

The feasibility of the health insurance projects in Iraq

Preparation of researchers:

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Abstract

The aim of the research is to delve into the contents of health insurance and determine its importance, foundations and positive impact on the health sector. It provides a financial vision and integrated feasibility for health insurance companies and health service companies, by calculating the break-even point and expected profits of companies. It has used the descriptive approach (a questionnaire form) and the quantitative approach through (financial indicators based on official statistics). The descriptive research community is the population of the provinces of Najaf and Basra, the number of respondents was (200) people for each province as a sample of the

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research using the Excel program to extract the results. The research has reached a set of results, the most important of which is an urgent need for the health insurance system and the need to activate it, and the presence of material and human capabilities to apply health insurance. In addition, legal problems are one of the most important obstacles in the application of health insurance. As a result, such a project is economically feasible for insurance companies if they do this service better from a marketing point of view.

Keywords: Health insurance, Feasibility studies, Najaf (1445 AH-2023 AD)

Introduction

The health sector is one of the most important sectors in the country because of its direct impact on the life of society and the comfort and tranquility of the individual and his large human cadres working in this sector. Also, it has an impact on the country's economy and budget, as the health sector constitutes a high percentage of the annual financial budget of the state. While health insurance is one of the most important types of insurance against the risks of health conditions in the individual and family, which includes the individual and family, which includes the costs of examination, diagnosis and treatment within the ceiling of the costs of Specific, as well as psychological and physical support may also include coverage of the allowance for interruption from work for a certain period or permanent disability according to the internal regulations of the consultant. The vision of health insurance is based on the principle of pooling risks and distributing them among individuals equally, and the Iraqi health system suffers from large accumulations manifested in the deterioration of infrastructure, technological obsolescence, shortage of medical supplies and equipment, the great shortage of medicines, as well as the spread of many unlicensed clinics and pharmacies and noticeable weakness. In health control, in contrast to these accumulated problems, the significant increase in the number of people that require health services and the expansion of the opening of many new residential areas without providing health services (health centers or hospitals), the spread of epidemics and chronic diseases and the high costs of treatment indicate that the Iraqi citizen pays 75% of health spending from their own money. This spending is a major reason for the catastrophic costs borne by families and pushing them into poverty.

Scientific methodology

The importance of research: The importance of research is based on the importance of the health sector and the link of the subject to sustainable development in Iraq. The amount of financial waste that occurs as a result of the lack of optimal utilization of medical resources as a result of the high costs spent by the Iraqi government in exchange for poor medical services is also important. The same is with a clear absence of communication between the health system in the Iraqi private sector with the government sector.

Research Objective: To develop a roadmap to solve the problem, for the three parties of the health system, the state, the individual, health service providers, by finding an appropriate vision for the health insurance system to alleviate the burden of the state and to improve the health service for the individual. It creates a competitive market for health service providers that will increase the level of health service and measure the feasibility of the project for health service providers, in addition to the following objectives:

- Study and know the desire of individuals to benefit from health insurance .
- Know the internal mechanism of work of health insurance .
- Define and regulate the relationship with the government
- Who is covered by the health system?

The problem: Iraq suffers a lot from a deterioration in the services of government medical institutions in terms of quality and quantity of services. The services do not cover the needs of the people, with a clear inactivity of the health insurance sector in Iraq for fifty years. Insurance to cars, fires and thefts is limited, and the private sector did not take its role widely in insurance in general and health insurance in particular.

Hypotheses: The establishment of government insurance companies and private sector companies would achieve economic and marketing feasibility and contribute to solving the problem of the health sector in Iraq. They can create competition between the parties, and thus reflect positively on the quality and quantity of medical services to customers.

Research Methodology: In this research, the descriptive analytical approach was used, which is based on a thorough review of the literature related to the subject of the study, as well as the analysis of the available statistical data to predict the future of health insurance. On this basis, different sources of data, statistics, regulations and laws have been relied upon in the aspects of descriptive and detailed financial analysis with regard to investment, sources of funds, payment methods and medical coverage for health insurance.

