Understanding the private health sector
in the Islamic Republic of Iran

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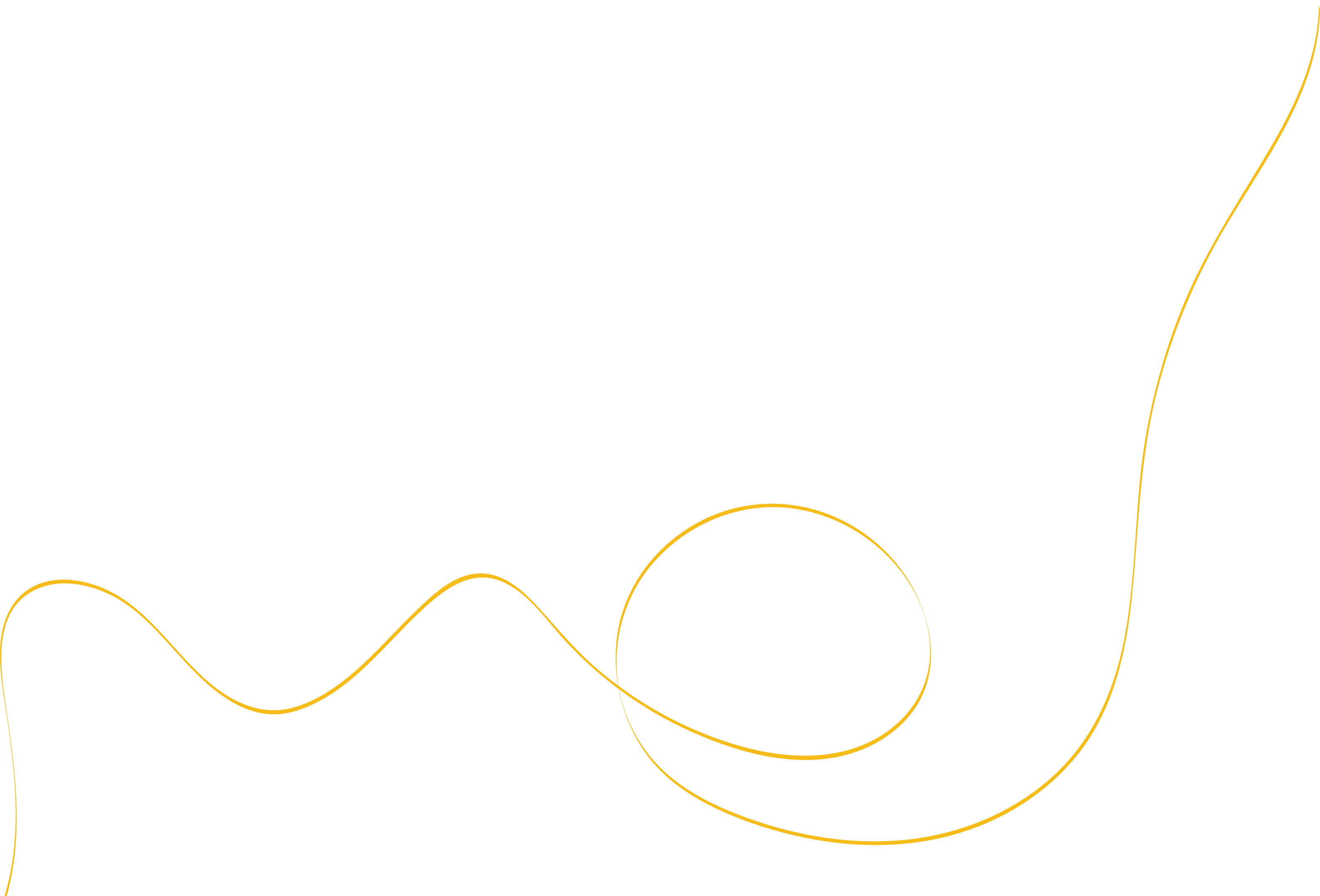


Executive summary

Private health centres are mostly concentrated in cities and usually work independently, mainly in the fields of clinical, paraclinical and rehabilitation services

The health system in the Islamic Republic of Iran is dominated by the public sector, which is the main provider of services. The private sector extends cooperation, and several health insurance companies exist. A few semi-public organizations also play a role in the provision of health services. Legally, the country's health system is under the stewardship of the Ministry of Health and Medical Education (MOHME).

The private health sector consists of individual practitioners, small clinics, large hospitals, diagnostic units, blood banks and pharmacies which, according to the laws and regulations of the MOHME, have expertise in their field of service and are eligible for licensing by the MOHME and Medical Council of the Islamic Republic of Iran. Private health centres are mostly concentrated in cities and usually work independently, mainly in the fields of clinical, paraclinical and rehabilitation services. Their sources of income include direct payments by people (about 35% of the price of services) and insurance payments. The private sector is the major provider of outpatient health services in clinics, diagnostic centres and laboratories (around 80%). It also provides about 30% of inpatient services and owns 18.7% of hospitals and 16.32% of hospital beds in the country. These beds are concentrated in the capital city, Tehran, which has over 13 000 beds (43% of all private hospital beds).

The private sector started playing a greater role in the health care system following the announcement of policies in keeping with Article 44 of the Constitution of the Islamic Republic of Iran in 2005. Subsequently, the implementation of the Health Transformation Plan (HTP), starting in 2014, led to a significant increase in the private sector's contribution to primary health care. Now, around 20 million of the 53 million urban citizens receive free primary health care services from the private sector under detailed service agreements with the MOHME. This includes services for health promotion, child care, maternity care, family health, mental health, nutrition, communicable and noncommunicable diseases, environmental and occupational health, screening (breast, gastrointestinal and cervical cancers), school health, and oral and dental health, which are provided under formal contracts with subdivisions of the MOHME including medical sciences universities and district health networks.

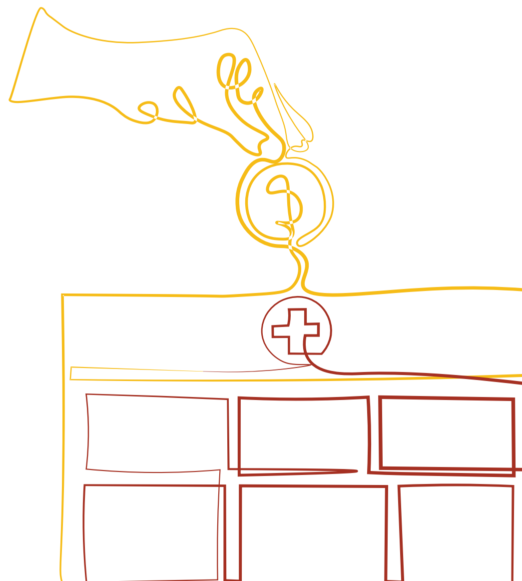
Of special importance to the promotion of public–private partnership (PPP) are the Tabriz health cooperatives, which provide primary health care services to a defined population. These cooperatives follow a controlled market-based model to provide an identified, integrated service package including promotive, preventive, case-finding and treatment services. The public sector makes continuous evaluations of the quality of the services provided and pays for them per patient on the basis of performance.

From the perspective of national policy-makers, the main concerns related to the private health sector include: inadequacy of the data available in the sector; the small number of accredited facilities; and overprescription, profit-mindedness and commercial behaviour. From the point of view of representatives of the nongovernmental sector, major potential obstacles to PPP and private sector engagement (PSE) include: the absence of a specific budget and lack of finances to support or pay the private sector; a lack of clear policies for PPP and PSE; the

absence of a specific unit within the Government to design, negotiate and implement PPP; and weak mutual trust between the public and private sectors.

According to private providers (laboratories, pharmacies and diagnostic centres), few partnerships have been formed despite the advantages of and opportunities for PPP. One reason for the private sector's reluctance to enter into partnerships is the poor performance of the public sector in terms of meeting its obligations. Representatives of nongovernmental organizations stated that the main advantage of PPP was the superior quality of health care and its main disadvantage was the higher cost of care. Consumers of health services (patients and their families) stated that the main reason why they chose the private sector was the better quality of services, while the main cause of dissatisfaction was higher costs. According to the findings of studies that assessed the performance of the private sector in the Iranian health system, the private sector was successful in some aspects of service provision, while the public sector was successful in others.

In light of the significant capacity of the private health sector in all urban areas, it would be safe to conclude that regardless of the serious concerns about private sector accountability, it could play a substantial role in expanding coverage both in terms of the population covered and the services provided, thereby helping the Islamic Republic of Iran to progress towards universal health coverage.



1

Introduction

The goals of the Health Transformation Plan are to achieve UHC and provide high-quality, comprehensive service packages to the population, ensuring that people receive the maximum financial protection

This report aims to explore the role and responsibilities of the private health sector, whether in the form of public–private partnership (PPP) or private sector engagement (PSE), and its potential for contribution to the achievement of universal health coverage (UHC) in the Islamic Republic of Iran.

Despite the importance of the private health sector in the Iranian health system and its major role in the provision of health services, particularly in urban areas, there is no formal, comprehensive information system on the distribution of its services and its performance. This makes it difficult to gather meaningful, reliable, accurate and up-to-date information on the private sector. Following the introduction of the Health Transformation Plan (HTP) in 2014, the Islamic Republic of Iran has been implementing a countrywide electronic health information system in four phases; however, the private sector phase is still under construction.

Therefore, the data required for this report were collected mainly from three sources, as follows.

- **Desk review – descriptive information and numerical data were gathered from various deputies of the Ministry of Health and Medical Education (MOHME), a few medical sciences universities, the National Institute of Health Research and health insurance organizations.**

- **In-depth interviews and surveys – these focused on stakeholders and experts, including: senior policy-makers; national health authorities; health sector experts; representatives of the private health sector (laboratories, pharmacies and diagnostic centres), not-for-profit private sector organizations and private health insurance organizations; donors (development partners); and consumers/patients at private health facilities.**

- **Review – a review was conducted of national and international literature, as well as websites and reports of the World Health Organization (WHO), World Bank, MOHME, health insurance companies and the Iranian Parliament, among others.**

According to Article 29 of the Iranian Constitution, all citizens have a right to health care services and medical care. Evidence of the importance being accorded to "health for all" includes the introduction of financial protection for patients and the provision of health services to all regions in the fifth and sixth development plans, as well as in the general health policies communicated by the Supreme Leader of the Islamic Republic of Iran. Recently, the country has been engaged in reforming its health system to meet the present and future health-related needs and expectations of individuals and the community. The aim is to provide the population with access to equitable and high-quality services without causing financial hardship and, thus, ensuring progress towards achieving UHC.

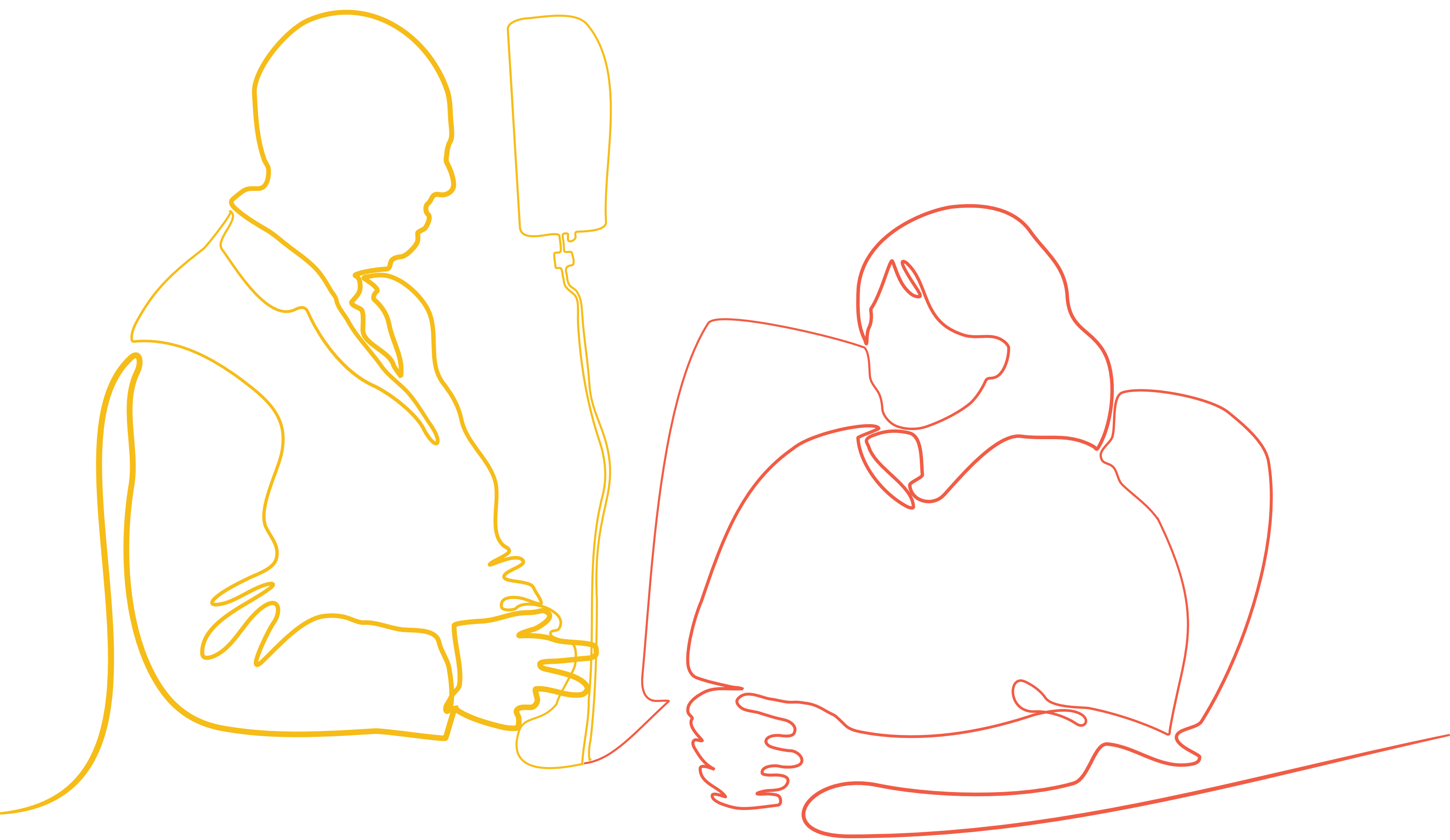
The country made substantial progress towards achieving this goal through the implementation of the HTP between 2014 and 2018. The HTP consists of 15 national programmes and 10 supporting projects. Its goals are to achieve UHC and provide high-quality, comprehensive service packages to the population, ensuring that people receive the maximum financial protection. The HTP achieved much progress with respect to health-related indicators and the three dimensions of UHC, as follows:

