



Effective factors and drivers of Iran's health care financing system

Maryam Ramezani^{1,2}, Ali Akbar Haghdoost^{*3} , Mohammad Hossein Mehrolhassani⁴, Masoud Abolhallaje⁵, Reza Dehnavieh⁶, Atousa Poursheikhali⁶

Received: 30 Jan 2019

Published: 24 Aug 2020

Abstract

Background: Different factors affect Iran's health care financing system, and regardless of this impact, the future of this system will face fundamental challenges. In this environment, a health system is successful if it is able to anticipate the effects of these factors in the future of health care financing and preplan appropriate interventions towards health care financing system. The present study aims to identify these factors and trends.

Methods: This study compiled a round view of the experts on the subject, with a future studies approach through a qualitative method. To collect data, a deep and semi-structured interview was performed. The results of the interviews were analyzed using content analysis method, and the primary and secondary themes were extracted using the Micmac software.

Results: A total of 71 variables were identified in the form of 12 groups with titles of stewardship, service provision, resource gathering, purchasing and resource allocation, sociocultural, technological, environmental, economic, political, and managerial, and laws and values. Four variables, including distant-service provision, administrative bureaucracy, administrative focus and corruption, low-support decision-making, economic blockade, and sales of oil were among the influential factors and drivers.

Conclusion: The findings showed Iran's financing system is relatively stable but fragile and 3 areas of technology, politics, and economics have the most impact on structuring Iran's financing system.

Keywords: The financing system, Future studies, Key forces, Drivers, Health system functions

Conflicts of Interest: None declared

Funding: Institute for Futures Studies in Health, Kerman University of Medical Sciences

*This work has been published under CC BY-NC-SA 1.0 license.

Copyright© Iran University of Medical Sciences

Cite this article as: Ramezani M, Haghdoost AA, Mehrolhassani MH, Abolhallaje M, Dehnavieh R, Poursheikhali A. Effective factors and drivers of Iran's health care financing system. *Med J Islam Repub Iran.* 2020 (24 Aug);34:104. <https://doi.org/10.47176/mjiri.34.104>

Introduction

In many countries, realizing health and its promotion is one of the goals of the sovereignty and fundamental rights of the people. In Iran, this requirement is stipulated in article 29 of the Constitution (1) and also declared as one of the most significant features of a society on the Iranian horizon vision (2). In addition to realizing and promoting the health of the community, fair participation in the pro-

vision of resources is considered as one of the main goals of the health system, which is only possible through proper functioning of financing in the health system. Lack of financial support against unexpected health costs can even increase poverty in poor people (3). The World Health Organization (WHO) has considered financing as an important function in the proposed health system (4) so as to

Corresponding author: Dr Ali Akbar Haghdoost, ahaghdoost@kmu.ac.ir

¹ Health Services Management Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

² Research institute for Endocrine Science, Shahid Beheshti university of Medical Sciences, Tehran, Iran

³ Modeling in Health Research Center, Institute for Future Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

⁴ Social Determinants of Health Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

⁵ Ministry of Health & Medical Education, Tehran, Iran

⁶ Health Services Management Research Center, Institute for Future Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

↑What is "already known" in this topic:

Different factors affect Iran's health care financing system, and regardless of this impact, the future of this system will face fundamental challenges. In this environment a health system is successful if it is able to anticipate the effects of these factors in the future and preplan appropriate interventions.

→What this article adds:

The study showed the important variables affecting the financing system in Iran include the possibility of providing distant services, administrative bureaucracy and anticorruption, successful advocacy, economic blockade, and oil sales.

be able to provide the necessary financial protection for the society to access essential health services in relation to justice, efficiency, and effectiveness (5, 6). In Iran, different models of service delivery are used in urban and rural regions (7, 8).