Theoretical framework: health insurance

- 1- Health insurance: It is one of the types of insurance against the risks of health conditions in the individual, and includes the costs of examination, diagnosis and treatment within a specific ceiling of costs, and psychological and physical support. It is considered one of the ways to deliver health care to individuals and groups, and that the philosophy of health insurance depends on the principle of aggregating risks, and means collecting the risks of infection with the disease that affects society or a particular group and sharing it among individuals equally. This is through collecting the necessary funds to treat this combined risk equally, and then distributing it to individuals according to their need for treatment. It leads to reducing the burdens and costs incurred when treating the pathological cases to which the insured are exposed and ensures that health care reaches all those in need in exchange for a small amount of money and fixed paid by all individuals participating in insurance, which is a social system based on cooperation and solidarity between individuals to bear what one of them cannot bear alone. The companies and investors organize the benefit of risk distribution in order to provide a better haven for comprehensive health insurance. This program is often offered by a hospital, a group of doctors, a government entity, or private commercial companies.
- 2- Elements of health insurance:
 - The first party: It is the investor in health insurance, which may be an individual, company or health institution .
 - The second party: It is the beneficiary, and the individual is in person when he participates in health insurance, or has his family with him, or

the contract is within a company or institution, as the person participates, for example, within the group of employees in the company in which he works and who have health insurance with a specific institution.

- Contract: It shows the amount of financial deduction for insurance and its foundations, which may be fixed monthly, and may include a deduction of a certain percentage of the costs of the medical procedure when it occurs, for example, that the individual pays (10%) of the doctor's examination, or (5%) of the hospital fees.
- Normal coverage: it includes the diseases covered by the treatment and the procedures covered. For example, some health insurance companies refuse to cover vision correction operations and consider it a cosmetic procedure, and this also applies to orthodontic treatments.
- Health care provider: it may be a private or government hospital, depending on the contract signed between the two parties. For example, a health insurance contract may require that treatment be only in private hospitals.

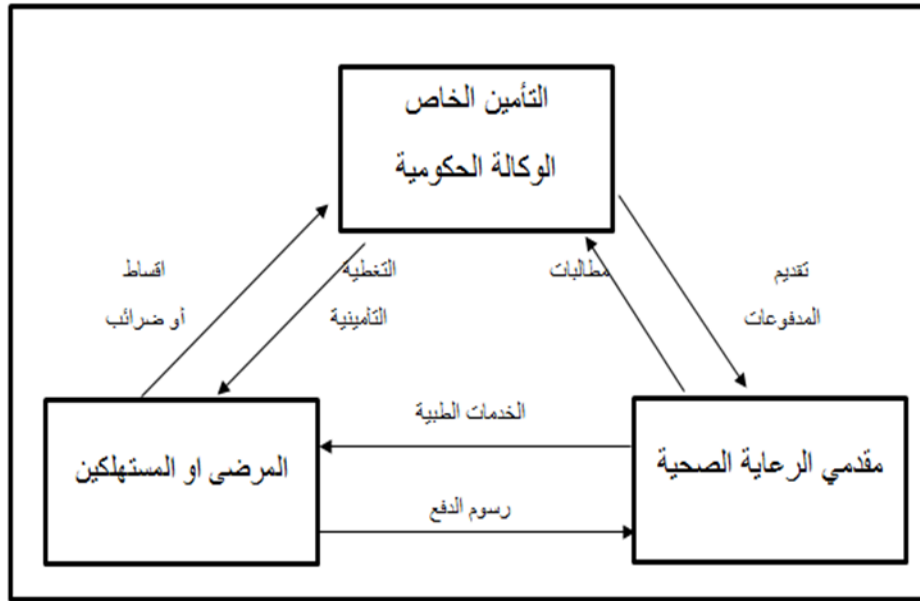


Figure (1) The main pillars of the health insurance system: Source researchers.