- **Population coverage – it expanded population coverage by developing and implementing a family practice programme across the country and strengthening primary health care in urban areas, covering all people in marginal areas.**
- **Service coverage – it expanded the service package by including programmes on noncommunicable diseases, mental health and nutrition, and some social services.**
- **Financial coverage – it improved the financial protection of patients by increasing insurance coverage to include over 11 million new people (the proportion of out-of-pocket payments decreased, from about 47% in 2013 to 38.1% in 2017).**

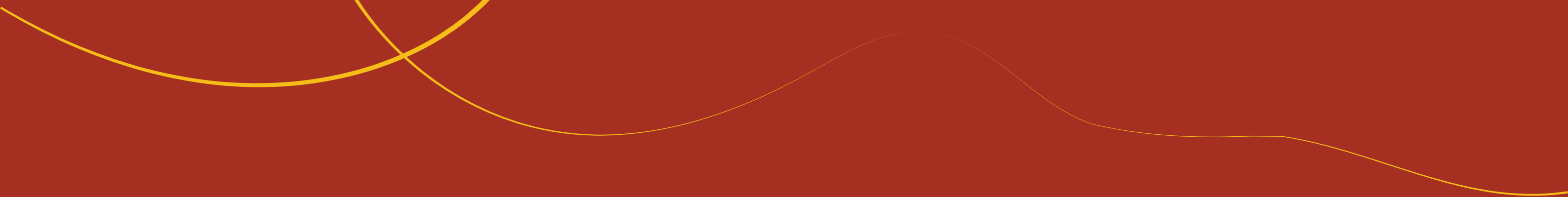
The HTP also resulted in a substantial expansion of services in rural areas and among deprived population groups and informal populations (such as unregistered refugees and migrants).

However, despite these efforts, there is a long way to go and the country would benefit by paying attention to certain areas, including: building strong political commitment; developing and using evidence-based programmes and approaches; promoting PPP and PSE; developing a comprehensive cost-effective service package (based on the project Disease Control Priorities 3;[1] ensuring the financial protection of citizens; learning from pioneer countries' experiences; focusing on the quality of delivered care; and improving health literacy.

1 https://dcp-3.org/disease-control-priorities.



2
Country context



In 2017, gross domestic product was

US$ 427.7 billion

Islamic Republic of Iran is ranked as an upper middle-income country by the World Bank

With an area of 1 648 195 km^2, the Islamic Republic of Iran is the eighteenth largest country in the world by landmass *(1).* The Supreme Leader holds the highest position. The Parliament, called the Islamic Consultative Assembly, is responsible for making laws and its representatives are elected for a term of four years. The executive branch of the Government is ruled by the President, who is elected directly by the people every four years *(2)*.

According to the 2016 census, the country's population was 79 926 270 (seventeenth highest in the world) *(3).* In 2017, the gross domestic product (GDP) was US$ 427.7 billion. The Islamic Republic of Iran is ranked as an upper middle-income country by the World Bank *(4).* It is the eighteenth largest economy in the world and the fourth largest producer of oil. It has the world's second largest gas resources. It ranks tenth as a destination for tourism and fifth in terms of ecotourism. It has the largest industrial sector in the western Asian region and ranks fourth in the world in terms of diversity of agricultural products *(5–7)*. Table 1 presents the demographic and socioeconomic indicators of the country, based on the 2017 census.

Table 1. Demographic and socioeconomic indicators of the Islamic Republic of Iran (based on 2017 census *(2)*)

Area	Indicator				Value*
Population indicators	Total population	79 926 270			Male: 50.7%
					Female: 49.3%
	Households	24.1 million			Urban: 79.4%
					Rural: 25%
Socioeconomic indicators	Literacy rate				Male: 91%
					Female: 84.2%
	Distribution of workers				Agriculture: 18%
					Industry: 31.9%
					Service sector: 50.1%
	Basic health insurance	Iran Health Insurance (47.92%)			Government employees: 14.8 %
					Public health insurance: 23.1 %
					Iranian insurance: 0.04 %
					Villagers: 58.5 %
					Other groups: 3.7 %
		Social security insurance (44.64%)			Compulsory insurance: 68.3%
					Special insurances: 29.2%
					Unemployment insurance: 1.5%
					Non-compulsory group insurance: 1.05%
	Net average annual household expenditure (Iranian rials)	Urban 284.8 million	Total health expenditure: 29 747	Health care expenditure	20 292 (68.2%)
				Social and health insurance	9 455 (31.8%)
		Rural 156.9 million	Total health expenditure: 15 183	Health care expenditure	10 823 (71.3 %)
				Social and health insurance	4 360 (28.7 %)

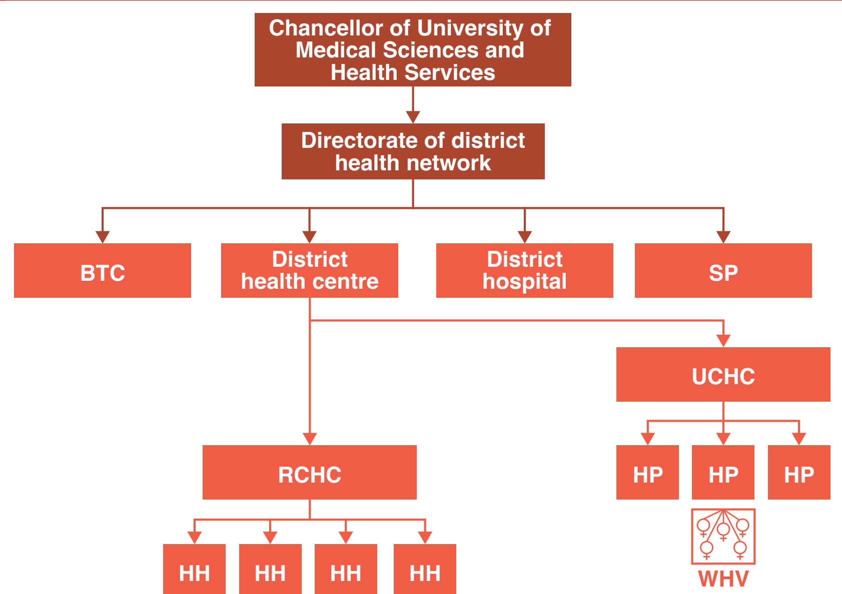
* Percentages may add up to more than 100% owing to overlapping insurances (i.e. a person may be covered by more than one insurance)

3
Overview of the health system

The country's health care system operates at three levels – national, provincial and district. The MOHME is responsible for health care at the national level, medical sciences universities are in charge at the provincial level and the district health network serves the district level *(8).*

Health care services are provided at three levels. The first level comprises rural health centres known as health houses and rural comprehensive health centres (CHCs), and health posts and urban CHCs (Fig. 1). Health houses are usually staffed by female and male rural health workers (*behvarz*), while health posts are staffed by community health workers (*morageb-e-salamat*). The CHCs have physicians, nutritionists, psychologists, midwives and dentists *(9,10).*

Fig. 1. District health system in the Islamic Republic of Iran (primary health care)



BTC: behvarz training centre; HP: health post; HH: health house; UCHC: urban comprehensive health services centre; RCHC: rural comprehensive health services centre; SP: specialized polyclinic, WHV: women health volunteers.

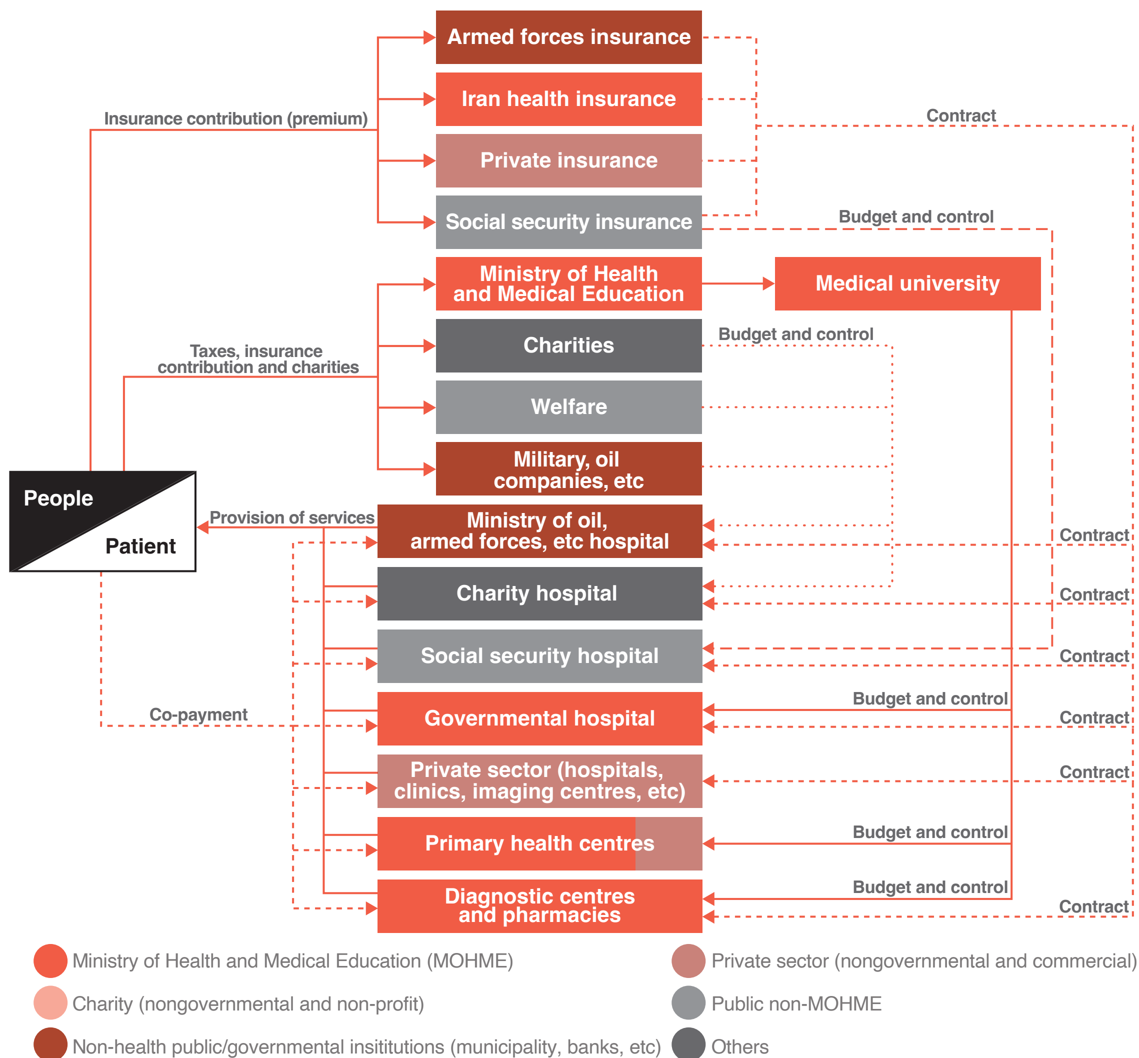
The second level comprises units that can provide more specialized health care, including the district health centre and district hospital. At the former, technical support is provided by experienced physicians and public health officers, who are also in charge of the management and supervision of first-line service delivery facilities and community health services. The district hospital is the referral centre for inpatient and outpatient services *(11,12).* Services are more specialized still at the third level, which complements services at the second level and consists of specialty and subspecialty hospitals. The training of medical and paramedical personnel is conducted at this level. Patients are transferred from one level to another through a referral system *(13,14).*