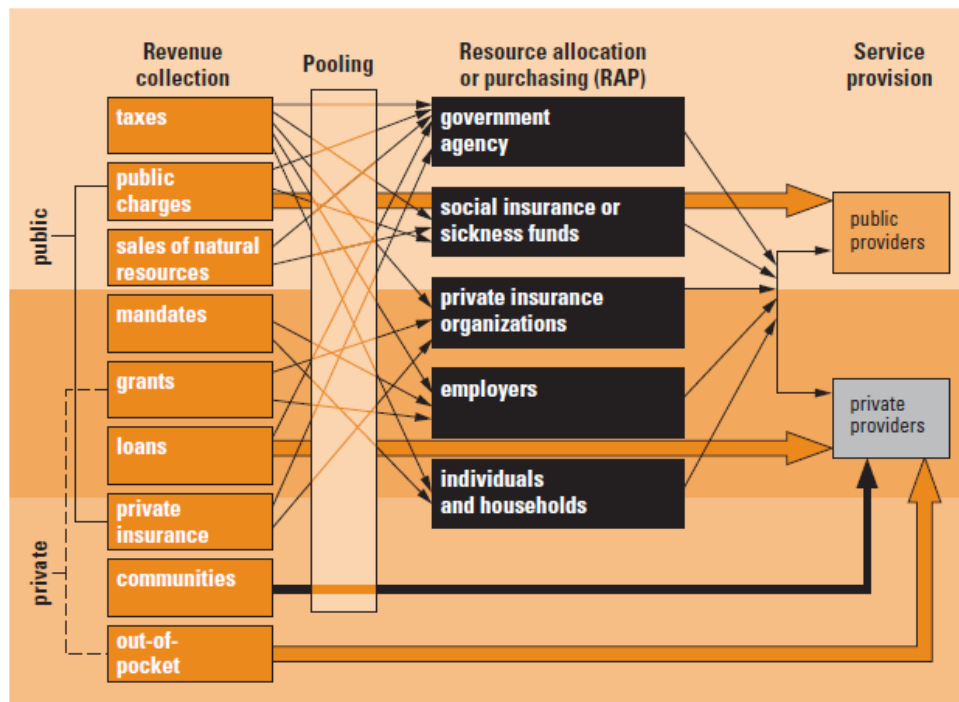
Ministry of Health and Medical Education (MOHME) undertook health care stewardship role in national level and medical universities are delegated as health care stewards at provincial level (9, 10). The health financing system in Iran is a mixed-system that consists of public funds (taxes, premiums, sales of natural resources, etc.), private funds (direct out-of-pocket payments, premiums, charities, etc.), and external resources. According to the Health National Accounts information of Iran's Statistics Center in 2011, the private sector has provided about 64.9% of health financing sources, with direct out-of-pocket payments comprising about 56.1% of the total. This kind of payment is mainly an incentive to ensure the provided service and not for the appreciation and other reasons (11). The amount of direct out-of-pocket payments and facing heavy costs and heavy financial burden, accumulation and control are only 25.6% of the health sector's resources, and the weakness in the distribution of risk among healthy people and patients is among the least consequences (12).

Based on the findings of Mossialo et al (Fig. 1), a very complex combination of underlying factors and social values, demographic characteristics, socioeconomic factors, environmental factors, the organizational structure, and external influences have contributed to effective financing (13), and later these factors and the lack of readiness to deal with them will make the health financing system of Iran face major challenges (14). It also contains the

basic health financing functions of revenue collection, risk pooling, and resource allocation, or purchasing, It shows how health financing systems are affected by social, economic, demographic, environmental, external, and political factors. In this environment a health system will be successful that is able to anticipate the effects of these factors in the future and plan appropriate interventions ahead of time. A proper understanding of these factors and the choice of appropriate responses is only possible through future studies.

To strengthen the futuristic look in the health financing system and to perform better in today's changing world, the planners of this system must challenge their assumptions about their paths with questions such as "What should be done if this happens?" So that they will be able to see the future world more clearly (15, 16).

Thinking about the various dimensions of a problem makes it clearer and easier to decide in different circumstances and to provide preparation to confront different possible events. Future studies is an approach that includes not only understanding the possible future but also preparing for future decisions. Future studies starts with identifying different options for the future, examining these options, considering their occurrence, likelihood, and desirability (17). Given the importance of financial resources in the health sector, conducting futures studies of the health financing system is of high importance. One of the most important prerequisites for futures studies is identifying and analyzing the factors influencing the future. An analysis of these factors will help identify important future scenarios (18). The present study aimed to identify the important factors affecting the future of the health financing system of Iran.



Source: Schieber and Maeda 1997.

Fig. 1. Theoretical framework of determinants of financing in the health system (13)

Methods

Study design

This study was conducted with a futures studies approach through a qualitative method. Framework analysis and thematic analysis have been used to analyze the round view of key people. Framework analysis is a suitable method for applied research with the aim of obtaining specific information and presenting implications or recommendations (19). On the other hand, the thematic analysis is a method for identifying, analyzing, and expressing the content of text data (20). Both of the methods are widely used in health-related studies and futures studies in health.

Sampling

To collect data, an in-depth and semi-structured interview was conducted with 13 managers, policymakers, planners, and practitioners of work and science related to the health financing system and with 5 experts and faculty members of the headquarters of the Ministry of Health and Medical Education. The sampling continued until data saturation. Purposeful sampling method, which is mostly used in qualitative research, was used (21).

To collect the viewpoints of these scholars, using the topic guide number 4, in-depth and semi-structured interviews were conducted with the participants. To prepare this guide, 3 rounds of group brainstorming were held among researchers and a group of other experts and faculty members, and the result of these meetings was a 9-item questionnaire, the content of which was repeatedly reviewed by the members.