The figure above represents the main pillars or elements of the health insurance system (or health care) and the figure focuses in its lower part on the market transaction that occurs between patients, consumers and health care providers. In most market transactions the exchange is direct between consumers and health care providers, and the price of payment is equal to the full cost of the services provided. Under normal market exchange, consumers and service providers are fully informed about the price and quality of the product and the unexpected and unlikely results. When you return to the previous form of its upper part, the third party, which is private insurance companies, work to receive premium payments from consumers for some types of medical coverage. In return, the private insurance company in turn compensates medical care providers for medical services provided to individuals holding insurance policies, while the methods of payment for medical care providers vary according to the type of card and medical coverage.

3- Sources of financing health insurance :

- The individual himself, and this is through the amount deducted from him on a monthly basis or according to treatment.
- The government, which sometimes covers the costs of health insurance, usually from tax money, and may also cover the full costs of individuals who cannot afford to pay their personal health insurance, such as the poor.
- Private institutions, as they may pay part of the costs of their employees' health insurance, while they pay the rest.
- International organizations, for example, the United Nations pays for the treatment of refugees and displaced persons, and the United Nations receives funding from donor countries and other international institutions.
- Donations and grants that may be from individuals or civil institutions, and may be material or in-kind such as medical supplies and buildings.

4- Problems facing health insurance:

- The lack of health insurance coverage for all segments of society exposes this group deprived of health insurance to the risks of destitution and disease because they bear the costs of their treatment. It also increases the risk of developing the disease due to their inability to pay for treatment, which deprives them of treatment and may lead to aggravation of the disease and possibly death.
- Manipulation by insured individuals, such as falsifying bills and treatments or treating an uninsured person on a health insurance card, causes an additional load on the insurance fund, and requires an appropriate monitoring and auditing system to prevent this.
- Wars, famines and natural accidents lead to the influx of refugees to neighboring areas, which increases the pressure on health resources in the affected areas, and the spread of diseases and epidemics as a result of the lack of hygiene standards in refugee communities and camps leads to more material pressure and lack of resources to deal with the health situation.
- The high rate of aging and chronic diseases in society as a result of the high average age of people is accompanied by an increase in the costs of caring for the elderly and the diseases they suffer from such as diabetes, respiratory diseases and heart disease. This also increases the pressure on health insurance.

Analytical and quantitative framework

1- Statistical Analysis:

Social and health development is a fundamental and constant axis in all the five-year plans implemented by the government and the Ministry of Planning during the last period, and in the last five-year plan of the Ministry of Health (2019-2022). It emphasized attention to social and health care for the Iraqi society and care for groups in need of care. This interest was reflected in the successive increase in actual spending on health services, which increased significantly to reach 6.5% of the total expenditure of the Family. Although the increase in actual spending was reflected in the quantity and quality of health services, it remained below the level of ambition. This may be due to the steady population increase at the highest rate in the region, environmental pollution, food security, etc. The emergence of the disadvantages of modern civilization and the willingness to develop modern mechanisms to address these problems have all led to an increase in the burden on the resources of the

Ministry of Health, and it has become necessary to search for new means to manage government health projects and provide the opportunity for the private sector to play a more effective role in health activity.

- The descriptive aspect of health insurance (Najaf Governorate)

For the purpose of knowing the opinions of the community about health insurance, a questionnaire form was prepared randomly on a group of individuals and segments of society for the province of Najaf. The sample size was (200) and (6) questions directed to the sample members for the purpose of knowing their opinions and the answers were distributed as shown in the following table:

