam is possible by relatively strong economic growth in recent years (24).

Creation of interactive policies of stewardship and insurances means that important decisions in the field of health insurance such as changing premium, or determining a service package that was previously carried out locally and decentralized is taken at a national level later on. Nationalizing such decisions makes the change in the rate of premiums more political and difficult, and in the event of a sudden increase in health costs such a restriction may lead to a budget deficit. Such financial instability for the unitary insurance occurred after merging insurances in South Korea, which increased the need for government financial participation in supporting the unitary insurance (25). Such cases indicate that uniformity and interaction requires more support from the government. In Turkey, economic stability and the rapid growth of national income, which took place from 2003 to 2012, provided the necessary financial space for the government to invest in social sectors. The increase of government tax revenue, privatization procedures, and foreign investment enabled the government to expand green card coverage from public funds and create an integrated health insurance plan (19).

Separation of insurance (purchaser role) from the Ministry of Health (provider role) emphasized in scientific texts. In Iran the existence of some problems appeared when the insurance organizations were belonging to Ministry of Health, so that in 1989 act, Social Security Organization obliged to provide its services to its insured people. Furthermore, in the Welfare and Social Security Comprehensive Structure System Act adopted in 2004, separation of the purchaser from the seller occurred as a structural modification. It was done in order to achieve the expected outcomes of this policy, such as purchasing quality services from the provider, strengthening surveillance and control over purchasing services, and increasing competition among providers to attract customers. Separation of the purchaser from the seller is defined as an action in which the purchaser, as the person who decides what services should be provided by the provider, is separated from the provider who should provide the services and agreed outputs (21). Due to structural differences between health systems in different countries, it is difficult to compare and evaluate the effects of this separation on the health system (26, 27). For this reason, there is scientific evidence, and different and controversial results about the effects of buyer-seller separation on health such as increased efficiency and quality improvement (28, 29). In Iran, due to the lack of coordination and trust between the two ministries, the policy of buyer-seller separation created many problems and challenges for the implementation of reform plans and health system stewardship.

5.1. Limitations

Lack of native studies and books on health financing, non-coded statistics on funding issues, inadequate cooperation of health financing institutions, and the way of access to some research samples were among the limitations of the current study.

5.2. Conclusions

Based on the most important findings of the study, there is a specific structure and mechanism to optimally use the interactive capacity of the Ministry of Health in Iran as a health system stewardship and social welfare funds, which requires determining these mechanisms in a scientific way. Utilizing the concepts of interaction in

the field of financing requires careful examination of the conditions of each country and it is necessary to create the required infrastructures to achieve the desired situation. The necessity of identifying the map of interactions in different countries is inevitable. Due to the importance of the subject, using these methods without clear rules and structures is not recommended. In this regard, it is suggested to design an appropriate administrative structure to use these methods in the Supreme Council of Insurance. The existence of a unit at the planning level of the Ministry of Health and Social Insurance Funds, and joint expert actions can be effective in the interactive reactions. In the present study, from a total of 43 interactive items, 31 were confirmed. There seems to be a capacity for creating interaction and achieving uniformity and political coordination in the health system and its prerequisites is forming working groups with predetermined interactive goals. The current study aimed at reducing the procedural dispersion by the interaction of insurance funds with each other and with the health system stewardship. Although financing the creation of a single insurance from international organizations and texts related to the field of health financing has been considered in the literature, and in recent years, in order to strengthen the pooling of risk and improve equity and efficiency, some countries adopted this policy, in countries where aggregation is accompanied by a lot of resistance, interactive policies can be used. Employment of the concepts of interaction in the field of financing requires a thorough examination of the conditions of each country and it is necessary to create the necessary infrastructure to achieve the desired situation. Interaction mechanisms of stewardship and social health insurances are not clear in Iran. Therefore, creating constituency committees of uniformity is suggested.

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Footnotes

Authors' Contribution: Study concept and design: Aslan Nazari and Iravan Masoudi Asl; analysis and interpretation of data: Masoud Abolhallaje, Amir Ashkan Nasiripour, Mohammad Javad Kabir, and Aslan Nazari; drafting of the manuscript: Aslan Nazari, Iravan Masoudi Asl, and Mohammad Javad Kabir; critical revision of the manuscript for important intellectual content: Masoud Abolhallaje, Ashkan Nasiripour, Mohammad Javad Kabir, Iravan Masoudi Asl, and Aslan Nazari; statistical analysis: Aslan Nazari.

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Table 3. The Findings of the First and Second Rounds of Delphi