Data collection

In the data collection phase, all interviews were conducted by the researcher responsible for this article and all the interviews were recorded after the consent was obtained from the interviewees and simultaneous notes were taken during the interview on the points that participants emphasized and also their facial expressions and physical movements. The length of each interview was 30 ± 10 minutes on average. All recorded interviews were carefully transcribed and rewritten in text. After the text had been transcribed, it was emailed to the person who had been

interviewed, and after confirmation, the text data entered the analysis stage.

Data analysis

To analyze the data, a 5-step framework analysis was used so that in the first stage, familiarization, a content-based communicative summary was designed for each interview. In the second phase, a thematic framework was designed with the help of the research objectives, the interview topic guide, and the thematic guide, and it was discussed at 2 joint sessions among the researchers. During these meetings, by reviewing the rewritten texts of the interviews, the framework was reviewed. To analyze or index, the researchers used the MAX QDA software, which captures Persian texts, and interviews went through primary indexing. Also, various sections of the interview were indexed using one or some codes based on the thematic relationship (22). The codes were reviewed and revised several times by 2 groups of the research team and finally assessed by all members of the study group and were scored from zero to 3, based on the degree of importance and relevance to the health financing system of Iran. Codes scoring zero and 1 had the least relationship and were deleted, and 71 codes or agents were derived from 103 codes. The next step was charting in which the opinions of the interviewees about each theme were compared using analytical tables. The relationship between the codes and the subcodes (within the main and subthemes) was also identified and analyzed (23). Finally, in the last stage, the codes and key factors influencing financing were scaled in the form of a cross-impact analysis questionnaire from zero to 3, and analyzed in the MICMAC software (24). The relationship between variables, the degree of influence and dependence, and the type of variables were analyzed.

Results

As shown in Table 1, 71 factors were identified in 12 groups as factors affecting the health financing system. In the interaction matrix, the sum of the numbers of each row is shown as the influence of that factor and the sum of the column numbers of each factor is shown as the dependence of the factor.

Table 1. Affecting factors in the financing of the Iranian health system and their interaction

| category | Variable | Total number of rows | Total number of columns | Consideration |
|---------------|---|----------------------|-------------------------|---|
| | | | | |
| Custodianship | The lack of transparency of financial information | 92 | 71 | The attitude to as well as the extent of using financial information as the basis of decision-making affects the funding system. 'Although the Ministry of Health has moved to accrual accounting basis from the initial cash basis, what matters is the extent to which the accrual accounting basis has become the basis of decision-making' (p7, p11). |
| | Weakness of referral | 85 | 79 | Implementing a system of reference and grading the provision of services would considerably affect the expenses of the health sector (p6, p2). |
| | Limited advocacy | 124 | 68 | Winning the contributions and participation of other affiliated organizations influences the funding of the system (p9). |