Table (1) the opinions of individuals in Najaf Governorate

No	Question	Answers yes	Answers No	Neutral answers
1	Do you agree to pay a symbolic monthly amount within your financial ability in exchange for high-quality medical services, but in the event that you do not benefit from these medical services, someone else will benefit from them	151	40	9
2	If the following services are available (medical examination, tests, examinations, surgeries, medications and follow-up, prosthetic devices) in one specialized medical center and the service is provided at a level that suits your monthly income, are you ready for health insurance?	142	8	50
3	Do you think that the insurance and health insurance project will develop and improve the reality of Health Institutions and Services in Iraq	128	10	62
4	Do you think that the implementation of health insurance and insurance in Iraq will relieve the state of many burdens and difficulties related to the provision of medical services?	113	24	63
5	Do you expect there to be a response to the project by medical institutions and clinics? Consultants, private and private pharmacies	159	37	4
6	What do you think are the chances of success for the project?	143	7	50

Source: Prepared by researchers

It was shown from the above table that the stability coefficient of the answers reached (0.87), which is a very good indicator, as the answers to the sample members were very good and the scale of the interaction of individuals with the questions was in a realistic way and can be relied upon in building conclusions as follows:

(75%) are willing to pay an appropriate monthly amount with their financial ability to obtain high-quality medical services, while (71%) indicate that they are ready for health insurance if health services are available such as analyzes, examinations and.... etc. Yet, (68%) of the total sample members believe that the health insurance project will develop the reality of health institutions and raise the level of the health system in the health sector, and (57%) believe that the application of health insurance will reduce the burdens on the state in the field of providing health services. Also, (79%)

are a response and interaction with the project by medical institutions, consulting clinics, private and private pharmacies, and that (71%) support the success of the project if it is implemented and implemented on the ground.

❖ Descriptive aspect of health insurance (Basra Governorate)

For the purpose of knowing the opinions of the community about health insurance, a questionnaire form was prepared randomly on a group of individuals and segments of society for Basra Governorate, where the sample size reached (200) and (6) questions directed to the sample members for the purpose of knowing their opinions, and the answers were distributed as shown in the following table: -

Table (2) the opinions of individuals in Basra Governorate

t	Question	Answers yes	Answers B No	Neutral answers
1	Do you agree to pay a symbolic monthly amount within your financial ability in exchange for obtaining high-quality medical services, but in the event that you do not benefit from these medical services, someone else will benefit from them?	163	14	23
2	If the following services are available (medical examination, tests, examinations, surgeries, medications and follow-up, prosthetic devices) in one specialized medical center and the service is provided at a level that suits your monthly income, are you ready for health insurance?	172	15	13
3	Do you think that the health insurance project will develop and improve the reality of health institutions and services in Iraq?	156	22	22
4	Do you think that the implementation of health insurance and insurance in Iraq will relieve the state of many burdens and difficulties related to the provision of medical services?	147	37	16
5	Do you expect a response to the project from medical institutions, consulting clinics, private and private pharmacies?	165	24	11
6	What do you think are the chances of success for the project?	160	26	14

Source: Prepared by researchers

Where it was shown from the above table that the stability coefficient of the answers reached (0.89), which is a very good indicator as the answers to the sample members were very good and the scale of the interaction of individuals with the questions was in a realistic way and can be relied upon in building conclusions as follows:

(81%) are willing to pay an appropriate monthly amount with their financial ability to obtain high-quality medical services. Yet, (86%) are ready for health insurance if health services are available from analyzes, examinations and.... etc. Also, (78%) of the total sample members believe that the health insurance project will develop the reality of health institutions and raise the levels of the health system in the health sector,

while (73%) believe that the application of health insurance will reduce the burdens on the state in the field of providing health services. Here, (82 %) believe that there is a response and interaction with the project by medical institutions, consulting clinics, private and private pharmacies, and that (80%) support the success of the project if it is implemented on the ground.

2- Financial Analysis:

Spending on the health sector is growing faster than other sectors of the global economy, accounting for 10% of global GDP. A recent WHO report on global health expenditures shows a rapid escalation in global spending on health, which is particularly evident in low- and middle-income countries, where health spending is increasing by an average of 6% per year compared to 4% in countries. High-income expenditure was spent on the health sector (household spending, government spending, donors) as follows:

- Household spending: According to the World Health Organization, Arab governments allocate only 7.8% of total government spending to health. Global spending on healthcare is more than \$5800 billion, including \$92 billion in the Middle East, where the region's spending is equivalent to 1.6% of the global ratio, although its population constitutes 8% of the world's population. In Iraq, citizens pay 75% of health spending from their own pockets, and this spending is a major cause of the catastrophic costs borne by families and pushing them into poverty.

