

# Comparing the Health Care System of Iran with Various Countries

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## Abstract

**Background:** Gaining health is an inalienable right of every human being; therefore, governments are required to provide a minimum of health care services for all people who live in the society.

**Objectives:** This study was conducted to compare the health care system of Iran and some selected countries around the world.

**Methods:** This was a descriptive-comparative study, which was conducted to compare the health care system of Iran and a number of selected countries with a focus on the service provider and payment method. In this research, nine countries including Norway, Australia, United States of America, Germany, Italy, Canada, England, Denmark and Japan were selected and studied based on the availability of data. These data were compared to that of Iran. The required information from selected countries was collected in 2014 using the “health system review: health system in transition”, and “international profiles of health care systems”, as well as well-known websites such as the world health organization, the world bank and the health department.

**Results:** The findings of this study showed that in most selected countries, primary care services were provided by the private sector and the public sector has been mostly functioning as a supervisor in this area, but in Iran, primary care services were provided by the government. The findings of this study also showed that hospital services in Iran and selected countries (second and third level services) were provided by both public and private sectors, yet the public sector had a bigger share. Moreover, payment in primary health care (PHC) in the majority of the selected countries was mostly capitation and FFS payments, or a combination of the two. Payment in hospital care (secondary and tertiary levels) in most of the studied countries and even Iran was mostly through governmental budgets.

**Conclusions:** According to the findings of this comparative study indicating the successful experiences of health systems around the world, it seems that the implementation of the process of decentralization of the government in some sections and different levels of health care is the best option for the health care system of Iran.

**Keywords:** Health Services, Delivery of Health Care, Health Care Financing, Iran

## 1. Background

Health is considered as one of the major rights of humans and thus all people should have access to resources needed for health care. Factors affecting health include socio-economic factors, physical environment, lifestyle, genetic factors, and access to health services (1). In all countries, the costs of health care are paid by the government, insurances and people themselves; and the contribution of each part is different. In Iran, in accordance with article 29 of the constitution, “the right to benefit from social welfare with respect to retirement, unemployment, old age, disability, state of being an orphan, homelessness and accidents, including health services, health and medical care through insurance or otherwise, is a universal right”. The government is required by law to provide financial services and support for all citizens of the country using the na-

tional revenues and funds obtained through public contributions (2). The literature review showed that all countries are faced with similar challenges despite major differences in finance, organization and delivery of health services in different countries. These challenges in the health sector include: ensuring equity in public access to health care, improving services, development and improvement of treatment results, reducing the costs for the public, improving performance, better responsibility and accountability in the health care system, more involvement of the public in decision-making in the health care area, and reducing barriers between health and social care. Of course, responses to these challenges in different countries has been affected by various historical, political, social and cultural issues (3). Studying international experiences in this field shows that the overall health and social welfare management system has performed focused planning in most

developed countries, but follows a completely decentralized system in the application process. Besides, regarding the complexity of the organizational structure it is very simple and compact (4). Different methods have been used in the health system of different countries to reach their targets, which have faced significant challenges despite their achievements (5). The health system of Iran functions in an environment with rapidly changing social, economic, and technical factors that have led to diverse challenges and tensions (6). It is important to make changes, which aim at equal use of health care services for all people, which help them with paying health care costs, financing continually, and adjusting with the payment system (7). Although the health care network, which was developed in 1984, has been considered a remarkable success of the health system in Iran, the public access to services at secondary and tertiary levels has not improved (8). Nowadays most countries are experiencing some rapid political changes through focusing on primary health care (9). In Iran, the private and public sectors both provide health care and treatment services; however, public sector and specially the ministry of health, treatment and medical education play a more significant role in this regard (10). Such comparative studies of health care systems and health care delivery in successful countries, introduced by the world health organization (WHO) and using their experiences, will assist us in achieving a prosperous health system. Hence, the aim of the present study was to examine the health care system of Iran and other (selected) countries with the aim of inspection of health care service providers and the way they are financed.