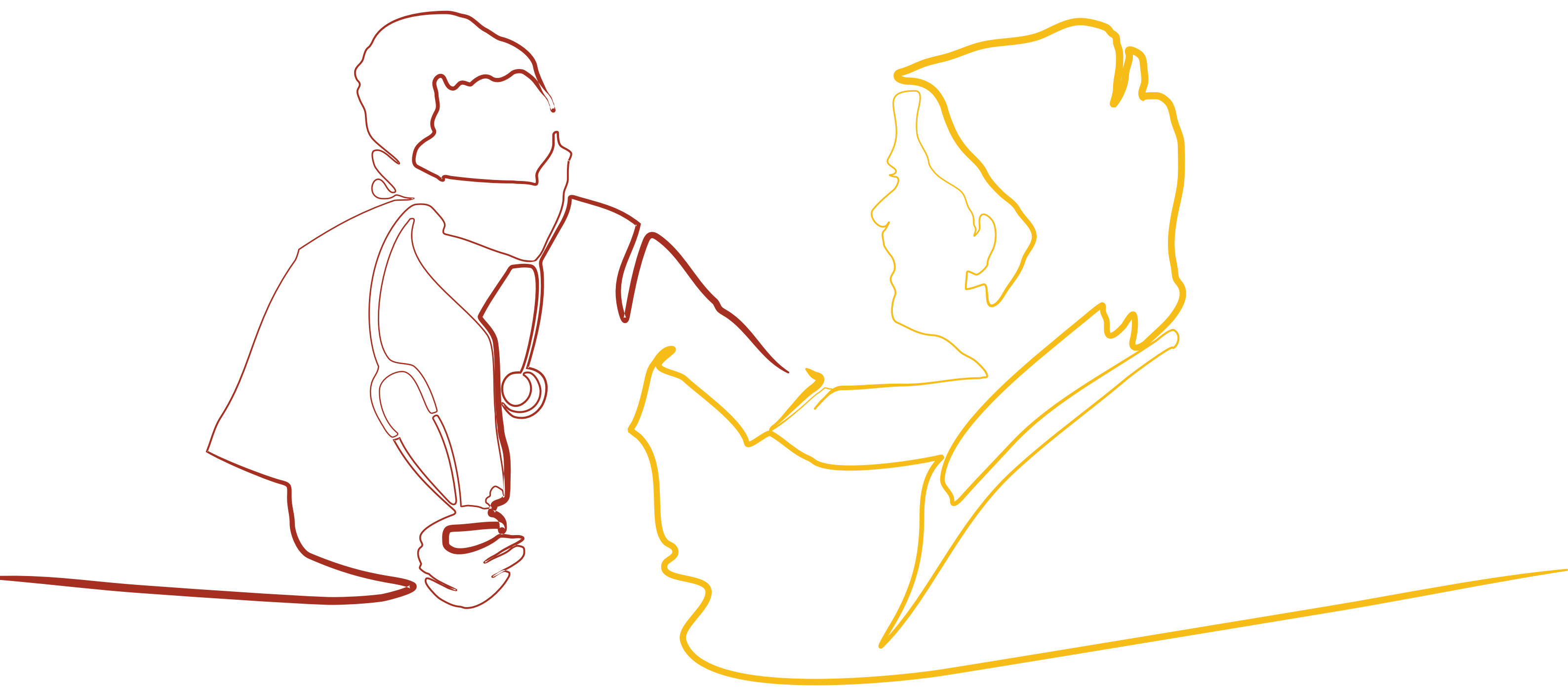
As in many other middle- or upper middle-income countries, the health system in the Islamic Republic of Iran is dominated by the public sector. The public sector provides the majority of health services, with the cooperation of the private sector, which includes several health insurance companies. Some national and semi-public organizations also play a role in the provision of services. It is hard to distinguish the boundaries (in decision-making, planning, service delivery, covered population, and so on) between the various organizations providing health care services.

3 Primary health care centres reference guide. Public health directorate, quality control unit, Ministry of Health.

Although the private sector is part of the health care system in the Islamic Republic of Iran, it has yet to play a significant role due to several issues and barriers including inefficient economic structures, administrative drawbacks, inadequate rules and regulations, and lack of sufficient economic incentives. Article 44 of the Constitution was amended in 2006 to enable the private sector to play a larger role *(15)*. Subsequent to the announcement of general policies under Article 44, the private sector became more involved in the health care system. Previously, it had provided health care services according to the fee-for-service model; however, after the coverage of social insurance was extended, a part of the costs was transferred to basic and complementary health insurance companies. At present, most of the costs incurred for health care consist of out-of-pocket (OOP) expenditure. The private sector mainly offers outpatient and inpatient services, diagnostic services, rehabilitation and consultation. Its role in providing primary health care services is negligible *(16–18)*. Only 17% of hospitals and 13% of hospital beds are owned and operated by the private sector and these are concentrated in urban centres *(19)*. It is not possible to make a true estimate of the role and performance of the private sector in the absence of reliable data. Fig. 2 is a representation of the health care system of the Islamic Republic of Iran.

Fig. 2. Structure of the health care system in the Islamic Republic of Iran; source: *(20)*





4
Public sector

Primary health care services are provided by both the public sector and the private sector in urban areas, and mainly by the public sector in rural areas

As mentioned earlier, the health system in the Islamic Republic of Iran is dominated by the public sector. This section takes a more detailed look at how the public sector functions at various levels.

MOHME

The health care system is legally under the stewardship of the MOHME *(21,22)*. The MOHME is responsible for: the supervision, regulation and governance of the system; policy-making; production of medicines and medical equipment; provision of services; and research and education in the medical sciences. The Ministry implements policies and directions contained in national documents related to health at the national level. This responsibility is delegated to the medical universities at the provincial level. Each province has at least one medical university that provides health services within the defined territory. Moreover, each medical university's deputy of treatment supervises the private sector and provides data and reports to the Deputy of Treatment at the MOHME. The medical university provides health care services through the district health network of each city. The following section deals with the provision of services.

Primary health care

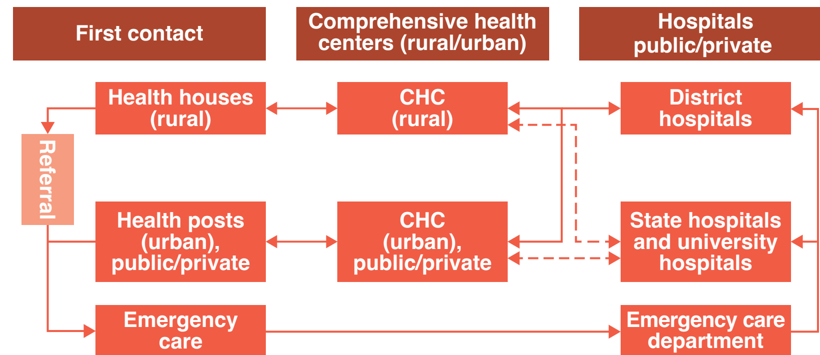
Primary health care services are provided by both the public sector and the private sector in urban areas, and mainly by the public sector in rural areas. Public sector services are based on the family practice model and the referral system.

- **In rural regions, the population is offered primary health care services at health houses by the *behvarz*. Health houses provide services related to health education, nutrition counselling, access to safe drinking-water, environmental sanitation, maternal and child health, vaccination, prevention and control of infectious diseases, treatment of common diseases and injuries, provision of essential medicines, oral health and mental health. A *behvarz* is a native villager who is assigned to serve in a health house after a two-year training course. On average, each *behvarz* covers about 2500 people.**

- **The *moragheb-e-salamat* provide primary health services to the urban population in the health posts. The services offered are the same as those provided by *behvarz* in the health houses. *Moragheb-e-salamat* hold a college degree in the medical sciences and undergo a six-month training course in the field of primary health care. On an average, each *moragheb-e-salamat* covers about 3000 people.**

- **People who need more specialized services are referred by health posts or health houses to urban or rural CHCs, as shown in Fig. 3. The CHC team comprises a family physician/ general physician, public health officer, environmental and occupational health officer, mental health expert, nutritionist, dentist and midwives. In addition to serving as referral centres, the CHCs supervise the health houses and health posts under their jurisdiction. Each rural CHC covers about 12 000 people and each urban CHC covers 60 000–75 000 people.**

Fig. 3. Referral pathways in the Iranian health system



In the past, the public sector was entirely responsible for the provision of primary health services in urban areas. However, following the implementation of the HTP from 2014 onwards, these services have been contracted out to the private sector on the behalf of the Government in select urban areas, particularly marginal areas, in the form of PPP. They are intended for a specified population.

Ministry of Cooperatives, Labour and Social Welfare

The Ministry of Cooperatives, Labour and Social Welfare plays a role in both governance and the provision of services. Among the public organizations affiliated to the Ministry is the Social Security Organization (SSO), one of the main funders of health insurance in the Islamic Republic of Iran. The SSO has its own central structure, branches, hospitals, clinics, polyclinics and day clinics. The Deputy of Treatment of the SSO meets the Organization's obligations to those who have been insured in two ways: 1) direct provision of health care services through owned or leased facilities; and 2) purchase of services.

Other public organizations

Other public entities (governmental, quasi-governmental and nongovernmental) that provide health services are listed below.

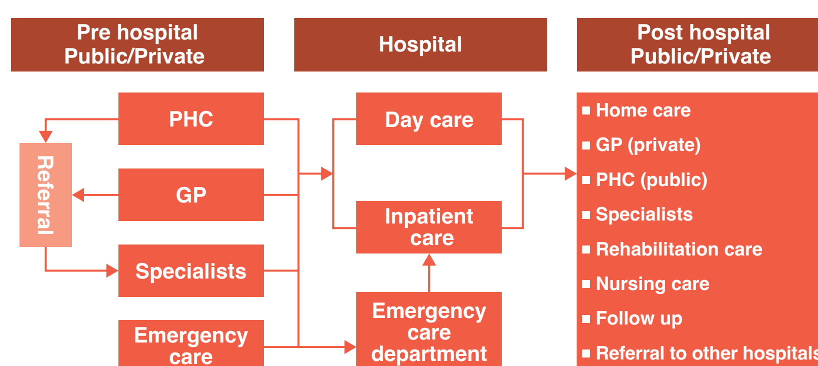
- **The Red Crescent Society is involved mainly in relief and rescue work during disasters. It also provides rehabilitation and social services, besides supplying certain medicines and medical products.**
- **The Legal Medicine Organization is an independent specialist organization within the judiciary and provides forensic medicine services.**
- **A large number of people are covered by health care services provided by the Armed Forces, Ministry of Oil, Ministry of Education, Imam Khomeini Relief Foundation, municipalities, banks, the Academic Center for Education, Culture and Research (ACECR), the Foundation of Martyrs and Disabled Veterans, and the State Welfare Organization.**

4.1 Utilization of health services

Clinical and paraclinical services

In addition to CHCs, clinical services are also provided by general and specialized hospitals, clinics and polyclinics (whether in the public or private sector, or under the SSO), and general physicians, specialists and midwives in independent practices (Fig. 4). Outpatient surgeries are performed in the surgical centres of the private and charity sectors. Emergency care is provided by the road rescue posts of the Iranian Red Crescent Society and the pre-hospital emergency centres. All pre-hospital emergency rooms are managed by the public sector.

Fig. 4. Clinical pathways in the Iranian health system



PHC: primary health care; GP: general practitioner.

According to the latest data, public hospitals accounted for 70% of inpatient admissions in 2017, while the private sector provided almost 80% of outpatient services. The private sector is probably capable of providing most of the services provided by the public sector and there are certain services, such as cosmetic surgery, that are provided almost exclusively by the private sector. The number of admissions in the private sector has declined in recent years because the implementation of the HTP has resulted in a significant decrease in OOP expenses incurred on the services provided by public hospitals. Another factor, as shown in Table 2, is that the length of stay is shorter in private hospitals than in public hospitals. The volume of hospital services provided by the various sectors in 2017 is shown in Table 2. The number of admissions per bed, calculated from Tables 2 and 4, is 31.85 and 23.85 in public and private hospitals, respectively.

Table 2. Inpatient admissions in different sectors

Sector	Number of inpatient admissions (yearly)	Average length of stay (days)
Public (MOHME)	8 330 415	2.79
Private (commercial and not-for-profit)	2 104 032	2.02
Nongovernmental public (institutions such as municipality and banks, etc.)	1 225 109	2.68
Public (not under the MOHME)	643 258	2.40
Total	12 302 814	2.63

4.2 Main health indicators

The Islamic Republic of Iran has achieved many successes in the sphere of primary health care and is relatively well-positioned in terms of health indicators. Key health indicators are presented in Table 3.