Table (3) the expenditure of Iraqi households on the health sector for the year (2018)

Governorate	Number of urban households	Spending One thousand dinars	Number of rural families	Spending One thousand dinars	Total Households	Total household expenditure
Nineveh	279510	218017800	182490	102194400	462000	320212200

Kirkuk	182268	14216904 0	61732	3456992 0	244000	17673896 0
Diyala	135810	10593180 0	13419 0	7514640 0	270000	18107820 0
Anbar	109494	8540532 0	12150 6	6804336 0	231000	15344868 0
Baghdad	1120000	8736000 00	0	0	1120000	87360000 0
Babylon	144434	11265852 0	13656 6	7647696 0	281000	18913548 0
Karbala	119540	93241200	52460	2937760 0	172000	12261880 0
Wasit	111931	87306180	61069	3419864 0	173000	12150482 0
Salads	105730	8246940 0	112270	6287120 0	218000	14534060 0
Najaf	143823	11218194 0	47177	2641912 0	191000	13860106 0
Qadisiyah	99866	77895480	67134	3759504 0	167000	115490520 0
Muthanna	48852	38104560	43148	2416288 0	92000	62267440 0
Dhi Qar	185452	14465256 0	98548	5518688 0	284000	19983944 0
Maysan	99712	77775360	28288	1584128 0	128000	93616640 0
Basra	291327	22723506 0	27673	1549688 0	361000	24273194 0

Source: Iraqi Ministry of Planning.

It is clear from the above table that the volume of Iraqi household expenditures on the health sector is distributed according to the urban population and rural population. The statistical indicators indicate an increase in the volume of household expenditure on the health sector from (4.7%) in 2017 to (6.5%) in 2018, as the total expenditure of the urban population reached (3,063,988,980,000) dinars and the total expenditure of the rural population (739,653,040,000) dinars. The total expenditure throughout Iraq reached (3,803,642,020) dinars. The average family expenditure according to the official statistics of the Ministry of Planning for the year (2018) was (780,000) dinars annually for urban residents, and (560,000) dinars annually for rural residents, and that the average number of family members in urban areas is (6.6) members per family. The average number of family members in rural areas is (7.4) members per family. Despite the large volume of household expenditures on the health sector, evidence indicates that there is a significant deterioration in the health service provided.

- ✚ Donors: - All the bodies operating in Iraq and not directly linked to the structure of the Ministry of Health, namely the Iraqi Red Cross, the United

Nations, and civil society organizations, may be religious bodies, or donors, these bodies play a major role in financing the health sector in Iraq.

- ✚ Government spending: - The Iraqi state is the main financier of the financial resources of health institutions in Iraq, as Iraq is classified in the second group among the Arab countries in terms of average per capita income ranging between 300-1000 dollars. Although Iraq is one of the oil-exporting countries and has a large financial budget, the political and security turmoil experienced by the country. Growing rates of corruption and weak governance have affected the share of individuals in an acceptable share of spending on health services. The first group consisted of countries in which the individual enjoys an annual share of spending of more than a thousand dollars, which included the Gulf countries with the exception of Oman. This is due to the high value of the gross product of these countries, especially from the enormous fiscal budget that comes from the export of oil and gas and the decline in population.

Table (4) Iraqi government expenditure on the health sector for the year (2018).