## 2. Objectives

This research was conducted to compare the health care system of Iran and some chosen countries around the world.

## 3. Methods

This was a descriptive-comparative study, which was conducted to compare the health care system of Iran and that of some selected countries with a focus on the service provider organization and payment method. In this study, nine countries including Norway, Australia, United States of America, Germany, Italy, Canada, England, Denmark and Japan were selected based on availability of data. The obtained data were compared to that of Iran. The information of selected countries was collected in 2014 from "health system review: Health system in transition", "international profiles of health care systems", and well-known

websites, such as the world health organization, the world bank and the health department website, in English and Persian. The following indices were picked up for data extraction: provider's ownership in primary care centers and hospitals, provider payment (primary care payment and hospital payment) and the role of primary care (required registration with GP and gatekeeping).

## 4. Results

The results of this study showed that the role of the government in Iran does not differ from that of other countries; policy making, financing and allocation of health care budget are the duties of the government in Iran. These findings suggest that in the majority of selected countries, primary care services are provided by the private sector and the government has a regulatory role in this field, however in Iran primary care services are provided by the government (Table 1). In Iran, public coverage consists of primary health care (PHC) alone, while in other countries it comprises of services at the secondary level of care, and dentistry and psychological care along with PHC. The findings suggest that primary care in most of the studied countries is done by general physicians and is registered by them; referring patients to the specialist is possible through the diagnosis of general physicians. In Iran, under the urban and rural family physician program this form of diagnosis and referral has been implemented (Table 1). The gate-keeper role is defined for physicians in all countries except Iran and Japan. Also special care is provided through the referral system in those countries; however, there is no referral system in Iran and Japan and all out-patient services have access to specialists, and patients have the authority of choosing them. The above findings indicate that hospital services (secondary and tertiary levels) of the studied countries are offered by public and private sectors and other active institutions; however, the public sector has the most contribution. In Iran, all the service providers play a role in this field yet the public sector is more significant than other sectors (Table 1). There was a mix of public and private hospitals in all studied countries. About 97% of hospital beds in Denmark are owned by the public sector. The findings of this study suggest that payments in hospital care (secondary and tertiary levels) in most of the studied countries, both developed and developing, is mainly through governmental budgets, and payments such as fee-for-service (FFS) has been done using public funds in hospitals (Table 1). Also a large number of hospitals are public in Iran, which are managed by global budgets, insurance organizations and private incomes, and are funded by OPP from patients. According

to statistics, there seems to be a large number of hospitals with a low number of beds in Iran. These findings also suggest that payments in primary health care (PHC) in most of the studied countries mostly include capitation and FFS payments or a combination of the two. In Iran, payments in PHC was formerly capitation only, yet after the legislation of Health revolution program and family physician, the FFS payment has been adopted as well (Table 1). Also, results of this study showed that almost all costs were covered by public programs in Canada and England, yet in Iran and other countries patients participate in health care payment. Public entities are key entities for health system governance in the studied countries except Canada and Australia, in which non-governmental organizations play important roles in system governance. The Ministry of health and education is responsible for governing the health system in Iran. There is a wide range of interventions done to ensure quality of care in various countries, such as standardization and accreditation, annual internal and external evaluation. Furthermore, Canada has moved to increase budget of provinces to improve quality of care. The care quality commission has the responsibility for these interventions in England. Also in France there are national plans for a number of chronic conditions, with new tools and risk management in hospitals. Patient safety and reporting accidents by staff members are some actions done by the Danish government. In addition to these interventions, cancer-reporting scheme is done in Japan. Finally, Iran has some plans such as health tariffs and standards, hospitals accreditation, clinical governance and health technology assessment through treatment affairs. For improving care coordination, financial incentives are used in Canada and Japan. Mandatory health agreements between municipalities and regions were introduced in Denmark. Lastly England and Iran have taken advantage of multi-level services and referral system. Reducing inequality in the health system is one of the concerns of countries. The current health care system in Iran is considered unsuccessful in accomplishing justice and equality, and the solution is implementing a health system transformation plan. In all studied countries as well as Iran, government agencies are accountable for population health. Information technology is used at all levels of the health system in all countries. Costs of health care have been controlled in different ways in various countries. In Canada, costs are controlled principally through single-payer purchasing power, and increases in real spending mainly reflect government investment decisions and budgetary over-runs. Policies that control pharmaceutical expenditure in Denmark include, generic substitution by doctors and pharmacists, pre-scribing guidelines, and assessment by the regions of deviations in physi-