Table 1. Ctd

| category | Variable | Total number of rows | Total number of columns | Consideration |
|--------------------------------------|---|----------------------|-------------------------|---|
| Accumulation | Supportive funds | 90 | 84 | Merging public supporting structures (support funds) and nonpublic entities (Imam Khomeini Relief Committee) (p13, p11). |
| | Multiple insurance | 100 | 122 | The characteristics of the insurance structure of the country definitely influence the financial structure of the health sector (p18, p8, p3, p1). |
| Purchase and allocation of resources | Strategic purchasing | 74 | 94 | If strategic purchases are materialized for health services, it will greatly influence the financial resources of the health sector (p7, p10, p11, p2, p5). |
| | Economic scale | 66 | 80 | Nurturing economic views to health care services and seeking to create wealth from such services greatly influence the funding (p9, p18, p13, p11). |
| | Private and public tariffs | 77 | 100 | Setting fair tariffs for both public and private sectors based on the actual cost price is an important consideration (p1, p14, p18, p17). |
| | Fee for service | 98 | 133 | A very important point for the funding is the payment system (p9, p2, p11). |
| | Budgeting structure, Model and methods? | 70 | 81 | Budgeting system could greatly influence the expenses of the health sector through impacting the efficiency and management of health provision efforts (p14, p4). |
| Service Provision | Quality control for care | 76 | 101 | The quality of the services provided influences the funding (p11, p1, p2). |
| | Health package | 90 | 144 | The make-up of the service package greatly influences the funding (p18, p13, p3, p1). |
| Generation of Re- | Manpower inefficient | 109 | 105 | Managing human resources could considerably influence the financial resources of the health sector (p12, p2, p1). |
| | HTA | 52 | 49 | New technologies have placed a massive financial burden on the health system, and thus their appropriate assessments could help check and control the costs of such technologies (p1). |
| | THE/ GDP | 51 | 131 | The share of the health sector in public resources (p12). |
| Collection of Resources | Complications | 47 | 42 | Imposing duties on harmful commodities is an important point which could affect the financial prospects of the health sector given the high financial burden placed by harmful substances on the health (p13, p8, p11). |
| | Tax-Structure | 64 | 67 | Lack of transparency for placing tax on harmful goods (p1). |
| | Premium law | 61 | 66 | Whether premiums are calculated exponentially or step-based significantly affects the financial resources of the insurance companies (p7, p5, p15, p18). |
| | Franchise payment law | 76 | 95 | Formulation of well-conceived instructions for fixing and paying deductibles followed by close and accurate monitoring and reviews greatly contribute to the proper management of healthcare costs and incomes (p16, p9, p1). |
| | New model of financing | 66 | 58 | New methods would definitely help better utilization of financial resources (p2, p1, p12). |
| | Complementary medical | 76 | 118 | As we have not laid the grounds for coping with the age pyramid and high rates of aging, they could influence the health care and treatment costs (p3, p17). |
| | Population-structure | 78 | 62 | As we have not laid the grounds for coping with the age pyramid and high rates of aging, they could influence the healthcare and treatment costs (p3, p17). |
| Social and cultural factors | Immigration-rural | 79 | 77 | Higher rates of internal migrations definitely lead to increased health care and treatment costs. Distribution of population in rural and urban areas as well as our urban architecture and geometry influence the funding in all respects (p11). |
| | Migration-immigration | 69 | 83 | Afghans' population who live on the outskirts of the cities, diseases prevalent along the border regions, and the brain drain are other factors influencing the health and treatment costs (p12). |
| | Women-role | 82 | 84 | The roles played by women considerably affect the health care and treatment costs (p9). Children born to stronger, well-educated and better-informed mothers are healthier and thus impose less health care and treatment costs on the society (p8, p14). |
| | Family-structure | 80 | 66 | Extended families are not as frequent as before (p17). Marrying at later stages of life, higher incidence of divorces, and increased number of female breadwinners are important (p15, p9). |
| | Job's- change | 97 | 106 | Technologies are growing and the health sector naturally has to follow suit. This means changes in the provision of health care services in the health sector and as a result inevitable changes in the costs (p6). |
| | Doctor's lead | 81 | 87 | In the health care sector and in particular in the public sector, mediocracy is present which is dangerous. The least consequence of such phenomenon is the increased costs of the health sector (p10, 011). |

As the dispersal of factors affecting the health sector financing system is shown in Figure 2, variables are scattered in the first and third quarters and the degree of filling

is 61.13%, which indicates that the system has relatively stable status of factors affecting the financing system, and most factors have a moderate and dispersed interaction.