Government expenditure (million)	Population	Governorate
1150470	1,597,876	Kirkuk
1178802	1,637,226	Diyala
1275592	1,771,656	Anbar
5851263	8,126,755	Baghdad
1486830	2,065,042	Babylon
877487	1,218,732	Karbala
992680	1,378,723	Wasit
1148569	1,595,235	Salads
1059546	1,471,592	Najaf
929554	1,291,048	Qadisiyah
586347	814,371	Muthanna
1508523	2,095,172	Dhi Qar
801124	1,112,673	Maysan
2094113	2,908,491	Basra

Source: Iraqi Ministry of Planning.

The results from the above table show that the volume of total government spending has reached (27,449,403,000,000) dinars, and in the same direction reports indicate that the magnitude of the amounts spent that do not reflect the deteriorating reality of the health sector, and this is due to the poor management of the health sector, and the inability of successive governments to find a health system capable of providing an

acceptable level of service commensurate with the magnitude of government spending, As well as the spread of administrative and financial corruption in all joints of the health system in Iraq. The Ministry of Health lacks a clear strategy for the development of the health sector.

❖ Types of health insurance cards:

The issue of health insurance is one of the important topics in modern societies, and its main goal is to provide medical coverage to the largest possible number of members of society. This coverage is in the form of offering medical insurance cards to serve the community, and these packages vary in terms of the type of service, the number of visits, and the price of the service card.

There is a set of factors that determine health insurance companies in offering medical insurance cards. These factors are the distribution of community members to the public and private sectors, as well as the per capita income, the level of medical service provided by the government sector, the existence of laws and regulations that regulate the work of medical insurance companies, and the types of diseases prevalent in society.

This research offers ten types of proposed medical insurance cards, which are as follows:

- 1) In-hospital family medical insurance card
- 2) Out-of-hospital family medical insurance card
- 3) Individual Medical Insurance Card
- 4) Group Medical Insurance Card
- 5) Security Forces Medical Insurance Card
- 6) Family Medical Insurance Card for Professionals
- 7) Medical insurance card for the disabled
- 8) Medical Insurance Card for Chronic Diseases
- 9) Medical insurance card for the elderly
- 10) Medical insurance card for retirees

The costs, revenues and break-even point were calculated for all Iraqi provinces and for all cards proposed by the study, and the cost varies from one card to another according to the type of service provided. This medical service generally included doctor consultation, pathological analyzes and the provision of medicine. A number of cards sold for each medical package ranging from (60%-100%) of the total community in the governorates have been proposed. These percentages were adopted based on a set of factors, the most important of which are the results of the statistical study conducted by the current study, as well as the deterioration of the health situation in government hospitals. The sale price of one card per month was determined by calculating the cost of the medical service plus a profit margin ranging between (10% - 15%) as profits for the health insurance company, and the annual revenues of the health insurance company were calculated for each governorate through ((The following equation: (card sale price per month * 12) * number of cards proposed for sale)).

(break-even point) is the point at which revenues are equal to costs, that is, in the sense of determining the number of cards sold in the light of which the company achieves parity. If the health insurance company works medical coverage below the break-even point, it will achieve profits as a result of lower costs, while if the health insurance company works medical coverage higher than the break-even point, it will incur losses as a result of high costs. If the health insurance company achieves a break-even point,

it is a neutral that did not achieve profits and did not incur losses. The break-even point is calculated through the following equation (annual revenues / health insurance coverage), and health insurance coverage varies from one card to another. The coverage is determined in light of the monthly card price, and below some of the cards proposed by the research will be clarified by calculating the cost of medical service, the number of cards proposed for sale, and the price monthly card sale, annual revenue.