cians' prescribing behavior. Price regulation for all health care services as a national benefits package is a critical cost-containment mechanism in Japan. Implementing the health system transformation plan in Iran is considered as a cost control policy.

## 5. Discussion

This comparative research was conducted to compare health care systems in Iran and a number of selected countries with a focus on the service provider organization and payment method. The findings of this study show that there are some shortcomings and problems in the health system of Iran compared to leading countries in this field, such as the referral system, type of payment method and ownership of service providers. In Iran, the government plays an active role in planning, leadership, and supervision in a centralized manner, which are better to be devolved to local health care centers. Furthermore, the Iranian government has the responsibility of planning and supervision of these centers. Jabbari et al. in their study proposed a mechanism for decentralization of the government regarding the health system, including transferring health care provision to medical sciences universities, some welfare services to municipalities or ministry of welfare, and public-private partnership in health care provision (6). Also, results of a study conducted by Doshmangir et al. showed that the implementation of the board of trustees' policy in teaching hospitals in Iran and some similar decentralization policies in the past didn't succeed due to a lack of proper infrastructure. Also key stakeholders, particularly the government, did not support the decentralization of Iran's health system (32). The entire population is covered by the health care system in all countries except Iran. Public coverage only includes primary health care (PHC) in Iran, and most of the expensive secondary and tertiary services are not covered. To reduce inequalities in Iran, measures such as implementation of a health system transformation plan has been done yet direct costs are still high. Having had preventive care is beneficial, yet it is important for the government to provide it publicly (33). Karimi et al. results indicated that equitable access to health services in Iran would develop a national health insurance system with the aim of eliminating parallel insurance, coverage for all necessary medical services, particularly for the elderly and patients with chronic mental illnesses (34). The present findings showed that the majority of hospitals are public in all studied countries including Iran. Ghanbari et al. offered a model for health services provision in state hospitals of Iran. They suggested that the government could guarantee function of the public interest and improve quality of services, customer satisfac-

**Table 1.** The Service Provider and Payment Method in Selected Countries

Countries	Provider's Ownership		Provider's Payment		Primary Care Role	
	Primary Care	Hospitals	Primary Care Payment	Hospital Payment	Registering required to meet the appropriate GP	Offering primary care
<b>Australia (11, 12)</b>	Private	Public (67% of beds) and private (33%)	FFS	Global budgets and fee for service in public hospitals (including physician costs. FFS in private hospitals)	No	Yes
<b>Canada (13, 14)</b>	Private	Mostly private and non-profit or public, a number of hospitals are private and for profit	Mostly FFS, but alternatives exist (e.g. capitation)	Public budgets as well as fee for service in hospitals (does not include physician costs)	Not in general, but true for some capitation models	Motivations are different across provinces. E.g. in Ontario, specialists charge high costs from the patients who are referred to them by their general physician
<b>Denmark (15, 16)</b>	Private	Almost all of them are public	A combination of capitation and FFS	Public budgets as well as case payment, includes physician costs	Yes (98%)	No (98%)
<b>England (17, 18)</b>	Mainly private (most of the general physicians are self-employed, and others are working in the private sector)	Private	Combination of capitation, P4P and FFS	Mostly fee for service as well as service contracts. All of these payments include physician cost and medications.	Yes	Yes
<b>Germany (19, 20)</b>	Private	Public (50% of beds) private and non-profit (33%), private for profit (17% of beds)	FFS	General budgets as well as fee for service including physician costs	No	Under some programs of disease fund
<b>Italy (21, 22)</b>	Private (providers of primary health care services are self-employed (including general physicians and children specialists))	Mostly public and some private	Combination of capitation and FFS	General budgets as well as fee for service (including physicians cost)	Yes	Yes
<b>Japan (23, 24)</b>	Mainly private	Private and non-profit (55% of beds) and public	Most of monthly and daily fee for service and some FFS	Daily payments as well as FFS or FFS (including specialist's costs)	No	No
<b>Norway (25, 26)</b>	Private	Almost all public	Combined revenues of town contracts, usage fees (according to the shared costs capitation); the government supports FFS payments	General budget as well as case payment. 40% drugs including physician costs	Yes	Yes
<b>US (27, 28)</b>	Private	Combination of non-profit (70% of beds), public (15%) and profitable services (15%)	Mostly capitation and private programs, and some of the FFS	Daily payment and cases (usually does not include physician costs)	No	Under some insurance programs
<b>Iran (29-31)</b>	Public	Combination of all sectors (public, private, etc.) but mostly public	Subsidiary and capitation	General costs and fees for service to the physicians	Yes	Yes