Table 1. Ctd

| category | Variable | Total number of rows | Total number of columns | Consideration |
|-----------------------------|--------------------------|----------------------|-------------------------|--|
| Social and cultural factors | Educational role | 107 | 59 | Present-day schools and families are the foundations for nurturing the future generation. The education system plays a crucial role (p10). Unfortunately, those in charge of the education department are not sensitive to the physical and mental health and welfare of the society which will deal us huge blows in the future (p10). |
| | Network role | 104 | 77 | Promoting the culture and social enablement using the potentials of social networks, media and NGOs could contribute to decreasing the costs of healthcare and treatment costs (p2, p6, p9). |
| | Services-Labeling | 26 | 61 | Some individuals feel it beneath themselves to ask for health care services (p8). |
| | People's trust | 60 | 96 | When a feeling of self-responsibility is shared among the members of the society, it will be reflected clearly in controlling the health care costs (p7). For example, implementing Health Transformation Scheme was an articular representation of a poor relationship between the receivers of services and their providers (p6). |
| | Oops payment | 55 | 108 | Public contributions to the health care costs (p8, p18). |
| technology | New technology risks | 49 | 90 | We are already moving toward day clinics and home care in Iran. However, the first outcome of access to more modern equipment and fast development of these technologies is a future exposed to risks and positive and negative unavoidable consequences such as cultural and environmental perils and generation breaks and gaps (p9, p12). |
| | Day clinic / home care | 79 | 97 | Day clinic and home care will affect health care financing system (p3, p17). |
| | IT improvement | 147 | 69 | IT improvement: easier access home care and self-care will be achievable with IT improvement (p11). |
| Environmental Issues | Industrial pollution | 68 | 109 | Statistics on the fatalities associated with human-induced acts such as bio terrorism and road accidents have reached warning levels (p9). |
| | Air pollution | 72 | 24 | Outbreaks of communicable diseases, an infestation of infests and diseases affect the health care and treatment costs (p5). |
| | Drought | 55 | 57 | Drought and water shortages are global issues. Life stops without water while health and treatments would be overwhelmed by problems. Costs would get out of control. Temperature drops or surges and occurrence of wild fires in forests are other influential factors (p6). |
| | Natural disaster | 49 | 26 | We are all aware that Iran is on a seismic belt and thus very earthquake-prone. The recent decade had demonstrated that we do not have plans in place for dealing with natural crises such as a flood. They cripple our treatment and health care and incur startling health costs (p7). |
| Economical Issues | Un employment | 69 | 85 | Statistics and figures published by Iran's Statistical Center show that the unemployment crisis will intensify among the vulnerable classes of the society which in turn undermines the health sector and naturally increases the health care and treatment costs (p5). |
| | Income's salary /gap | 125 | 112 | We see income gaps among social classes in Iran. These gaps affect the health care requirements, healthcare provisions and its costs (p3). |
| | Black market | 108 | 108 | Medicines are trafficked inside and outside the country. There no monitoring system in place. Black market reigns here, with its own financial dealings and transactions (p12). |
| | Family -ogic-expenditure | 81 | 116 | It follows a sinus pattern. If costs of accommodations and food go up, health care budget goes down in response (p4, p17). |
| | Destroying capitalism | 116 | 105 | The power of capitalism, the efficiency of banks, and the stock exchange are the effective, inseparable part of the funding system of the health sector (p10). |
| | Oil-based economic | 105 | 47 | Our country's economy is based on oil. The price of oil fluctuates. It is subject to numerous events across the world. Oil runs out in the end after all. This means that some resources are not sustainable (p11, p4, p1, p13). |
| | Private sector | 103 | 121 | The power of the private sector and how the government supports this sector in terms of economic considerations influences the health sector (p6). |
| | Health harmful | 33 | 51 | Harmful goods and substances will have a lot negative effect on health expenditure and in continue finding tax from that can be helpful (p13). |
| Unique product economic | 97 | 51 | | |
| Economical blockade | 116 | 15 | | |