Table 3. Key health indicators

Row			Indicators		Total	Year
1	**Total health indicators**	**Mortality between 15 and 60 years of age (per 100 000 population)**	Female		60	2016
			Male		99	
		Life expectancy at birth (years)	Female		78.4	2017
			Male		73.8	
2	**Determinants of health and risk factors**	**Biological**	Low birth weight (<2500 g)		8.6%	2014
			Exclusive breastfeeding for 6 months		44.1%	2014
			High blood sugar (in age group of 18+ years)		12.2%	2014
			High blood pressure (in age group of 18+ years)		20.4%	2014
		Nutritional	Global Hunger Index		8.7%	2017
			Stunted children under-5 years of age		6.8%	2013
			Underweight children under-5 years of age		3%	2013
			Overweight children under-5 years of age		11.8%	2013
			Obese children under-5 years of age		1.9%	2013
			Overweight youth (13–18 years of age)		9.7%	2016
			Overweight adults (18+ years of age)	Female	54.7%	2016
				Male	26.6%	
			Obese adults (18+ years of age)		26.1%	2014
		Behavioural factors	Insufficient physical activity (in age group of 13–18 years)		48.7%	2016
			Insufficient physical activity (in age group of 18+ years)		33.5%	2010
			Tobacco use (in age group of 13–15 years)		5.9%	2012
			Tobacco use (in age group of 15+ years)		11%	2016
		Environmental factors	Access to drinking-water		91%	2015
			Access to sanitation facilities		90%	2015
3	**Health status (mortality)**	**Mortality per 1000 live births**	Neonatal (under 1 month)		9.9	2015
			Infant (under 1 year)		13	2015
			Under-5 years of age		46.7	2016
			Maternal mortality ratio per 100 000 live births		25	2015
		Age-standardized mortality rates per 100 000 population	Communicable diseases		56	2015
			Noncommunicable diseases		13	2015
			Mortality rate of incidence		46.7	2016
			Probability of dying from cardiovascular disease, cancer, diabetes or chronic respiratory disease between exact ages 30 and 70 years (%)		14.8	2016
			Household and ambient air pollution		50.9	2016
			Road traffic injuries		20.27 (16 426 deaths)	2016

4	**Health status (disease)**	Incidence of cancer (all types) (per 100 000 population)	127.7	2012
		Tuberculosis case notification (per 100 000 population)	14	2016
		HIV (number of new cases per 1000 healthy people)	0.06	2016
		Incidence of malaria (per 1000 people at risk)	0.2	2016
		Incidence of hepatitis B (in children under 5 years of age)	0.02%	2015
		Incidence of measles (per 1 000 000 population)	8.2	2014
5	**Coverage of selected interventions**	UHC service coverage index	65%	2015
		Antenatal care (1+ visits)	98.4%	2015
		Antenatal care (4+ visits)	96.3%	2015
		Skilled birth attendance	99%	2017
		DTP3/pentavalent vaccine among children under 1 year of age	99%	2017
		Measles immunization	99%	2017
		Service for severe mental health disorders	56%	2015
		Tuberculosis treatment (notified/estimated incidence)	80%	2016
		Tuberculosis treatment success rate for new bacteriologically confirmed cases	87%	2015
		Suspected malaria cases who have undergone a diagnostic test	100%	2014
		Adults and children living with HIV currently receiving antiretroviral therapy	43%	2016
		Key populations (people who inject drugs) at higher risk who have been tested for HIV in the past 12 months and know their status	27.6%	2014
		Population using improved drinking-water sources	99%	2016

DTP — diphtheria; Pol — polio

4.3 Health sector resources

Facilities and infrastructure

The private sector, including not-for-profit organizations, owns 18.7% of the country's hospitals and 16.3% of its hospital beds. Table 4 shows the distribution of hospitals and beds among the different sectors.

Table 4. Sector-wise distribution of hospitals

Sector	Number of hospitals	Number of active beds	% of beds
Public (MOHME)	749	90 003	68.79
Private (commercial)	172	17 182	13.12
Private (not-for-profit)	37	4 198	3.20
Public (institutions such as municipality and bank)	141	17 506	13.36
Public (not under MOHME)	10	1 029	0.78
Others	8	994	0.75
Total	1 117	130 912	100

The number of active facilities at the primary health care level is 29 195, of which 5397 are CHCs. Of the total facilities, 4484 (83%) are in the public sector and 913 (17%) are in the private sector (only in cities with a population of over 20 000). The number of health posts is 5519, of which

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3230 (58.5%) are in the public and 2289 (41.5%) in the private sector (only in cities with a population of over 20 000). The health system has 17 980 health houses and 299 maternity facilities.

Although diagnostic (laboratory and imaging) and rehabilitation services are provided by the public, private and charity sectors, the private sector is more dominant in this field. Of the 6625 active medical laboratories, 43.3% are in the public and quasi-governmental sectors, while 56.7% are in the private sector. Of the 3446 nuclear medicine diagnostic centres, 37.4% are in the public and quasi-governmental sectors, while 62.6% are in the private sector. There is a total of 7449 rehabilitation centres, of which 17.6% are in the public and quasi-public sectors, while 82.4% are in the private sector. Finally, of the 10 937 pharmacies, 8.9% belong to the public and quasi-governmental sectors, while 91.1% belong to the private sector.

Health workforce

In 2016, there were 4384 full-time physicians, 71 271 nurses and 28 614 nursing assistants working in public sector hospitals. After the implementation of the HTP in 2014, the number of hospitals with resident specialists increased from 91 to 408 and the number of resident specialists reached 4330. The number of specialist physicians in deprived areas also rose, from 941 in 2014 to 5992 in 2016. There were 8149 general physicians working in CHCs in 2014 compared with 13 052 in 2016, amounting to an increase of 60%. After implementing the HTP in 2014, the job description of the *moragheb-e-salamat* in the health posts was redefined and their number reached 18 592 (9903 from the private sector). Nutrition and mental health services were introduced in the CHCs following the HTP, and by 2016 there were 1169 nutritionists (961 from the private sector) and 1538 psychologists (1273 from the private sector) working in CHCs.

Government hospitals employ the largest share of human resources (65%). The share of the nongovernmental sector, including charities and private hospitals, is a mere 21.9%. However, clear distinctions cannot be drawn between the sectors as health practitioners, especially physicians, work simultaneously in hospitals belonging to different sectors. The distribution of human resources among the different sectors is presented in Table 5.

Table 5. Distribution of human resources in different sectors

Sector	Number of staff members	% of total staff
Public (MOHME)	261 497	65.02
Private (commercial)	72 481	18.02
Private (not-for-profit)	15 732	3.91
Public (institutions such as municipality and bank)	43 052	10.7
Public (not under MOHME)	5 546	1.38
Others	3 815	0.96
Total	402 123	100

4.4 Health financing and access to services

Total annual expenditure of the Iranian health system is 1 036 846 756 million Iranian rials (8.68% of the nominal GDP). The public sector (MOHME) accounts for 13.49% of this amount, other public sector organizations (quasi-government bodies) account for 38.01%, insurance organizations for 33.7% (basic insurance 28% and supplementary insurance 5.7%), private sector (for-profit) for 4.9%, private sector (not-for-profit) for less than 0.5%, households (OOP) for 38.01%, and external aid for less than 0.5%.

In recent years, the implementation of the HTP and the increase in the Government's investment in hospital infrastructure was accompanied by greater financial resources being allocated to health insurance schemes to help to balance supply and demand. In 2018, financial resources allocated to incentives for improving the quality of hospital services amounted to US$ 2.28 billion (about 75% of the HTP budget in its initial years), while the demand for financial resources for health insurance is US$ 0.72 billion (about 25% of the total HTP budget).

According to unpublished 2015 analysis of the National Health Accounts by the National Institute for Health Research, the share of health expenditure in the GDP shows an increasing trend. From 6.1% in 2013, it rose to 7.5% in 2014 and 8.7% in 2015. During the same period, OOP expenditure fell from 47% to 38.1% (a decrease of about 9%). The share of Government health expenditure in total health expenditure grew from 39% in 2013 to 49.8% in 2014 and 51.3% in 2015. The reduction in OOP expenditure (9%) is almost equal to the increase in the share of Government health expenditure in total health expenditure (11%).

The MOHME has implemented some important interventions to achieve sustainable financing of the health system, including:

- **financing health system interventions and ensuring their sustainability;**
- **transferring financial resources to insurance companies for the purchase of health services from the MOHME;**
- **improving the management of resources and ensuring financial discipline; and**
- **supporting local production of medicines and increasing their share of the drugs market.**

However, despite the creation of some sustainable financial resources for health, the share of health expenditure in the GDP is increasing. The creation of a new budget line through Government debt is challenging because the balance of the Government budget is negative.

Currently, 93% of the population is covered by health insurance, and insurance resources comprise 33.7% of total health expenditure. Health insurance is divided into two main groups: basic insurance and

Supplementary private insurance companies have entered the market in recent decades, mainly to cover the co-payments and co-insurances of the basic health insurance companies

supplementary insurance. People covered by the basic health insurance schemes include: 1) private or public sector employees who are entitled to social security; 2) Government employees who fall under the National Employment Act; 3) those whose health insurance premiums are paid from public resources; 4) those whose premiums are provided from public sources (the poor, and people without any insurance coverage); and 5) others. Due to lack of Government resources, the package and percentage of costs covered by basic insurances are low and people use supplementary insurance to offset the shortfall. For this reason, supplementary private insurance companies have entered the market in recent decades, mainly to cover the co-payments and co-insurances of the basic health insurance companies.

The four major basic health insurance companies are: 1) the SSO; 2) the Iran Health Insurance Organization; 3) the Armed Forces Medical Service Insurance Organization; and 4) the Imam Khomeini Relief Foundation. Besides these, there are several other health insurance funds affiliated to specific Government bodies; these funds usually provide both basic and complementary/supplementary health insurance. Based on the latest information in the official reports of insurance companies, 47.92% of the total insured population are covered by the Iran Health Insurance Organization, 44.64% by the SSO, 1.53% by the Imam Khomeini Relief Fund, and 5.91% by the Armed Forces Medical Service Insurance Organization.

Taking into consideration the total inflation rate in the country and the population's purchasing power, the Government makes annual assessments of health care tariffs and determines new tariffs, which are then communicated by the Cabinet to the public, private and charity health sectors. The national policy on tariffs is applicable to almost all stakeholders and providers in all regions.

People covered by basic health insurance packages pay only 10% of the charges for inpatient services and 30% for outpatient services in public hospitals. However, in a private hospital, they must pay 70% of the price of services, regardless of the insurance company; if they happen to have supplementary insurance, they can use it.

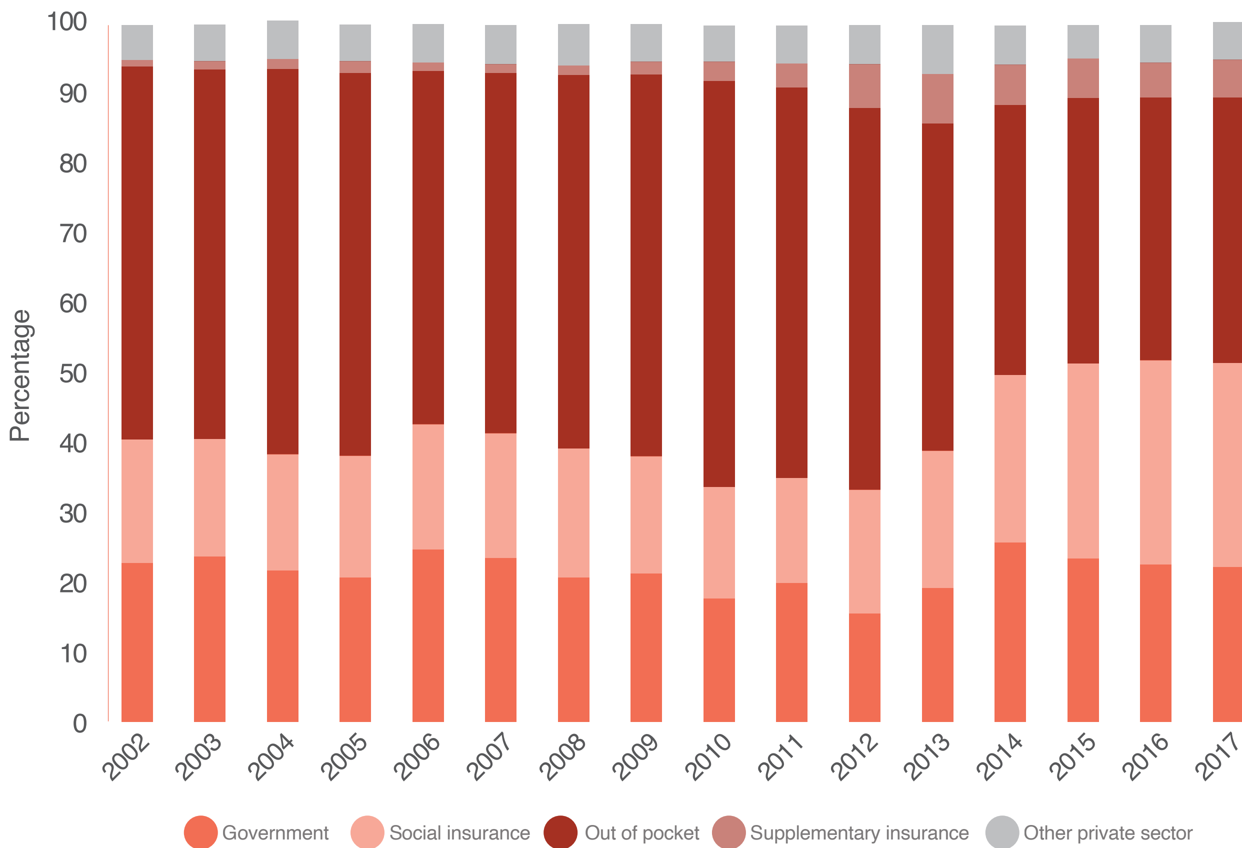
Resources for financing the health system include:

- **public sector – basic health insurances, ministries, universities, Government organizations and institutions, public nongovernmental organizations (such as municipalities and the Islamic Republic of Iran Broadcasting);**

- **private sector – direct OOP payments by households, supplementary health insurance companies, private companies, banks and Islamic Azad University.**

Fig. 5 shows the share of different resources in financing the country's health expenditure.

