

## Prioritizing the performance indicators of a large insurance organization in Iran from the patients' perspective

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### Abstract

**Introduction:** System performance evaluation is one of the principles of health services management that continuously inhibit the diversion of the system from achieving its goals. This study aimed to rank and prioritize the performance indicators of an insurance organization from the patients' perspective.

**Methods:** This is a cross-sectional and analytical-descriptive study conducted in 2011. The service recipients sample size was determined at 400 patients who referred to the health centers. Required data were collected using a researcher-made questionnaire. Then, the collected data was analyzed using SPSS 17.0 and some descriptive and analytical tests including Mean, Standard Deviation (SD), ANOVA and Friedman Tests.

**Results:** The mean of the most indicators studied from the service recipients' perspective was above the average. The findings showed that in the prioritization of the insurance organization's performance indicators from the service recipients' perspective, the component of overall satisfaction with services received and the recipients' knowledge of insurance regulations were high and low priorities with averages of 3.78 and 2.51, respectively.

**Conclusion:** The insurance organization's performance was far from its optimum position. Developing training programs to increase patients' knowledge of the insurance regulations, more supervision and control over informal payments, as well as, calculating actual insurance premiums are the most important issues which should be considered by the heads of insurance organization in developing their organization strategies.

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**Keywords:** Performance indicators, insurance, Iran, patients

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## **Introduction**

If every member of the society lose his/her health, it can threat others' health or damage to the society's economy due to lack of his/her participation in the national production and impose costs to the insurance organizations because of his/her treatments(1). Health insurance as a life plan from birth to end of life is designed, implemented and evaluated continuously and effectively to provide an appropriate opportunity for relief and security when suffering from an illness. Therefore, the most valuable way to protect people against the growing costs of healthcare services is increasing an insurance participation between the government and people (2-3). For promoting the health of society, governments try to provide special services such as insuring people to decrease their treatment costs so that they themselves can buy the health insurance or their employers can insure them (4).

It should be noted that not only establishing an insurance system is not sufficient, but this system need to be continuously evaluated in order to improve its performance, as well as, to achieve its ultimate goals (5-6). A successful insurance organization is the one that can increase its patient satisfaction and quality of healthcare. In order to achieve these goals, insurance organizations should act in such a way that people have access to services based on their needs and pay according to their ability. This factor increases the efficiency of the insurance services as well as the people tendency to be insured (7-9). One of the basic principles of the health insurance system is "availability" which means providing health insurance facilities and financial resources in relation to the number of the insured in the country and its regions based on the regionalization which should be considered when developing this system (10). Protecting people against treatment costs, as well as, achieving equity in financial contributions of these costs are the main objectives of all health systems (11).

From the perspective of social security system's perspective, the level of health insurance commitments is not appropriate, so that the inclusion or non inclusion of service commitments have been specified by guidelines and regulations and, often, do not have any given legal basis. Basic health services have not specifically been defined and, even in the regulations, some of the essential public health services have been excluded from the commitments of universal insurance coverage (12). The historical trend shows that all activities taken place in the country to determine the service packages, have focused more on the high cost of services not on their cost-effectiveness and needs prioritization(13). The insurance organizations in which the government plays the employer role, including the studied insurance organization, the calculation criteria are based on capitation which has resulted in decrease in the government contribution, in relation to the other employers who pay premiums to the Social Security Organization, and the government changes this capitation fee according to its available resources which effects on the quantity and quality of services provided by this insurance organization(14).

Overview of the insurance organizations' performance in Iran indicates that these organizations are faced with various problems such as the lack of information about supplementary health insurance packages, the lack of comprehensiveness and adequacy of services, the lack of clear boundaries between basic and supplementary health insurance packages, etc. It should be noted that the purpose of supplementary insurance is to give service recipients and patients more choices to receive a wide range of services through paying more (15).

According to the findings of Pooragahi's study, the most important challenges and problems of war victims' families with service organizations, which provide them with services based on their different needs, have been the lack of providing some health services and the lack of access to medical care for all victims' families (16). Therefore, it can be concluded that

insurance coverage status has a negative and inappropriate trend. Therefore, it can be concluded that the service coverage status of the studied insurance organization has not had an appropriate trend (16). The results of Ibrahimipour and colleagues' study showed that the lack of coverage or inadequate coverage of services is the most important challenge of large insurance organizations (14).

At present, basic health insurance organizations, in some cases, do not provide the basic health insurance packages equally. This has resulted in some of the same services to be provided differently by different health insurance organizations. Therefore, it seems to be necessary to equalize the regulations applied by the insurance organizations on providing the packages of services in the country (17). The results of a study show that it is necessary to implement and actualize the health insurance tariffs and capitation so that needy people not to be deprived of required services (2). Rashidian in an article entitled "Expensive diagnosis and health system challenges" has mentioned the lack of any decision-making system for insurance organizations and the lack of information about the coverage of supplementary insurance for some diagnostic services as health system challenges (18).