Thus, 4 variables are in the second quarter. These variables have a high impact and low impact, and 34 variables are located in the fourth domain and have high impact and low impact. Seven variables are in the first quarter and 5 variables in the third quarter. However, some of these variables are scattered around the diagonal axis, indicating that these variables have the same degree of influence and

dependence. Only in stable systems, is the role and position of each variable quite well defined, and in the relatively stable system of this study, some variables are around the diagonal axis, which in this case, some of the variables show a fluctuating state of influence and dependence, making the identification and evaluation of the key factors very difficult.

Table 1. Ctd

| category | Variable | Total number of rows | Total number of columns | Consideration |
|------------------------|--|----------------------|-------------------------|--|
| Economic Issues | Economic stability | 108 | 148 | Based on NHA it is clear that limitation of stability in economic system of country |
| | External financing | 89 | 122 | Having good relationship between countries and external financing |
| | Fix exchange rate | 77 | 51 | Exchange rates of foreign currencies (p11). |
| | Economical relationship with international | 102 | 67 | Financing by international companies helps the economics of the health sector. Unfortunately, lack of access to a consistent framework and fluctuations of the exchange rates converted this opportunity into a threat. Future events matter (p13). |
| | Development pattern | 197 | 143 | Iran has a concentrated political establishment. It is not federal or state-based. This gives the capital and the staff department of the Health Ministry more power and authority while some decisions must be made at provincial levels (p11, p15). |
| Managerial policies | Political persist | 160 | 146 | When governments change every four years, it sure affects the healthcare policies (p7). |
| | Security political crisis | 94 | 73 | Intergeneration power transfers, internal security, power-seeking groups such as ISIS and regional insecurity, regional clashes, terrorism, EU, economic giants are also important (p15). |
| | Bureaucracy - corruption | 136 | 66 | Concentration status, administrative bureaucracy, and corruption (p18, p16, p11, p10). |
| | Government in Health | 93 | 53 | Separation of different governmental roles in the field of health" (p15, p8). |
| | Public/private | 100 | 100 | The health sector suffers irredeemably when the health sector's decision-makers and physicians work at 2 places despite the clear prohibition of the law (p9, p8, p14). |
| | Bill of patient right | 100 | 89 | |
| | Import cover head law | 61 | 134 | Charter of patients' rights, how much people know their rights, guarantees to execute and restore such rights, even for the physicians and the treatment staff of the hospitals and medical centers and media considerably influence the healthcare and treatment costs (p14, p9). |
| | Religious culture | 145 | 141 | Iran has a predominantly religious population. The approach to having interactions with Friday Prayer Imams and religious figures benefits the health and treatment training courses. It also contributes to lower healthcare costs (p7, p5). |
| | Specialism culture | 109 | 102 | When the health care providers and clients tend to offer and use specialized services, it will considerably affect the financial resources (p18). |
| | Buttery attitude | 52 | 101 | In the future when the population ages, people turn to cosmetic and beauty surgeries (p1). |
| Regulations and values | Mistake consumption pattern | 134 | 128 | Appropriate consumption patterns of provision and uses of services will considerably affect the financial resources (p13). |
| | Health knowledge | 88 | 87 | The relationship between social capital and the legitimacy of the existing system between the provider and the consumer, and the pattern of people's consumption in medicine, and the public's perception of the health and weakness of health literacy and the health of the community, which is itself a factor. |
| | Public/treatment | 79 | 111 | Public knowledge of health issues in I ran treatment is more valuable than public health that are more expensive (p5). |
| | Self-treatment | 89 | 88 | The ability of the society to develop self-care (p15, p18). |
| | Postmodern approach | 112 | 61 | The pleasures of individualism and the emergence of postmodern tendencies in the field of health that create health polarization (several groups) (p1, p14). |
| | Value of wealth | 130 | 141 | In developing countries it is ordinary to consider wealth as valuable, which is why in near future there may be less tendency for producing or providing service than financing |