Fig. 5. Share of different resources in financing health expenditure, 2002–2017



4.5 Health insurance and UHC

Basic insurance plays a pivotal role in achieving UHC. Strengthening basic insurances by reviewing service packages, costs and coverage can be very effective in reducing their main weakness, which is cost recovery. Currently, about 25% (20 million people) of the country's population has some kind of private health insurance. The main nongovernmental health insurance organization is the SSO, which has the second largest insured population in the country. Hence, this section will focus mainly on the SSO.

The SSO was established in 1953. It provides mandatory and voluntary insurance, basic health insurance, disability and unemployment allowance, retirement allowance, bereavement allowance, support for medical devices, marriage allowance and some other services. The SSO's personnel are spread nationwide and number 60 000; of these, 45 000 are clinical personnel who work at SSO-owned health facilities. The population covered by the SSO rose from 34 million in 2012 to 42 million in 2017. The organization has contracts with 854 hospitals across the country (all public and university hospitals and some private hospitals). Only 6% of those insured by the SSO have voluntary insurance, while the rest are covered by mandatory insurance. The SSO's main sources of revenue are insurance premiums, revenue from investments and revenue from its hospitals.

The basic health insurance package is clearly defined. It covers the services listed in the Relative Value of Health Services book and some other services, such as outpatient visits and hospital hoteling on a par with the tariffs of the public sector. Currently, over 90% of the population has basic health insurance (minimum coverage); however, the coverage of other insurance, such as retirement, is not that high. The premium rate and the obligations of the SSO are determined by the Social Security Act of 1975. The premium is generally 30% of wages, of which 20% is paid by the employer, 7% by the employee, and 3% as a subsidy by the Government. Of the total premiums, 9% are expensed for treatments. The dependants of an insured person need not pay a separate premium and will receive the same level of coverage as the insured person.

All insured people have to contribute in the form of co-payments and co-insurances at the point of service. The basic health insurance organizations pay 70% of the public tariffs for outpatient services and 90% for inpatient services. The consumer has to cover the remainder of the costs through OOP payments. Thus, direct payments by the patient are not prohibited. All patients must pay their share, unless they are covered by the SSO and the services are provided by health facilities owned by the SSO.

The SSO publishes annual reports of its performance. These are used by officials of the health system and insurance organizations for decision-making for the future. Representatives of the General Inspection Organization of the Islamic Republic of Iran, which is within the SSO, have access to all financial and performance documents. Some reports are also sent to Parliament and other organizations, such as the Statistical Center of Iran.

4.6 Licensing and accreditation

New health facilities are licensed by the MOHME, its representatives in the provinces (medical universities) and the Medical Council of the Islamic Republic of Iran. The Evaluation and Accreditation Office, one of the Ministry's subordinate agencies, is in charge of the monitoring and licensing of health facilities. It has seven divisions: monitoring and accrediting inpatient centres; monitoring outpatient clinics and work offices; monitoring dental clinics; monitoring drug use treatment centres; monitoring organ transplant centres; statistics and information technology; and licensing. The Evaluation and Accreditation Office visits all hospitals and health centres to improve the quality of services and patient safety, in keeping with MOHME standards and guidelines. At the provincial level, each university has an accreditation office that performs duties related to evaluation and accreditation on behalf of the MOHME Office.

The main axes of the accreditation standards are: management and leadership; patient rights; organization, management and empowerment of human resources; facilities and basic amenities; safety measures; quality improvement; and data collection. Accreditation and assessment are performed by a team consisting of representatives of providers, purchasers (health insurers) and supervision entities. After evaluation, the scores earned by a facility with respect to the different axes are recorded. The concessions are summed up by the MOHME, and the

grade of the hospitals specified. Subsidiary hospitals are provided with training in the accreditation standards.

After accreditation, the quality of services is then usually assessed annually by the same team (unless any problems are reported). Problems and complaints are assessed by the Medical Council of the Islamic Republic of Iran, the inspection units of the medical universities and the MOHME. Private hospitals, like their public counterparts, must report notifiable diseases and quality indicators (such as the accreditation score) to the public. This information is compiled by the universities' Vice-Chancellor for Treatment Affairs and sent to the MOHME's Deputy Minister of Treatment. They are not required to disclose data on financial issues and human resources.

5

Role of the private sector

The private health sector consists of individual practitioners, general and specialized clinics, hospitals, diagnostic centres and pharmacies

The private health sector consists of individual practitioners, general and specialized clinics, hospitals, diagnostic centres and pharmacies which are authorized by the licensing unit of the MOHME and the Medical Council of the Islamic Republic of Iran. The latter is a nongovernmental organization established under legislation passed by the Iranian Parliament in 1964. It is responsible for licensing, authorizing and registering all health care professionals (numbering 254 311 in 2017) with the exception of nurses, who are registered by the Iranian Nursing Organization. It aims to define, protect and support patient rights as well as the professional rights of health care practitioners, and regulates bilateral or multilateral collaborations between health care professionals and other associations and organizations.

As mentioned earlier, following the announcement of general policies under Article 44 of the Constitution, the private sector has become more inclined to invest in the health system. The sector's representatives believe that because their activities are subject to the general policies under Article 44, their trade practices should be treated in accordance with the trade law, which places no obligated tariffs on them. For this reason, it would be better to have a specific law for the provision of health services by the private sector. Note 2 of Article 3 of the Law of Implementing the General Policies of Article 44, enacted on 8 February 2008, states: "The areas of health, education and research, and culture are not subject to this law and any development of public or non-public sectors and any transfer to the nongovernmental sector in these areas should be according to the specific bill that should be arrived at by the Parliament in the next year after the announcement of this law".

5.1 For-profit private health sector

For-profit private health facilities usually operate independently. The operations of the for-profit sector were quite extensive prior to the HTP. Most clients, excluding those who required hospitalization, opted for private clinics linked to insurance schemes. However, the situation has changed with the HTP and now there is greater emphasis on the public sector, including its monitoring mechanisms, financial procedures and referral system.

According to Health Services Utilization Survey data (2015), 50.4% of patients sought health services from private outpatient clinics and 15% from private hospitals. The total number of general, specialty and subspecialty outpatient clinics in the 172 private hospitals was 1597. The number of private pharmacies was 9654, and the number of private diagnostic laboratories was 2452. There were 14 medical schools, 91 nursing schools and 56 schools of midwifery run by the private sector.

National health policies, strategies and plans have attempted to identify the role of the private health sector in expanding UHC, but nothing very specific has emerged. The goal of UHC and involvement of the private sector have been endorsed in the Mega Health Policies, approved by the Supreme Leader, and the Sixth Five-Year Development Plan and Mega General Policies of the country.

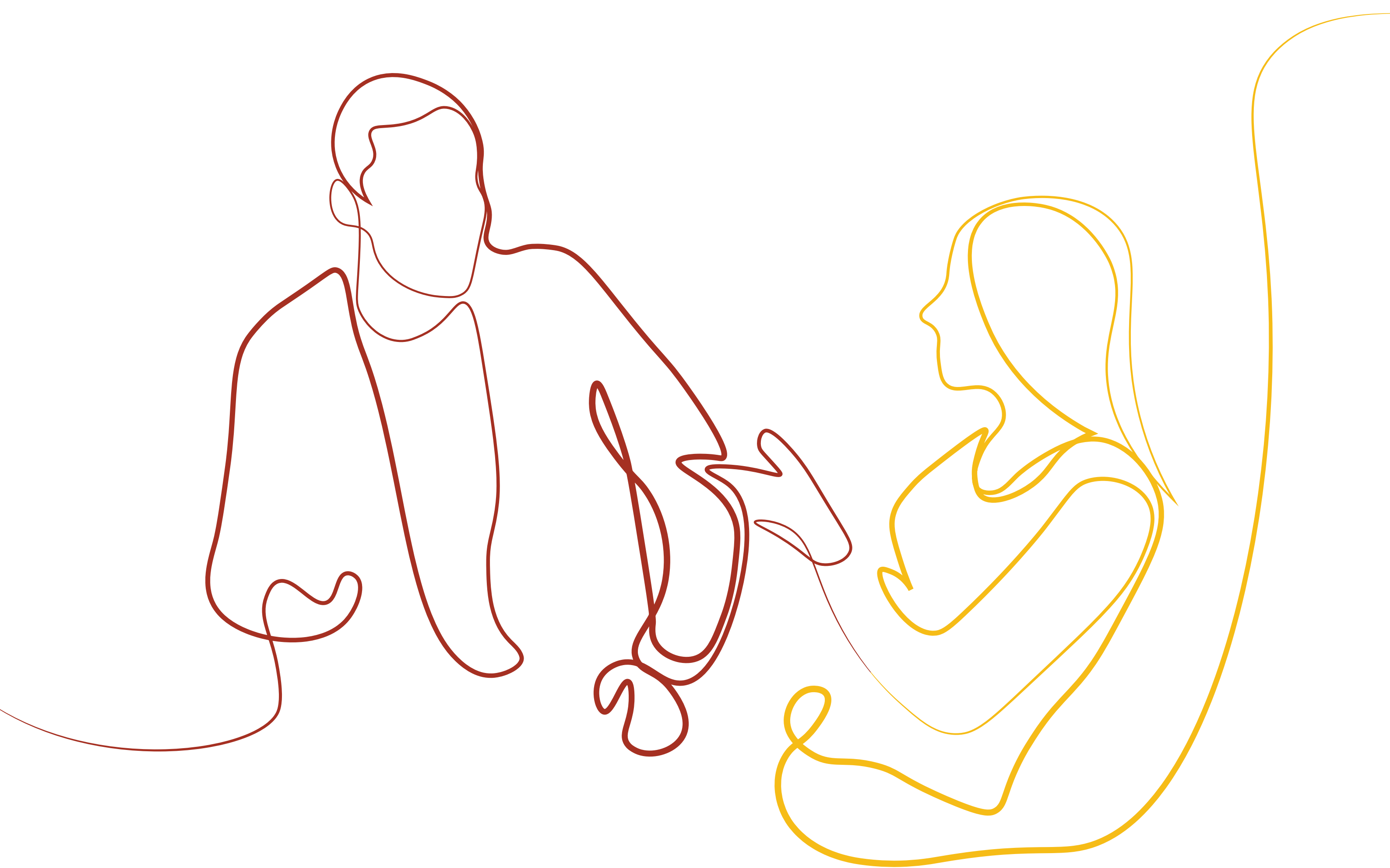
5.2 Not-for-profit organizations

This sector consists mainly of charity organizations and nongovernmental organizations. The charities provide mostly outpatient (diagnostic, imaging, rehabilitation) services. Some are engaged in establishing clinical and diagnostic centres, especially hospitals, and providing equipment. They also pay allowances to patients and help the public sector to implement national or public health programmes (e.g. screening and vaccination).

Most of the charity and nongovernmental organizations are set up and run by people without any expertise in the field of health, or retired people with experience in various fields of medical science. All nongovernmental organizations work under the Iran Health Charity Assembly, which aims to identify and organize the country's health benefactors, ensure the proper use of assistance, enlist public participation in health care and offer guidance on national health priorities. The majority of the financial resources of these organizations come from donations and they are usually not funded by the Government or the public health sector. They do receive payment for the health services they provide from insurance companies, however. Most charity organizations and nongovernmental organizations have their own premises.

Recently, the MOHME established the Deputy Minister for Social Affairs to facilitate communication between nongovernmental organizations and the public health sector and to enlist the cooperation of these organizations in the country's health programmes. The Deputy Minister for Social Affairs has been providing systematic support to functional nongovernmental organizations and facilitating the establishment of new ones. During 2017–2018, more than 650 nongovernmental organizations were registered. To attain the objective of UHC, the Deputy Minister for Social Affairs has been advocating for community-based organizations at the level of clubs and neighbourhoods. The implementation of this idea, which is being tried out at the district level, is in the initial stage. If it proves to be successful, it will be a good example of how the community can contribute to health care goals.

9 Annual statistical report 2018. Ministry of Health, Government of Iraq.



6

Characteristics of the private sector

6.1 Legal and regulatory framework and governance

The MOHME is responsible for the supervision and regulation of the health sector, governance, policy-making, research and development related to medicines and medical devices, and research and development and education related to medical sciences. The Ministry oversees the execution of broad policies and documents related to the health system at the national level. At the provincial level, this responsibility lies with medical universities.

Several laws and development plans made over the years have paved the way for a larger role of the private sector in health projects in the country. These include Article 44 of the Constitution, the fourth, fifth and sixth five-year development plans, the article of law on continuous improvement of the business environment, articles of law on the elimination of barriers to competitive production and building a community financial system, and the law for regulating some of the Government's financial rules.

The main bodies/departments that regulate key actors and activities in the private health sector include:

- **Medical Council of the Islamic Republic of Iran – physicians;**
- **Iran Food and Drug Administration – pharmacies and pharmaceutical companies;**
- **Deputy Minister of Treatment, MOHME – outpatient clinics, hospitals and diagnostic laboratories;**
- **Deputy Minister for educational affairs, MOHME – training institutions.**

The MOHME collects data on private providers, especially on outpatient services; however, the information is not completely up to date. Recently, a system has been developed for identifying and characterizing the country's health service providers. Health professionals who receive benefits through the full-time geographical plan are not allowed to work in the private sector (i.e., are not allowed to have dual practice).

According to national laws, the health service provider (be it a health facility or an individual) must be professionally competent and licensed by the MOHME, the medical sciences universities and the Medical Council of the Islamic Republic of Iran.