tion, productivity of existing resources by assembling context of market-oriented mechanisms in the provision of hospital services and monitoring quality via intermediate institutions, along with determining the rules of fair and social competition in public hospitals (35). The findings also suggest that the government's quota for the health sector financing is very low in Iran compared to the selected countries. The private sector in selected countries is only limited to some specific services and is responsible for a small fraction of the financing, while the situation is reverse in Iran. Pazouki et al. offered a mechanism to improve financing of the health system in Iran including using taxes in fiscal policy, health care tariffs based on final cost of services and creating infrastructures for private sector activity (36). There is a wide range of interventions done to ensure quality of care in different countries. Despite implementation of these measures in the recent years in Iran, in terms of clinical governance, accreditation, and implementation of plans such as health tariffs and standards, for various reasons including a state instead of a private institution responsible for accrediting hospitals, these programs have not been successful. Also there is a lack of representatives, for all the items involved in the provision of health care, in the accreditation team (37). The gate-keeper role is defined for physicians at the primary level in all countries except Iran. As a result, there are some issues related to the referral system and coordination of care. Also there is no referral system and all out-patient services are provided by specialists in the private sector. Different studies showed that it is necessary to educate the health team by proper implementation of the referral system, and have a legal commitment for specialists to give feedback and educate the public regarding the referral system (38-40). Electronic medical records are performed publicly in Iran, which is the reason why this program hasn't been successful yet. Whereas according to experiences of other countries, this task should be devolved to private organizations (41). Given that fee-for-service (FFS) and capitation were the payment methods for general physicians in primary care in all studied countries, it seems that it is better for Iran to go around these two methods because of lack of motivation, failure to comply with referral system by physicians, and poor quality of primary health services. Karimi et al. showed that regarding the low gross domestic product (GDP) in Iran and the low percentage of it spent on health, FFS and capitation are recommended in primary health care. Also in case of FFS payment at secondary and tertiary level, it is better to indirectly allocate financial resources to health care providers, beside the unification of tariffs between public and private sectors in order to achieve equality in the health system (42). Also, Vatankhah et al. suggested implementation of

a mixed payment method of salary, capitation, and bonus payment for general physicians and another mixed payment method of salary if there exists an employment relationship and bonus payment for specialists (43).

### 5.1. Conclusions

According to the findings of this comparative study indicating the success of health systems around the world, it seems that the implementation of decentralization of the government in some sectors and at different levels of health care services is the best option for improving the health system of Iran. Hence, primary health care and referral system by family physicians must be done with regards to the privatization of HCR management in leading countries in the field of health care, through delegation and paying for services of private sector under supervision of the government and ministry of health, treatment and medical education. Also, medical service packages, programs and policies should move towards focusing on prevention and primary care in order to decrease the traffic of the next levels and reduce the costs.

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