Based on the findings presented, the first category belong to the influence factors. These factors are located in the second quarter, high near the vertical axis, including the possibility of providing distant-services, administrative bureaucracy and anticorruption, successful decision-making and advocacy, economic blockade, and oil sales variables that affect the health financing system in Iran. The second group is the bivariate variables. These variables are in the first quarter, meaning they have both high influence and dependence. In this study, of the 71 variables, 7 are in this group; these variables are subdivided

into risk and target variables. The risk variables are located in the graph around the diameter of the first quarter and include one of the developmental variables of the country. The 6 other variables, which are located below the diagonal line in the first quarter, including income differences, the capitalist system, government political stability, the religious culture, consumption patterns, and wealth value, are part of target variables.

The 34 variables are in the third category of dependence variables or the result variables in the fourth quarter, including inflation or stagnation, foreign investment status,

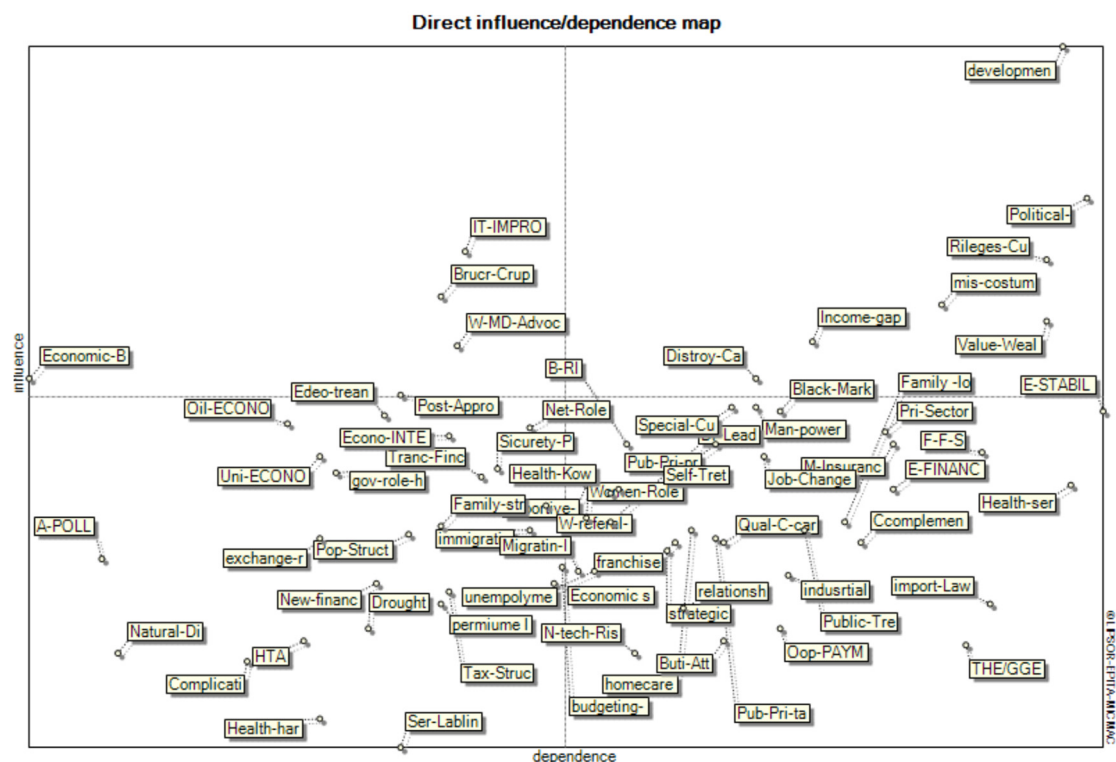


Fig. 2. Dispersal of factors affecting health care financing system

bill of patient right, the payment system, budgeting, service packages, nuclear and industrial pollution of metropolitan areas, the value of prevention over treatment, self-care, specialization, modifying peoples' aesthetic beliefs, organizational legal structures, imports, the private sector, harmful goods, medicine smuggling, household expenditure, people's trust, people's collaboration in financing the health costs, day clinic and home care, change in the pattern of occupations in proportion to technological growth, doctor's lead, women's role change, quality control of service provision, implementation of the referral system and leveling the provision of services, human resources management, insurance mechanisms, tariff, strategic purchases, economic agenda of health care, the share of the health sector from public sector, and the share of tax on harmful goods. The obvious attribute of the result variables is that they can be used to observe the status of the change caused by the influence variables, especially for uncertainties that cannot be observed or followed by changes due to their complex nature. For example, we can see the unemployment rate as the result of changes in the country's economic and political system, and by changes in unemployment rates, we can judge the performance of these systems.

A total of 25 variables were in the fourth category; the independent variables with low influence and dependence levels are in the third quarter. These variables consist of discrete variables and secondary leverage variables. The discrete variables are located near the center of the chart coordinates and include 16 variables of the new financing mechanisms, social stigmas of receiving public services, financing mechanisms and structures, the law of collecting

resources from per capita income, latent unemployment among the vulnerable segments of the population, overseas migrations, family planning, security of the region and political crises, transparency of financial information as a basis for decisions on global warming, health literacy, international migration, HTA, the place of traditional medicine in the people's perspectives, the age pyramid and population bubble, and social networks. Also, 9 variables are in the group of leverage variables that are located in the third quarter and above the diagonal line: single-product economics, sustainability of resources, membership in the global trade organization, the Education Organization, postmodern integration into health, differentiation of various health governance roles, natural disasters, exchange rates, and environmental degradation. Regulatory variables are a different category of variables that function successively as the secondary risk (similar to the risk variable in the bivariate variables category), poor objectives (similar to the objective variable in the bivariate variables category), and secondary leverage variables (similar to the secondary leverage variable in the category of independent variables).

Since some variables are in the interstitial position, depending on the nature of each variable and the accuracy of the location coordinates, the variables near the center of the graph were classified in the other categories. In other words, variables can be considered as regulatory variables, due to the nature and the capacity of which being categorized in the other category to act similarly.

Discussion

Based on the findings of this study, the important varia-

bles affecting the financing system in Iran include the possibility of providing distant services, administrative bureaucracy and anticorruption, successful advocacy, economic blockade, and oil sales. For each of these variables, we can imagine different states in low or high spectra. Evidence suggests that providing distant services is cost-effective and will have a significant impact on the health financing system (25). Based on the results of this study there is uncertainty for factors affecting the formation of future financing scenarios for the health system of Iran, including providing distant services, administrative bureaucracy and the fight against corruption, advocacy and the economic blockade and the sale of oil, which have 2 sides from low or unsuccessful till high and successful or suitable sales in each factor.

Therefore, it is expected the health services in Iran will be provided in a far more distant manner in the future and will be more technology dependent (26, 27).

Conclusion

This study aimed to identify the different factors affecting Iran's health care financing system. If the long-distance provision of these services does not expand significantly, funding of this sector will be seriously impacted. The status of bureaucracy and the fight against corruption will also have a significant impact on health financing in such a way that administrative bureaucracy and the fight against corruption can be prevalent or rare in the future. Successful or unsuccessful advocacy status and the status of free oil sale or economic blockade also affect the financing of the health sector. For example, an optimistic scenario of providing distant services is the one in which there is little bureaucracy and corruption, where gaining the support of the beneficiaries is successful and selling oil is done without any economic monopoly problems, such as sanctions.

Acknowledgement

We would like to show our gratitude to the Budget and Performance Monitoring Center of Iran Ministry of Health and Medical Education. This research was supported by Institute for Future Studies in Health, Kerman University of Medical Sciences, Kerman, Iran.

Conflict of Interests

The authors declare that they have no competing interests.