The licensing authority, which works under the supervision of the MOHME's Evaluation and Accreditation Office, is responsible for enforcing laws and regulations related to the establishment and operation of private centres. The licensing authority has formulated about 54 regulations, instructions and guidelines. These include rules on the establishment of: individual clinics; general and specialized group clinics; chemotherapy and dialysis centres; diagnostic centres; charitable organizations; private clinics; individual/group traditional medicine clinics; hospitals; drug use treatment centres; and private ambulance services. The licensing authority assesses whether a provider has fulfilled the requirements for obtaining a licence, and providers have to renew their

licences after a specified period. Traditional and informal healers are required to obtain a licence if their services are likely to harm patients; if they fail to obtain a licence, their activity will be stopped.

Under the current structure of the health system, the process of obtaining registration, obtaining a licence and establishing a health facility is difficult and time-consuming. While there is a well-defined legal network for licensing, accreditation, control and supervision, its implementation is far from optimal. Despite reforms and procedural improvement in recent years, some obvious shortcomings continue to hinder supervision and accreditation, especially in the area of outpatient services. Furthermore, supervision mostly assesses structure and equipment (inputs) rather than performance and outcomes. Deficiencies in the administrative structure of the licensing authority and a lack of organizational capacity are a stumbling block to the implementation of laws and regulations related to outpatient services. In this regard, there are activities and corrective measures in place, but there is not enough information on the private health sector to enable effective monitoring and enforcement of the laws.

Payment mechanisms

The private sector initially provided health services using the fee-for-service mechanism. However, with the growth of social insurance, the basic and complementary/supplementary insurance schemes began to pay a share of the costs of health care provided by these facilities. Now, if patients are covered by a health insurance company and the doctor is also under contract with that company, patients pay 35% of the cost; otherwise, the entire cost has to be met through OOP payments. Insurance organizations and OOP payments constitute the main sources of income for private health care providers.

In private hospitals, payment for outpatient services is usually through a fee-for-service mechanism. For private hospital inpatient services, the mechanism is also fee-for-services, charged per day.

Primary health care is funded by the Government, and service recipients usually do not pay.

6.2 Financial resources

The private sector accounts for about 50% of all resources in the health system. It is financed primarily by direct payments, the greater part of which comprise household OOP payments. Direct OOP payments account for almost 38% of the country's health expenditure; of these, 88% occur in the private sector. Basic and supplementary insurance companies are the second main source of financing of the private health sector.

According to the country's policy of health service regionalization, high-technology health services are provided under PPP contracts, which are one of the most important methods of financing in the private sector. The private sector's share of health service provision is 50% in Tehran, 40% in the remaining nine megaregions,[3] and 20% in other cities.

3 The concept of megaregions is used in development literature and refers to a economic unit composed of more than one city and each city's hinterland.

According to survey participants, the most important sources of funding for not-for-profit private organizations are public donors, donations from organization members and, in some cases, donations from people outside the organization. A few of these organizations sometimes receive financial assistance from the MOHME. Most respondents stated that they had not faced any difficulty in setting up their organization. However, some indicated that after a while they encountered financial difficulties and were left with limited resources due to a reduction in support.

6.3 Quality control, monitoring and evaluation

In line with new management methods, some services in the public hospitals are contracted out to the private sector within the framework of the national rules on PPP. These include establishing, managing and developing dialysis centres; establishing, equipping and running cancer centres; establishing and running hospitals; and equipping imaging centres, laboratory chains and operation theatres. Depending on the contract, the private provider may also undertake periodic supervision and monitoring of performance. The private provider is supposed to inform the hospital authorities of any shortcomings and is required to solve these problems, as well as problems relating to noncompliance with laws and standards. If the private contractor cannot solve a problem within a stipulated period of time, the contract may be cancelled.

6.4 Medical education

The private sector's share in the provision of medical education and running of medical universities is less than 20%. These activities are performed mainly by the Islamic Azad University. However, the private sector has made significant contributions to continuing medical education.[4] One of the problems related to involvement of the private sector in medical education is the accreditation process. Although progress has been made with respect to developing a mandatory accreditation mechanism for educational centres, its implementation is not yet underway.

The private sector institutions that contribute to medical education have committed to exchange information with the Government on matters such as communication, quality indicators, volume of services and resources used. However, so far only the number of students and the results of the comprehensive examinations are shared, which may be because of the lack of an effective national/provincial information registration system in the private sector.

The private sector can establish higher education institutions for health only if certain conditions are met. First, the institution must have the requisite resources, to be determined by the Deputy Minister for Education. Second, it should be capable of engaging with reputed universities in the world (based on the Shanghai ranking system), as approved by the High-level Assessment Council of the MOHME. Only after its financial capability has been proved does the Council for Development of Medical Universities issue a substantive agreement for the establishment of a private institution for higher education. The

4 Data source: Deputy Ministry of Education, Ministry of Health and Medical Education

initial assessment, monitoring and evaluation of the courses offered by a private institution is the responsibility of the relevant secretariats under the Deputy Minister for Education.

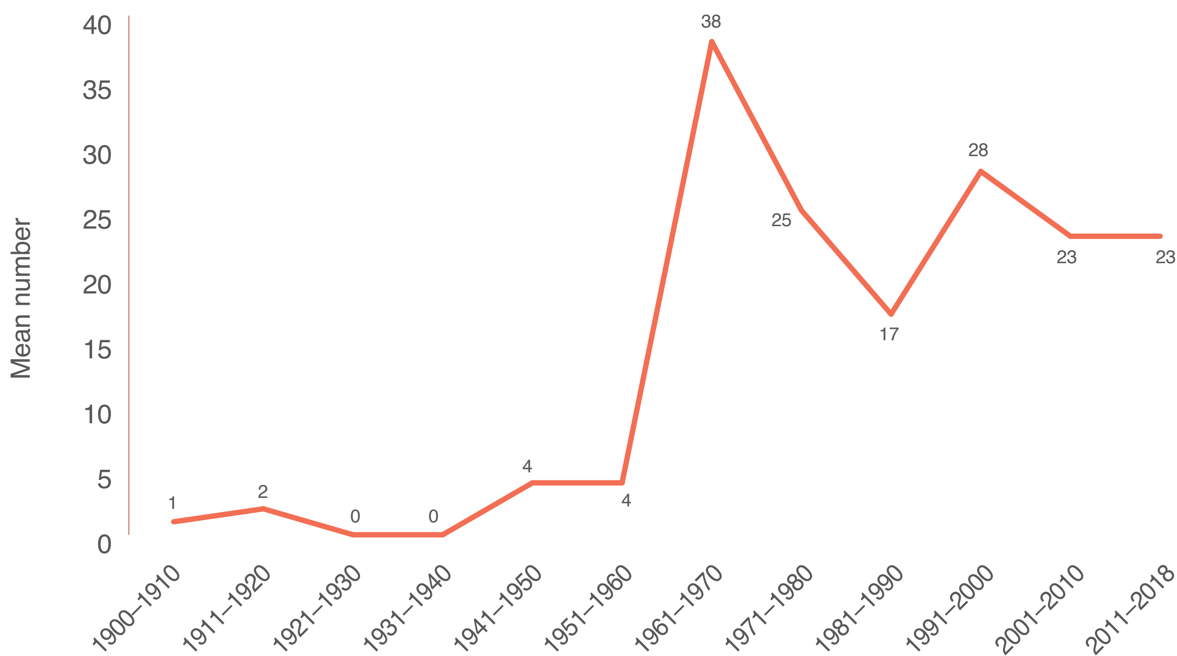
According to national policies and the agreements made, it is expected that the participation of the private sector in medical sciences education (academic and in-service education) will further expand. Ten new private medical schools have been licensed. Rules for private sector participation in the field of in-service training are in place and there is a good amount of PSE in this sphere.

6.5 Growth of the private sector

In recent years, PSE in the Iranian health system has grown significantly at the primary, secondary and tertiary levels alike. This has resulted in competition among various health care providers including public, private, charity and nongovernmental hospitals. The competition has proved beneficial from the stakeholders' perspective, as it has led to an improvement in the quality of care. The definition of quality indicators such as the length of hospital stay, mortality rates and patient satisfaction, as well as periodic monitoring of these indicators, has also improved the quality of the services delivered.

The first private hospital in the Islamic Republic of Iran was established in 1905. By 1970, the number of private hospitals had grown to 38, most of which were established between 1960 and 1970. There was a decline in this trend due to the period of political crisis and conflict, but the number of private hospitals increased again following the announcement of the policies under Article 44 of the Constitution in 2005 (Fig. 6).

Fig. 6. Trend in establishment of private hospitals



About 30% of private sector hospitals (50) and 40% of beds (more than 13 000) are concentrated in the capital city, Tehran.

6.6 Determinants of private sector growth

Most survey respondents felt that the main reason for the growth of the private health sector was the low quality of care provided by the public sector. The majority believed that the Government should focus on the quality of health care rather than the provision of services (see Annex, Table A.1).

The strength of the private health sector lies in its human resources, advanced medical technologies and specialized services. The provision of health services by this sector has thus expanded not only in cities, but also in smaller towns and rural areas. However, the downside is the creation of a certain amount of surplus capacity, for example in terms of hospital beds and advanced technologies. It can also lead to provision of unnecessary care, such as overprescription and unnecessary diagnostics.

The growth of the private sector has led to the migration of high-quality staff from the public health sector, which is thus being eroded. This has adversely affected the public sector's ability to attract skilled personnel and also demotivated personnel remaining in the public sector. Their expectations have increased, leading to dissatisfaction with working conditions and, consequently, a decline in the quality and quantity of services provided. It is worth noting that expenditures incurred on personnel comprise 65–75% of the total costs of the private sector.

Private health care providers who participated in the study stated that health professionals might be attracted to the private sector for the following reasons:

- **higher compensation**
- **continuing medical education**
- **better working conditions and more flexible hours**
- **being accorded greater respect**
- **recognition and nonmonetary incentives**
- **management style**
- **career growth and merit-based promotion**
- **challenging work and test of skills.**

Causes of private sector growth

Several factors have fostered the growth of the private sector in the Islamic Republic of Iran in recent years:

- **Paragraph 14 of the General Health Policies states that the Islamic Republic of Iran should: "achieve the authority in science, technics, and provision of medical services and obtain an outstanding position in medical areas in the Muslim world and the South-East Asia region". This may serve as an incentive for the promotion of private sector engagement in health tourism.**

- **Conflicts of interest of health system managers and policy-makers may sometimes result in dual practice, with people attracted to the private sector as it can provide their main source of income.**

- **The private health sector has benefited from the promotion of certain economic policies, which have led to the transfer of aspects of the governance of public services such as education, security and health to the private sector.**

- **Another factor is Government inefficiency in creating sustainable employment by establishing private firms that can export their goods/services or substitute foreign goods/services with their own ones. This has caused the Government to look upon the private health sector as a means of reducing unemployment. Some countries, such as Armenia, Georgia, Saudi Arabia and Türkiye, have commercial policies in the health sector which act as a competitive incentive for the Iranian health sector.**

- **The training of human resources in excess of need in the public sector, as well as the existence of excess technologies in the field of health, have provided suitable conditions for the private sector to access skilled human resources and sufficient equipment.**

Key concerns related to the private health sector

Some concerns related to the private sector include:

- **inadequate data and lack of information sharing with the Government;**

- **poor regulation or lack of enforcement of regulations;**

- **insufficient number of accredited health units/facilities;**

- **profit-oriented/commercial approach that results in irrational clinical practices and overprescription;**

- **limited engagement in public health programmes, which manifests in a lack of involvement in primary health care services and limited efforts towards national health goals/policies; and**

- **indifference regarding the management of diseases in line with national protocols, which leads to not following communicable disease notification protocols.**

Managerial strengths of the private sector

From a stakeholder perspective, the private health sector has the following managerial strengths:

- **optimal utilization of equipment, beds and resources;**
- **capacity to attract more competent staff;**
- **provision of performance-based incentives;**
- **flexible deployment of resources;**
- **cost control through better supervision and monitoring; and**
- **technical and managerial efficiency.**

7
Public-private partnerships

Recent years have seen an increase in political commitment to the promotion of PPP[5] in the Islamic Republic of Iran, with the President emphasizing its importance at several conferences. In 2015, the Economic Partnership Constituency was established in the MOHME. The Minister of Health announced its renaming as the Supreme Council of Economic Coordination in 2018. The Council functions in accordance with Article 44 of the Constitution, the General Health Policies and the comprehensive administrative reform programme. It aims to develop evidence-based policies, strategies and programmes related to PPP in the health sector. The Council is involved in the planning and development of mechanisms to promote a culture and knowledge of privatization, and the empowerment of the private and cooperative sectors to form economic partnerships. The other goals of the Council are to: facilitate private sector investment in the health system; plan how to use resources and facilities for the implementation of PPP projects; develop an agreement format for outsourcing services in the form of PPP; and monitor the implementation of PPP projects.

The models used in PPP are:

- **concession contracts (build-own-operate and build-operate-transfer);**
- **service contracts (clinical and nonclinical);**
- **management contracts (maintenance and operation);**
- **leases;**
- **outsourcing (of clinical and nonclinical activities);**
- **private finance initiative contracts; and**
- **public sector divestment or full privatization (divesture contract).**

Medical universities in the provinces are free to use whichever form of PPP they choose. Almost all public hospitals have contracts (which specify their duration) with private sector organizations, such as for operating the pharmacy, performing medical imaging and diagnostic tests, and running the emergency department. High-technology medical devices are often purchased or hired by public facilities under PPP agreements. The share of the public and private sectors in the provision of health services is determined by the Comprehensive Document of Treatment and the Service Regionalization. It seems likely that the number of partnerships will increase in the coming years.