- 1) Family medical insurance card inside the hospital: It is the card that is granted to all family members inside the hospital and includes coverage of consultations around the clock, as well as conducting analyzes inside the hospital and covering medicine from good origins, and is determined by covering one visit per month for all family members, and is calculated from the following equation:

$$(\text{Doctor's consultation} + \text{average analysis costs} + \text{average drug costs})$$

The number of cards sold was proposed as (60%) of the total number of families in the governorates. This percentage was adopted based on the results of the statistical study conducted by the study as well as the deterioration of the health situation in government hospitals. For example:

$$\text{Number of cards sold to Nineveh Governorate} = (\text{Number of families} * 60\%)$$

$$(462,000 * 0,60 = 277,200)$$

The price of selling one card for the family per month is the cost of medical service plus (10%)

As profits for the health insurance company, the cost was calculated as follows:

$$\text{Inpatient Family Medical Insurance Card Profits} = (\text{Card Cost} * 10\%)$$

$$(50,000 * 0,10 = 5,000)$$

Selling price of one card per household per month = (card cost + earnings per card)

$$(50,000 + 5,000 = 55,000 \text{ JOD monthly})$$

The revenues for each governorate were calculated through the following equation:

$$(\text{Card sale price per month} * 12) * \text{Number of cards proposed for sale.}$$

For example, the annual revenues of Nineveh Governorate:

$$(55,000 * 12) * 277,200 = (182,952,000,000)$$

The insurance company allocates an amount of (900,000) dinars as annual coverage for individuals holding a medical insurance card inside the hospital, and that the break-even point is calculated through the following equation:

$$\text{Break-even Point} = (\text{Annual Revenue} / \text{Health Insurance Coverage})$$

$$(18,295,200,000 / 900,000) = 203,280 \text{ Households}$$

This means covering (203,280) families, the company achieves parity. If the number of families less than (203,280) families is covered, the medical insurance company achieves profits, but in the case of coverage above (203,280) families, the company achieves losses.

- 2) Family medical insurance card outside the hospital: It is a medical coverage granted to all family members outside the hospital. It includes coverage of medical consultations around the clock, as well as conducting tests outside the hospital and covering medicine. It is determined by covering one visit per month for all family members.

The cost of the insurance card is calculated according to the following formula:

$$(\text{Outpatient consultation} + \text{average external analysis costs} + \text{average drug costs})$$

The number of cards sold was determined by (70%) of the total number of families in the governorates, and to calculate the number of cards sold, we use the following equation: (number of families * 70%).

For example, the number of cards sold to Nineveh Governorate = (number of households * 70%)

$$(462,000 * 0,70 = 323,400)$$

The sale price of one card for the family per month is calculated according to the following:

The cost of the medical service plus (12.5%) as profits for the Health Insurance Company, and the cost was calculated as follows:

Profits of the family medical insurance card outside the hospital = (card cost * 12.5%)
 $(55,000 * 0.125 = 7,000)$

The sale price of one card per family per month equals (card cost + card profits)
 $(55,000 + 7,000 = 62,000 \text{ JOD per month})$

The annual revenues of each governorate will be calculated through the following formula:

$$(\text{Card sale price per month} * 12) * \text{Number of cards proposed for sale}$$

For example, the annual revenues of Nineveh Governorate

$$(62,000 * 12) * 323,400 = 240,609,600,000$$

The insurance company allocates an annual amount as medical coverage for individuals holding a medical insurance card outside the hospital estimated at (1,000,000) dinars, and the break-even point is calculated through the following equation:

$$\text{Break-even Point} = (\text{Annual Revenue} / \text{Health Insurance Coverage})$$

$$(2,406,096 / 1,000,000 = 240,609 \text{ Family})$$

This means that if the number of families less than (240,609) families is covered, the insurance company achieves profits, but if (240,609) families are covered, the company achieves parity, and if the company covers more than (240,609) families, it achieves losses.

3) Individual medical insurance card: It is medical coverage granted to one person inside and outside the hospital and includes coverage of medical consultations around the clock, comprehensive periodic examinations and analyzes inside the hospital. It also covers outpatient medical visits, coverage of surgeries, and is determined by one advisory and treatment visit per person per month. It performs one surgery per year per person. This card is considered the best card in terms of providing medical service, as it includes all medical treatment requirements.