Item	1st Round				2nd Round			
	Mean	Standard Deviation	*t*	P Value	Mean	Standard Deviation	*t*	P Value
Benefit package								
Different premium fit in various basic services package	4.05	0.79	3.24	0.004	4.05	0.75	5.24	0.004
Specific separation of basic and complementary service packages tailored to the patients' therapeutic needs	4.15	0.93	3.11	0.006	4.15	0.93	3.11	0.006
Designing a package of services under the joint supervision of stewardship and insurance funds	4.15	1.01	2.82	0.011	4.2	1	3.11	0.006
Using package of services according to the needs (positive and negative items)	4.42	0.6	6.61	0.000	4.45	0.6	7.02	0.000
Coverage								
Intervention of the health system in identifying uncovered Iranian population and suggesting to the insurance	4.26	0.8	4.12	0.001	4.3	0.8	4.46	0.000
Preparation and implementation of temporary insurance designs to cover uninsured population for foreigners	3.43	0.99	1.04	0.31				
Equalizing the coverage level of all basic insurances based on the insurance with the highest coverage level	3.94	0.97	2.01	0.049	4.4	0.75	5.33	0.000
Financing								
Sharing the Ministry of Health resources with the insurances	4.25	0.91	3.68	0.002	4.25	0.78	4.26	0.000
Systematic planning to highlight the resource mobilization function at the Supreme Council of Insurance	4.21	0.78	3.93	0.001	4.4	0.68	2.94	0.008
Identification of service providers' cost rows such as fee for services, medical care, equipment, etc.	4.4	0.68	5.91	0.000	4.15	0.98	5.25	0.000
Integration of insurance funds in terms of laws and regulations	4.15	0.98	2.94	0.008	4.25	0.63	5.91	0.000
Process and structural integration in resource collection	4.25	0.63	5.25	0.000	4.5	0.76	5.87	0.000
Structural integration in resource collection	3.35	0.98	0.67	0.5				
Obligatory use of supplemental insurance in case of having the basic insurance coverage	3	1.29	-1.72	0.1				
Systematic Intervention of the ministry of health to cover all risk groups based on the risk score	3.89	0.73	2.33	0.031	4.55	0.6	7.76	0.000
Presence of NGO representatives such as different diseases associations in Supreme Council of Insurance members as stakeholders	3.45	1.27	0.17	0.86				
Using representative of Food and Drug Organization as a member of the Supreme Council of Insurance	3.45	1.39	-0.16	0.87				
The requirement for effective presence of the representative of the Plan and Budget Organization at the Supreme Council of Insurance meetings	4.44	0.78	5.12	0.000	4.15	0.87	3.32	0.004
Ensuring independent decision making by avoiding the membership of people with conflicts of interest in the Supreme Council of Insurance	4.55	0.6	7.76	0.000	4.35	0.67	5.66	0.000
Formation of procedural alignment committees at the Supreme Council of Insurance	3.9	0.78	2.49	0.022	4	1.02	2.17	0.042
Determining the same franchise for all basic insurances	3.72	0.89	1.98	0.04	4.25	0.91	3.68	0.002

Using new payment methods, such as performance-based payment or DRG system	4.15	0.87	3.32	0.004	4.55	0.94	4.97	0.000
Administrative behavior								
Obligation in using the contract type specified by the stewardship	3.63	1.21	2.01	0.038	4.55	0.68	6.84	0.000
Monitoring and investigating medical documents by insurances	4.31	0.67	5.29	0.000	4.4	0.75	5.33	0.000
Contracting in large volumes with insurances	4	1.02	2.17	0.042	4.15	1.03	2.79	0.012
Using a certain contract between providers and purchasers	3.47	1.21	1.3	0.37				
IT								
Developing and creating a single database to issue the same booklets for all insured people	4.25	0.91	3.68	0.002	4.4	0.88	4.56	0.000
Creating an integrated health record database for patients	4.52	0.96	4.63	0.000	4.65	0.67	7.66	0.000
Premium								
Determining the premium based on the salary, wage, and needs	4.05	1.19	2.06	0.043	4.3	0.57	6.26	0.000
Removing maximum ranges for the premium from salary and wage to achieve equity in health	4.4	0.75	5.33	0.000	4.4	0.75	5.33	0.000
Allocation of subsidy by the government to increase the quality of basic services package	3.35	1.17	1.92	0.069				
Changing the foundation of insurance based on family rather than occupation	3.31	1	-0.8	0.434				
Acceptability of the difference in the absolute amount of premiums in different insurance groups due to the principles of paying the premium based on the ability to pay	3.42	1.07	0.32	0.75				
Modifying the maximum premium payment range up to seven times of the minimum wage and salary	3.43	0.95	0.6	0.55				
Using progressive models with the specified ranges to get premium	3.85	1.13	2.13	0.016	4.4	0.68	5.91	0.000
Unifying people, government, and employer's share for all insured groups	1/3	0.96	-1.84	0.08				
Using realistic calculations or cost calculations available to determine the premium percentage	3.94	0.84	2.29	0.03	4.35	0.81	4.67	0.000
Purchasing								
Increasing the bargaining power of the purchaser through integration of purchasing services by basic insurances	4.15	1.03	2.79	0.012	4.4	0.68	4.9	0.000
Strategic purchasing of services based on quality information assessment by social insurance for effective resource management	4.36	0.89	4.22	0.001	4.1	1.25	2.14	0.045
Providing services in the form of a referral system	4.65	0.67	7.66	0.000	4.05	0.94	2.06	0.017
Introduction of insurance into national programs with the nature of screening, especially in non-contagious diseases	4.15	0.81	3.57	0.002	4.1	0.87	3.04	0.003
Over draft								
Novel contracts of basic insurance funds with operating banks to overdraft based on the credit	3.83	0.92	2.23	0.031	4.55	0.6	7.76	0.000
Taking advantage from dividend of deposit money to cover some expenses	3	1.12	-1.13	0.26				