Vary is quoted by Williams as saying that the quality of health care services is desirable when clients are satisfied of these services. Also, service recipients' satisfaction serves as a measure of community health status (19). System evaluation is one of the principles of health services management in which consumer satisfaction of health services is one of the aspects of evaluation which indicates the system is efficient (20).

Regarding the stated issues, this study aimed to rank and prioritize the performance indicators of an insurance organization in Iran from the patients' perspective.

## **Methods**

This is a cross-sectional and analytical-descriptive study conducted in 2011. The service recipients sample size was determined at 400 patients using Cochran's formula assuming  $d=0.05$ ,  $z=1.96$  and  $p=0.5$ , included patients admitted to 4 hospitals, 8 clinics and four dental clinics. These medical centers were selected using stratified sampling method and studied patients were selected using simple random sampling method. Required data were collected using a researcher-made questionnaire consisted of two parts. Its first part included demographic data and the second one included the performance indicators of the studied insurance organization. The validity and reliability of this questionnaire were confirmed using the standpoint of academic experts and Cronbach's alpha coefficient ( $\alpha=0.91$ ), respectively. Informed consent was obtained from all patients participating in the study. The 5-point Likert scale was used to rate the patients' responses to the questions (5= Very good, 4= Good, 3= average or neither good nor bad, 2= bad, and 1= Very bad). The response rate was %94.25. SPSS 17.0 and some descriptive and analytical tests including Mean, Standard Deviation (SD), ANOVA and Friedman Tests were used to analyze the collected data

## **Results**

Most of participants were men (%57.6). The participants' age range was between 17 to 89 years old with an average age of 44. The 31-45 age group of the participants was the one with the most number of participants (%38.7). Married participants were more than singles (%91.2) and the participants with under diploma degree were the most participants (%32.4). The results, also, indicated that most participants (%50.1) were the heads of households and the most of them were employed and had a history of hospitalization (Table 1).

Our study findings showed that the mean of most studied indicators from the service recipients' perspective was above the average. The mean of total studied indicators was 3.38. Also, the findings showed that in the ranking and prioritization of the insurance organization's performance indicators from the service recipients' perspective, the component of overall satisfaction with services received and the knowledge of insurance regulations were high and low priorities with averages of 3.78 and 2.51, respectively (Table 2).

There was a significant relationship among studied components ( $\chi^2 = 911.42$ , p-value  $< 0.001$ ). Therefore, their prioritization can be set easily (Table 3).

Also, studied factors such as sex, having the history of hospitalization, the dependency status, the employment status, and education levels did not have any significant relationships with the insurance organization's performance indicators (p-value  $> 0.05$ ).

**Table 1: The demographic data of the studied insurance organization's service recipients**

Variables	Frequency (%)
Sex	Male 217 (57.6)
	Female 160 (42.4)
Age	Less than 30 71 (18.8)
	31-45 146 (38.7)
	46-60 105 (27.9)
	More than 60 55 (14.6)
Marital status	Married 344 (91.2)
	Single 33 (8.8)
Education levels	Under Diploma 122 (32.4)
	Diploma 102 (27.1)
	Associate Degree 76 (20.2)
	Bachelor of Science 63 (16.7)
	Master of Science 10 (2.7)
	Philosophy of doctor (PhD) 2 (0.5)
Dependency status	Head of household 189 (50.1)
	Dependent 186 (49.3)
Employment status of head of household	Employed 223 (59.2)
	Retired 148 (39.3)
Having history of hospitalization	Yes 191 (50.7)
	No 184 (48.8)

**Table 2: Mean, SD and prioritization of the studied insurance organization's performance indicators from the patients' perspective**

No.	Indicators	Frequency	Mean	SD	Mean Rank
1	The status of services delivery of insurance organization	377	3.78	0.66	9.50
2	The status of supplementary insurance services	377	3.68	0.79	9.02
3	How staff of the studied insurance organization deal with service recipients	377	3.66	0.73	8.87
4	The quality of services	377	3.62	0.81	8.84
5	Patients' waiting time for receiving services	377	3.62	0.71	8.67
6	The service coverage provided by the studied insurance organization	377	3.56	0.70	7.95
7	The reimbursement rate and its timeliness	377	3.46	0.74	7.79
8	The easy reception of patients' ID cards in health centers	377	3.38	0.89	7.49
9	The tendency to receive more complete services by paying higher premiums	377	3.38	0.80	7.38
10	The approval process of prescriptions	377	3.32	0.76	7.21
11	The patients' satisfaction of the premiums	377	3.31	0.80	7.13
12	The patients' satisfaction of franchises	377	3.22	0.85	6.61
13	The amount of informal payments	377	2.73	0.98	4.71
14	The knowledge of insurance regulations	377	2.51	0.95	3.82

**Table 3: The results of prioritizing the insurance organization's performance indicators using Friedman Test**

Frequency	377
$\chi^2$	911.42
df	13
<i>P-Value</i>	<0.001

## Discussion

This survey aimed to study the performance indicators of an insurance organization from the patients' perspective, as one of the interest groups. Organizations, in terms of functional aspect, play an important role in creating satisfaction. Insurance organizations' knowledge about their performance from the service recipients' perspective is the key variable in understanding the cultural and communication challenges and leads to the pursuit of their goals and policies by which the organization reaches its maximum efficiency (21).