Cost of individual insurance card = external consultation + (cost of operation and pathological analyzes / 12 months) $(15,000 + 55,000) = 70,000$

The annual coverage provided by the insurance company annually to the individual insured holder of the individual medical insurance card includes (1,400,000) dinars. The number of cards sold was determined by (70%) of the total number of individuals in the governorates, and to calculate the number of cards sold, we use the following equation:

$$\text{Number of cards sold to Nineveh Governorate} = \text{Number of individuals} * 70\%$$

$$(3,729,998 * 0,70 = 2,610,998)$$

The sale price of one card for individuals per month is calculated through the cost of the medical service of (70,000) plus (14%) as profits for the health insurance company, and the cost was calculated as follows:

In-hospital family medical insurance card profits = card cost *14%
 $(70,000 * 0,14 = 10,000)$

Single card sale price for individuals per month = card cost + card profits
 $(70,000 + 10,000 = 80,000 \text{ JOD per month})$

The annual revenues of each governorate were calculated through the following equation:

$(\text{Card sale price per month} * 12) * \text{Number of cards proposed for sale}$

The annual revenues of Nineveh Governorate are:

$(80,000 * 12) * 2,610,998.6 = 2,506,558,656,000$

The break-even point is calculated through the following equation:

$\text{Break-even Point} = \text{Annual Revenue} / \text{Health Insurance Coverage}$

$(2,506,558,656,000 / 1,400,000 = 1,790,399 \text{ individual})$

This means that the number of families less than (1,790,399) individuals is covered, the insurance company achieves profits. If (1,790,399) individuals are covered, the company achieves parity, and if the company covers more than (1,790,399) individuals, it achieves losses .

Conclusions and recommendations

First: Conclusions

- 1- The poor management of the health sector, and the inability of successive governments to find a health system capable of providing an acceptable level of service commensurate with the magnitude of government spending on the health sector.
- 2- The spread of administrative and financial corruption in all departments of the health system in Iraq, and the lack of a clear strategy for the development of the health sector by the Ministry of Health, led to the collapse of the health sector.
- 3- The government's lack of interest in medical insurance companies and providing them with funds has also led to significant weakness in the health sector.
- 4- The lack of seriousness of government agencies in enacting legal legislation on health insurance, providing health services to citizens and developing the health sector, which led to the failure of these bodies and the collapse of the health sector.
- 5- Weakness and a clear absence to benefit from the relatively developed private medical sector, which is characterized by the high prices of its services, and which needs to be legalized and integrated with the government sector through health insurance.
- 6- The futility of current medical services, whether governmental or private, unless the way is given to medical insurance companies in Iraq.
- 7- The current government spending on the health sector in Iraq does not achieve its desired goals.

Second: Recommendations

- 1- We must take into account the population increase, growth rates, providing health cover and absorbing it for the coming numbers, because Iraq is considered one of the countries with an increasing character in population .

- 2- We need to pay attention and emphasize the guarantee of primary health care, as it was noted that the increase in spending on health by Iraqi families and the state of the total expenditure.
- 3- A strategy must be built whose end result is universal medical insurance that covers all Iraqi citizens, starting with medical insurance for ministries and then government agencies and trade unions.
- 4- The work of donors must be legalized, and most companies operating in Iraq, especially government companies, should be included in allocating an amount of funds to contribute to health insurance as a kind of social responsibility, to activate and strengthen the role of donors in financing health care in Iraq.
- 5- As for health insurance in Iraq, the enactment of the law by the Iraqi Council of Representatives enables all Iraqi people to enjoy the cover of health insurance, whether the individual lives under a federal or regional system. It is the case in Iraqi Kurdistan, or lives in other Iraqi provinces, and we suggest that there be specific licenses for insurance and health insurance companies and be specialized in health insurance exclusively. Their number does not exceed four companies in Iraq spread in all provinces and have representations and headquarters to manage them as well as the institutions that contract with them, whether in private or governmental institutions. On the other hand, it is possible that the Iraqi individual enjoys health insurance services outside Iraq as one of the options that can be proposed to enhance health insurance services.

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