7.1 PPP initiatives

The first PPP in the Islamic Republic of Iran was between the “MOHEB” Medical Institute, a not-for-profit patient support institution, and the Hasheminejad Hospital. The main aim of the partnership was to tide over the latter during a difficult period. Between 2000 and

5 There is not one widely accepted definition of “public–private partnership”. The PPP Knowledge Lab defines it as a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.

2003, the Hasheminejad Hospital, a national referral centre for kidney diseases, faced serious issues such as financial limitations, shortage of equipment and poor-quality services. In 2004, the Hasheminejad Hospital and MOHEB established a 16-bed ward in the hospital. Patients were free to choose between the new and old wards. Since the new ward was rated highly by patients, another 16-bed ward was established in 2008. The success of these two wards led to the establishment of the Moheb Mehr Hospital, next to the Hasheminejad Hospital. The Moheb Mehr Hospital, which officially began to operate in 2009, provided five wards with 100 beds, seven specialty and subspecialty clinics, and eight operation theatres.

The Moheb chain of hospitals provides another example of PPP in the country. These hospitals have contracts with the Moheb Medical Institute, Tehran University of Medical Sciences and Iran University of Medical Sciences. In the case of the Moheb Kowsar Hospital, a prominent hospital in the chain, the private sector invested 30% of the initial expenses to build the hospital, which had more than 250 beds. The remaining costs were met by a loan at an interest rate of 25% *(23)*.

Other examples of PPP at the secondary and tertiary levels of the health care system include: the Mahdi Clinic, an 840-bed hospital in Tehran; the medical imaging centres in the medical universities of Tehran, Shiraz, Shahid Beheshti, Hamadan, Mashhad, Tabriz and Esfahan; dialysis centres in selected hospitals in the 10 mega regions (a total of 4800 beds), mega laboratories (in cooperation with a holding company and universities of medical sciences), and the chain of laboratories of the Alborz University of Medical Sciences. At the primary health care level, the private sector is contracted to deliver care services in CHCs and health posts in urban areas, and pharmacies in rural areas.

In 2000, the Islamic Republic of Iran piloted its first health cooperatives. Several factors led to this move, including the fact that many countries were increasingly incorporating PPP into their health systems and were able to successfully transfer the provision of primary health care to the private sector. The support and cooperation of politicians and policy-makers from the private sector was another decisive factor. The private sector was encouraged to embrace the Government's macro policies to bring about improvements in the health system. In 2000, the MOHME and the Ministry of Cooperatives, Labour and Social Welfare reached an agreement to contract with health cooperatives to deliver primary health care services under governmental supervision and regulation, following which the Tabriz University of Medical Sciences designed health cooperatives and piloted them in East Azerbaijan province. The Tabriz health cooperatives are a model of PPP intended to provide an integrated service package of primary health care to a defined population, based on a controlled market-based model. The public sector undertook continuous evaluation of the quality of services delivered by the cooperatives and paid for the provision of primary health care on the basis of performance and per capita cost *(24,25)*. The Tabriz initiative was followed by the setting up of participatory health posts by the Tehran University of Medical Sciences in 2005. In this project, all

primary health care services, mostly in the marginal areas of Tehran, were contracted out to the private sector with the aim of increasing the coverage of services and improving the quality of the care delivered.

Following these valuable experiences, the HTP was able to cover over 20 million people with primary health care services under the structure of the family practice programme through PPP and the private sector, especially in marginalized areas. In addition, the PPP created jobs for almost 19 000 medical and paramedical science graduates in towns and suburbs of cities. Further, the access to and availability of primary health services rose to 100% in urban areas.

7.2 Equity considerations in PPP

In terms of costs: It is expected that the transfer of some activities to the private sector in the form of PPP will lead to reduced costs for both the population and the public sector, due to competition within the private sector. In this scenario, the main beneficiaries would be lower- and middle-income groups whose purchasing power would increase, thus leading to greater equity.

In terms of access: The most important effect of PPP would be increasing equity in access to services. It is expected that PPP will lead to increased access in areas that the public sector lacks ability/willingness to provide health services. Increased access to primary health services in deprived areas of India *(26)*, and improvement in the provision of primary health care in marginalized areas of Tabriz *(25,27–29)* are examples of the success of PPP in this regard.

Furthermore, the transfer of health service provision to the private sector in more affluent areas frees up the public sector and enables it to utilize its capacity and potential to provide services in poorer areas. This too will promote equity in the health system.

7.3 Areas for PPP and PSE

According to the results of this study and the opinion of policy-makers and experts, the participation of the private sector in the country's health system has both advantages and disadvantages (summarized in Table 7). Advantages include an increase in competition among public and private providers, and optimization of the utilization of equipment, beds and resources. In addition, the community has greater access to health care and client satisfaction is higher. Finally, incentives for health personnel are given on the basis of performance. Disadvantages include an increased share of OOP payments in patients' total health expenditure, lack of accurate information, inadequate exchange of information between the private sector and the Government, and the sector's disinclination to participate in the provision of public services.

Table 6. Working with the private sector: opportunities and challenges for the Government

Opportunities	Challenges
Incentive for development of competition in the public sector	Risk of increase in costs of services
Innovation in services	Increased likelihood of dual practice
Increase in physical access to services	Greater sense of social inequality
Development of skills and capacity through training	Reduction in Government capacity to provide health services
Scientific and professional collaboration with other countries	Risk of shortage of services during socioeconomic crises that force private facilities out of the market

Advantages and disadvantages apart, the study found that there are a few factors which are clearly working in favour of the private health sector. Two of the most important are political support at the higher levels of Government and the existence of legal articles allowing PSE (e.g. the Supreme Leader's announcement regarding the general principles of Article 44 of the Constitution). Stronger political commitment to PPP in recent years also encourages PSE. Furthermore, people have a positive attitude towards the private sector due to the good quality of services. The fact that the private sector has been addressing some of its shortcomings, including poor implementation of the referral system and failure to take complete responsibility, has also worked in its favour and increased demand for its services.

Based on the opinions of private sector representatives (managers of 18 private hospitals, three nonclinical service units and two polyclinics) as ascertained from in-depth interviews and surveys, the most important services for which the country requires PPP and PSE are specialized clinical services (dialysis, radio diagnostics, surgery, etc.), clinical support services (laboratories, imaging centres, blood banks, ambulances), and nonclinical support services (housekeeping, laundry, catering, etc.) (Annex, Fig. A.1).

In the opinion of participants, two models of PPP would be the most appropriate for the country: first, the design-build-finance-operate model for augmenting infrastructure (such as hospitals, hospital beds and training facilities); and, second, the outsourcing model to make certain specialty services (for example, dialysis and magnetic resonance imaging) available within Government facilities (Annex, Fig. A.2).

In the view of private sector representatives, the improved quality of health care is the most important benefit of PPP, while the relatively high cost of services is the most significant risk (Annex, Table A.2). Also, representatives feel that the major potential barriers to PPP and PSE are the absence of a dedicated budget and financial resources to pay the private sector partner (Annex, Fig. A.3).

In this study, consumers of private sector health services filled in a total of 1236 questionnaires (Annex, Table A.3). The respondents indicated that their primary reason for choosing the private sector was the quality of the services offered (Annex, Fig. A.4). The main cause of dissatisfaction with the private sector was the high cost of services (Annex, Fig. A.5).

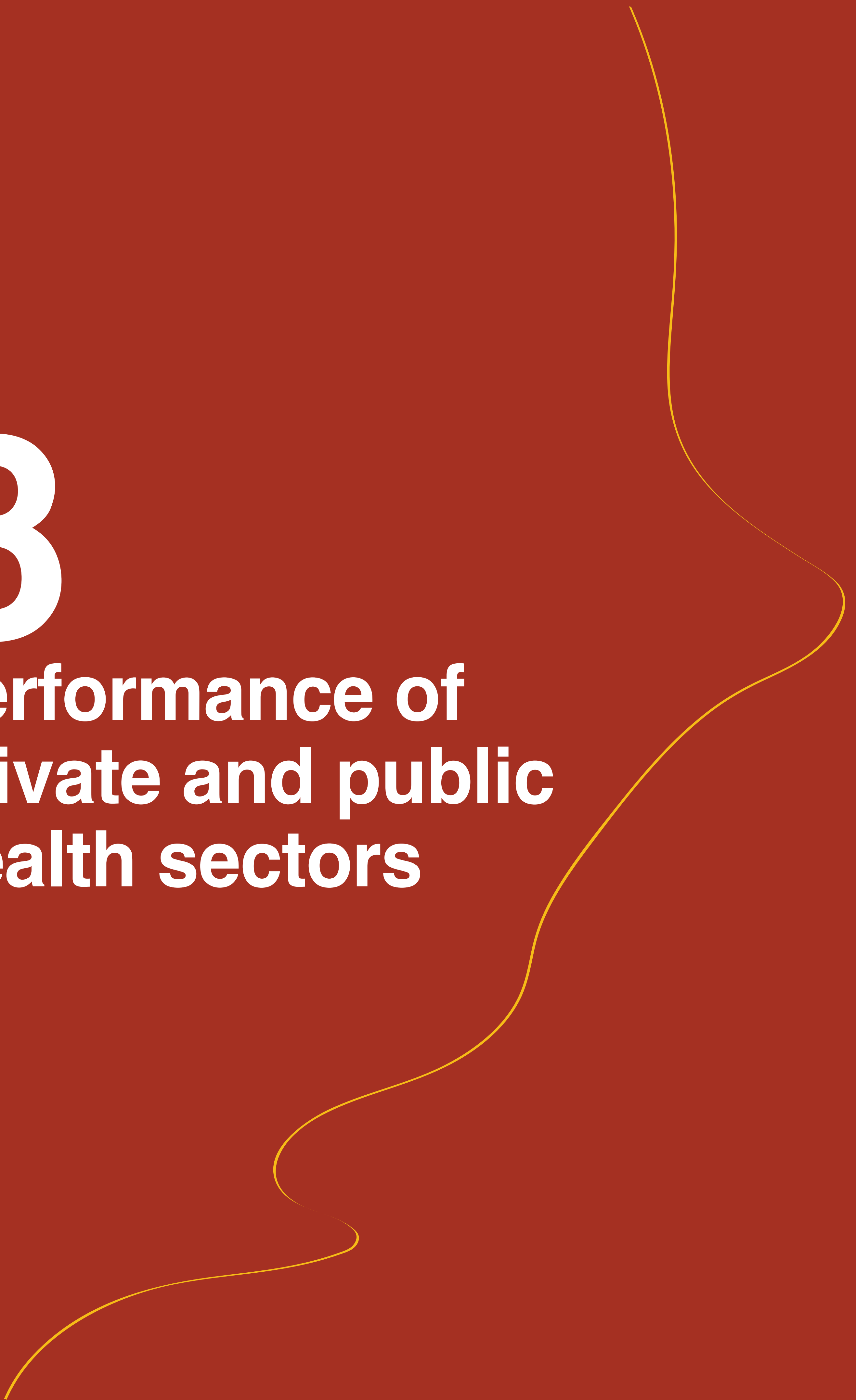
Most participants stated that the private sector had contributed significantly to disease control programmes, such as those for tuberculosis, malaria and, in particular, for HIV/AIDS. The sector has also been part of screening programmes for noncommunicable diseases, in line with national health programmes.

Most representatives of specialty and subspecialty care providers indicated that they had no intention of forming partnerships with the public sector. On the other hand, representatives of primary care providers stated that they had already formed such partnerships due to the implementation of PPP in primary health centres in some provinces, and said they were willing to continue to do so. Under the family practice programme, private sector organizations provide primary health care services at rural and urban centres. Except for representatives of primary health care providers, almost all participants representing the private sector stated that the sector did not have sufficient incentives to work in partnership with the public sector.

The majority of public and private sector representatives mentioned that the private sector was reluctant to engage with the public sector due to:

- **lack of commitment of the public sector;**
- **payment issues;**
- **restrictions on private sector activity;**
- **half-life of the programmes.**

In conclusion, despite the benefits of and opportunities for engagement of private providers in the public sector, the level of collaboration is low or even non-existent.



8
Performance of private and public health sectors

A major component of this study was a comprehensive review of literature that assesses the performance of the public and private sectors in the Iranian health system. There is evidence that responsiveness is better in private health centres than in public health centres *(30)* and responsiveness has been shown to be higher in private hospitals in compared with public hospitals *(31)*. According to one study, the performance indexes of private sector laboratories were better than those of laboratories in the public sector *(32).*

A study comparing the level of job satisfaction of general practitioners working in the private and public sectors found that older physicians, more experienced doctors and those working in the private sector reported higher job satisfaction *(33)*. With regard to nursing services, patients were more satisfied with public hospitals than private hospitals *(34)*.

In addition, evidence shows the importance of recognizing and analysing people's satisfaction with health services, and the need for greater attention to this issue *(35)*. Outsourcing has proved to be effective and represents a major change in the health care system *(36)*. Thus, cooperative health centres may deliver preventive health care services as effectively as public health centres in many fields, and even more effectively in certain areas *(37).*

It is difficult to conclude whether the public or private sector is performing better due to the scattered and differing results of studies, lack of valid evidence and lack of studies with high sample sizes and strong methodology.