Efficiency and effectiveness should be studied from the perspectives of all stakeholder groups. Patients, as one of the interest groups, have evaluated the performance of the studied insurance organization and prioritized its performance indicators. This evaluation and prioritization is important because the organization can be aware of its performance and that

how to provide its services. Though the insurance organizations themselves purchase the services and their health care centers have the major roles, the important function of the insurance organizations, namely strict and accurate control and supervision over providing health services, should be considered, too (22). In this study, three studied indicators, namely, service quality, easy reception of patients' ID cards and the amount of informal payments are related to the health care organizations, and other indicators are related to the direct services of the insurance organization.

This study results showed that the performance indicators were almost above the average so that the status of the insurance organization services (overall satisfaction with services received) and the knowledge of insurance regulations were high and low priorities, respectively. One of the important indicators examined in this study was the amount of informal payments paid by patients. Although this indicator was less than average, this amount was too high and should be decreased to zero. In the Vafae Najari's study, the studied components for evaluating the insurance system from the patients' perspective, as the service recipients, were organization and management, the coverage rate of population, criteria for determining insurance premiums, the methods of payment to service providers, insurance service commitments, as well as, monitoring and evaluation which some of these components are similar to the components reviewed in the present study (23).

The findings of Dehnavieh's study showed that some of the criteria, such as individuals' vision, political groups and also the power and influence of patient groups played a stronger role than their actual position in determining service packages. However, some criteria such as cost effectiveness of services, the validity of treatment methods documents, long-term stability and safety interventions were considered much less than their actual position in developing service packages (24). In the study of Jaafari and colleagues which aimed to study of the personnel's satisfaction with supplementary insurance services in Mazandaran University of Medical Sciences, the findings showed that factors such as age, the education levels, frequency of hospitalization, the causes of hospitalization and the diagnostic procedures performed had significant relationships with personnel's satisfaction (25) which is contrary to the results of this study.

The findings of Rezaee's study showed that the mean of knowledge, expectations and attitudes of people towards the insurance services was about the average which confirms our study results (26). The results of another study showed that one of the predisposing factors for violations such as receiving more money from the patients, is the existence of a situation that offenders feel they are not under any regulatory control, while the findings of current study showed that informal payments to the providers were at the low level which, compared to other insurance organizations, represents a relatively good performance of the studied insurance organization in controlling informal payments received by physicians and healthcare organizations (27).

Saei in a study entitled "Factors affecting the primary insured's satisfaction with insurance services" concluded that the mean of their satisfaction was below the average which is contrary to the results of this study. Saei's study findings about the knowledge component of the insurance regulations confirm the current study results. The similarity between the results of these two studies indicates that insurance organizations have had poor performance in educating and informing patients (28). Also, the results of Hosseini Farhangi and colleagues, entitled "Satisfaction of veterans with the supplementary insurance services", showed that the mean of their satisfaction with the supplementary insurance services was about the average which almost confirms present study results (29).

Based on the study of Hedayati and colleagues, most of the insured assessed the quality and quantity of insurance services at the average level which was somewhat similar to the current study results. One of the studied components in their study was the lack of easy reception of

patients' ID cards in health centers which was below the average while it was above the average in present study. One of the problems which patients are faced with, although the difference is minor, is that their ID cards are not easily accepted in the health centers because either the insurance organization does not contract with all accessible health centers or the physicians do not tend to contract with the insurance organization, which the latter is due to low tariffs (30).

The current study had a limitation. Though there are several large insurance organizations in Iran, this study had been conducted to rank and prioritize the performance indicators of only one of them from its patients' perspective. For future studies, ranking and prioritizing the performance indicators of other insurance organizations in Iran from their patients' perspective and, also, comparing them with each other are suggested.

## **Conclusion**

Overall, the findings of this study showed that though the studied insurance organization performance was above the average, it was far from its optimum position. Developing training programs to increase patients' knowledge of the insurance regulations, more supervision and control over informal payments, developing a program by which individuals become insured based on "receiving services according to their needs and paying for services based on their ability", as well as, calculating actual insurance premiums are the most important issues which should be considered by the heads of insurance organization in developing their organization strategies.

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