References

1. Constitution of Islamic Republic of Iran, Article 29 (1979).
2. Ebrahimi, F. & Sahragard, R. (2016). Some Insights into Iran's English Curriculum Based on Iran's Major Policies. *JLTR*, 7, pp. 1036-1042.
3. Rezapour A, Azar FE, Aghdash SA, Tanoomand A, Shokouh SM, Yousefzadeh N, et al. Measuring equity in household's health care payments (Tehran-Iran 2013): technical points for health policy decision makers. *Med J Islam Repub Iran*. 2015;29:246.
4. Evans DB, Etienne C. Health systems financing and the path to universal coverage. *B World Health Organ*. 2010;88(6):402-3.
5. Organization WH. The world health report 2000: health systems: improving performance: World Health Organization; 2000.
6. Dehnavieh R, Rahimi H. Basic Health Insurance Package in Iran: Revision Challenges. *Iran J Pub Health*. 2017 May;46(5):719.
7. Jahromi VK, Mehrolhassani MH, Dehnavieh R, Anari HS. Continuity of care evaluation: The view of patients and professionals about urban family physician program. *Int J Prev Med*. 2017;8:7.
8. Haghdoost A, Pourhosseini SS, Emami M, Dehnavieh R, Barfeh T, Mehrolhassani MH. Foresight in health sciences using CLA method. *Med J Islam Repub Iran*. 2017 Jan 15;31(1):492-9.
9. Hekmat SN, Tourani S, Haghdoost AA, Ebrahimpour H, Mehrolhassani MH, Dehnavieh R. Beneficial and Adverse Effects of the Integration of Medical Education and Health Service in IR. Iran; A Delphi Exercise. *J Med Sci*. 2014;14(1):21.
10. Turani S, Haghdoost AA, Maleki MR, Ravaghi H, Tijang RD, Hekmat SN. The Backgrounds, consequences, and future of the integration of Medical Education and Health Service Delivery System. *HealthMed*. 2011;5(6):1847-56.
11. Aboutorabi A, Ghiasipour M, Rezapour A, Pourreza A, Asiabar AS, Tanoomand A. Factors affecting the informal payments in public and teaching hospitals. *Med J Islam Repub Iran*. 2016;30:315.
12. Zakeri M, Olyaeemanesh A, Zanganeh M, Kazemian M, Rashidian A, Abouhalaj M, et al. The financing of the health system in the Islamic Republic of Iran: A National Health Account (NHA) approach. *Med J Islam Repub Iran*. 2015;29:243.
13. Gottret PE, Schieber G. Health financing revisited: a practitioner's guide: World Bank Publications; 2006.
14. Nabilou B, Yusefzadeh H, Rezapour A, Azar FE, Safi PS, Asiabar AS, et al. The productivity and its barriers in public hospitals: case study of Iran. *Med J Islam Repub Iran*. 2016;30:316.
15. Haghdoost A, Pourhosseini SS, Emami M, Dehnavieh R, Barfeh T, Mehrolhassani MH. Foresight in health sciences using CLA method. *Med J Islam Repub Iran*. 2017 Jan 15;31(1):492-9.
16. Hosseini Golkar M, Ghazinoory SS, Saghafi F, Eivazi MR, Poursheikhali A, Dehnavieh R. Appropriate types of futures studies scenarios in health. *Med J Islam Repub Iran*. 2017 Jan 15;31(1):478-83.
17. Technology Foresight Methods. Golban ed. Tehran. 2005.
18. Behesti M, Zali N. Identification of regional development key factors with scenario-based planning approach: Case study of East Azarbaijan Province. *J Spat Sci*. 2011;15(1):41-63.
19. Adib Hajbagheri M, Mahvash S. Qualitative Research Methods, Bashari Publications, Second Edition. 2007. (In Persian)
20. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res*. 2006;3(2):77-101.
21. Marshall MN. Sampling for qualitative research. *Fam Pract*. 1996;13(6):522-6.
22. Rashidian A, Eccles MP, Russell I. Falling on stony ground? A qualitative study of implementation of clinical guidelines' prescribing recommendations in primary care. *Health Policy Plan*. 2008;85(2):148-61.
23. Lacey A, Luff D. Qualitative data analysis: Trent Focus Sheffield; 2001.
24. Balali M. Identifying Key Factors Affecting Future of IRIB Organization A Cross-Impact Analysis Method. *Hum Commun Res*. 2012;19(71):9-37.
25. Whitten PS, Mair FS, Haycox A, May CR, Williams TL, Hellmich S. Systematic review of cost effectiveness studies of telemedicine interventions. *BMJ*. 2002;324(7351):1434-7.
26. Dehnavieh R, Hekmat SN, Ghasemi S, Mirshekari N. The vulnerable aspects of application of "Health Technology Assessment". *Int J Technol Assess Health Care*. 2015;31(03):197-8.
27. Hosseini Golkar M, Ghazinoory SS, Saghafi F, Eivazi MR, Poursheikhali A, Dehnavieh R. Appropriate types of futures studies scenarios in health. *Med J Islam Repub Iran*. 2017 Jan 15;31(1):478-83.