8.1 Not-for-profit organizations

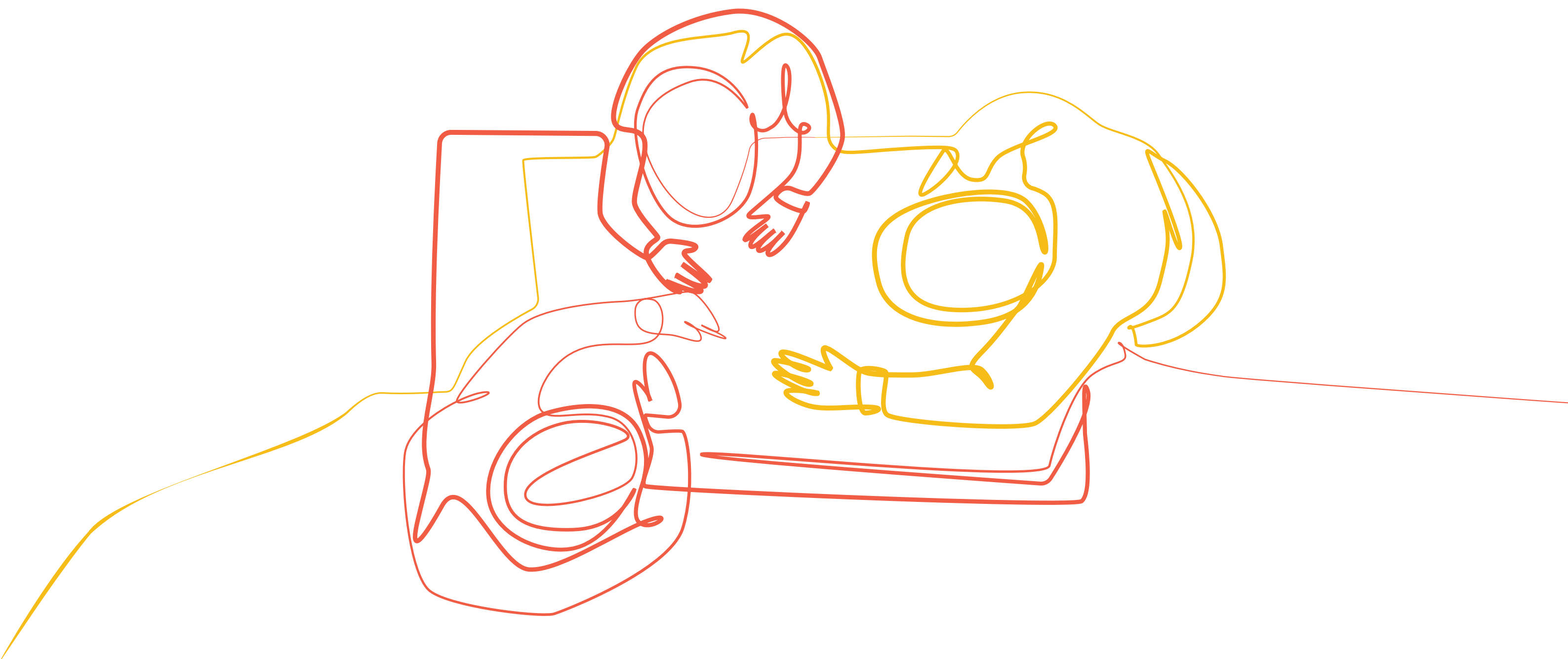
The most important reasons for dissatisfaction among nongovernmental organizations are delayed payments, lack of a participatory attitude and culture in the public sector, restrictive controls and inspections, lack of transparency of contracts, inadequate cooperation with donors by the public sector, provision of parallel services in the public sector and the public sector's failure to comply with its obligations. Participants from the public sector are of the view that an accurate study of the mission and objectives of nongovernmental not-for-profit organizations is needed before a proper partnership can be formed.

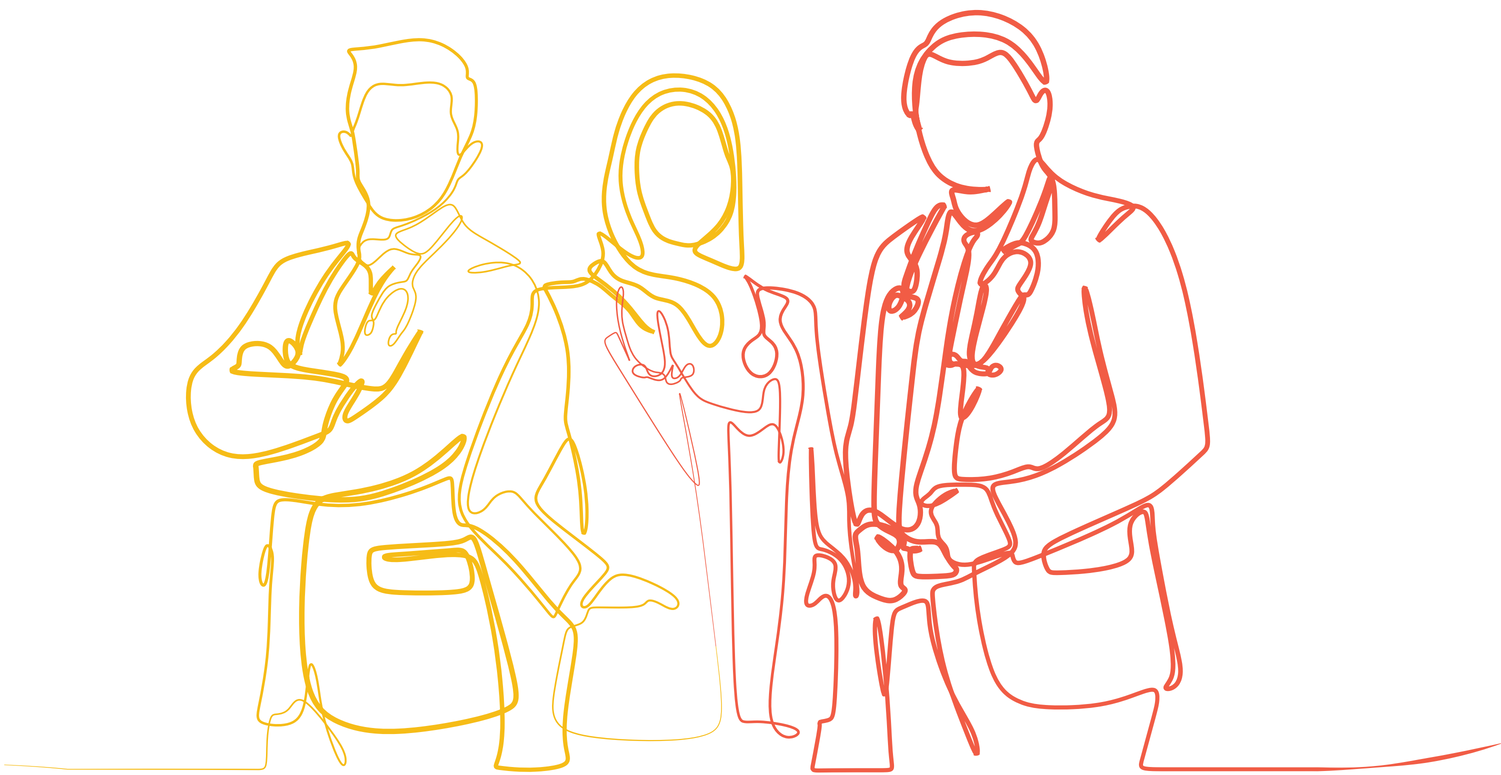
Most participants stated that the contribution of not-for-profit organizations to the country's priority health programmes is minor. Among the important activities implemented by these organizations are holding scientific meetings on AIDS, taking test samples for HIV and paying expenses incurred by cancer patients, especially chemotherapy costs. Most participants expressed the view that it would be easier to expand their activities if they had greater governmental support and

if the public sector were better at complying with its obligations. The organizations visualize expanding their activities in:

- **providing public/community education on mental health in urban areas;**
- **training health workers in deprived areas;**
- **tapping the capacity of expatriate Iranians to improve health services; and**
- **providing training sessions in life skills.**

The most important incentive that the respondents expect from the public sector is financial support. Other incentives include the issuance of licences for specific charitable activities, provision of space and public facilities for their programmes, and provision of specialist personnel for special programmes.





9

Donors (development partners)

Recent international barriers and restrictions imposed on the Islamic Republic of Iran have limited the number of donations from international donors

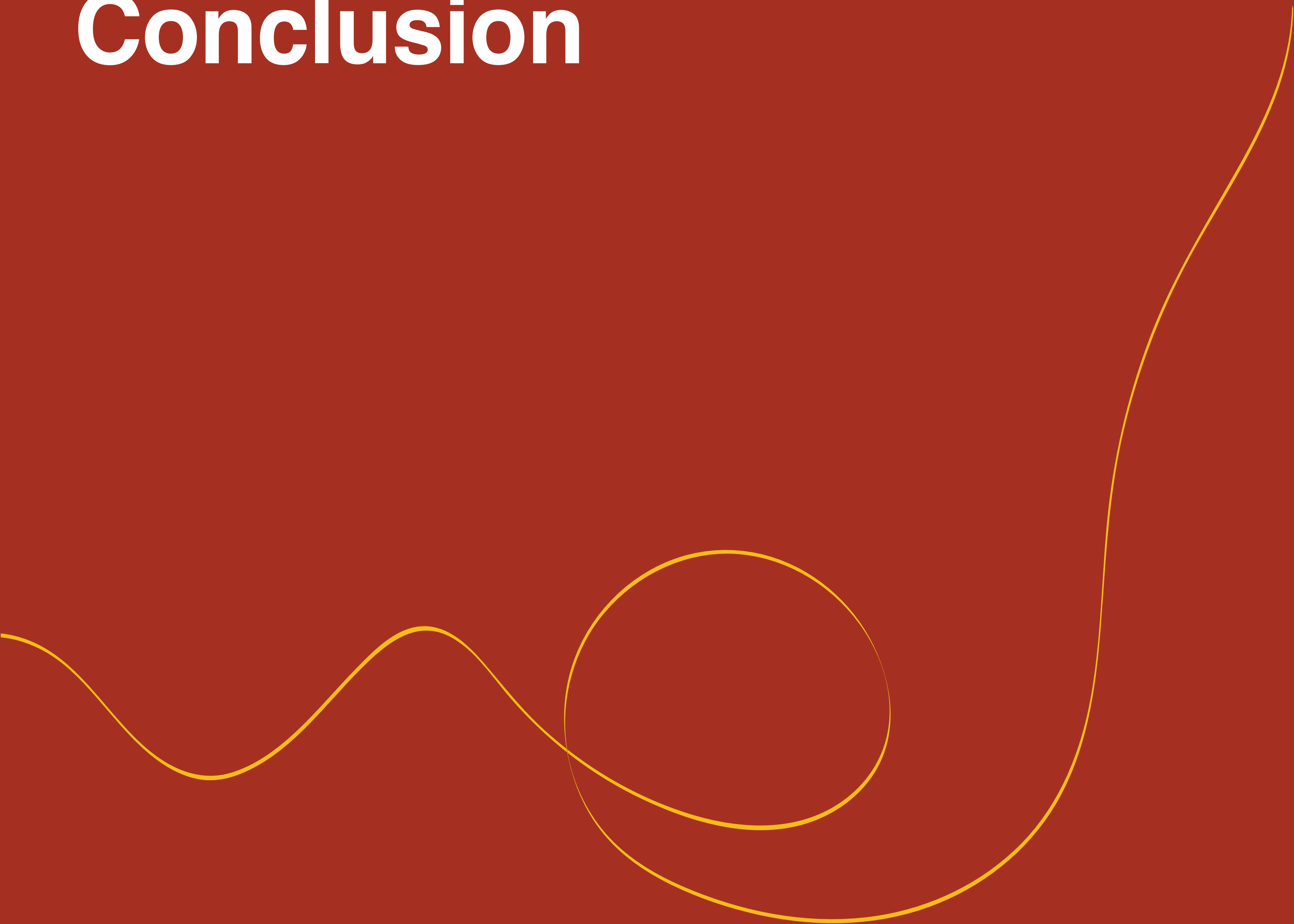
Various national and international donors contribute to health care in the Islamic Republic of Iran. National donors are organized and coordinated by a special department under the Deputy Minister for Social Affairs. A board of trustees in the MOHME and another in the University of Medical Sciences work together to manage donations from the private sector to ensure the greatest benefit to the health system.

Regarding contributions from international donors, recent international barriers and restrictions imposed on the Islamic Republic of Iran have limited the number of donations. However, a few are still being provided under special circumstances. A significant example is the provision of international funds by the Global Fund to Fight AIDS, Tuberculosis and Malaria. The priority areas for which the funds are provided are HIV, malaria and tuberculosis; the country has been eligible only for HIV funding from 2016 onward. The Islamic Republic of Iran also receives a few indirect donations from United Nations agencies; however, the amount is not significant and they are mostly catalytic funds intended for technical support. The total amount received through various grants and contracts since 2005 has been about US$ 100 million.

The Global Fund has well-defined and well-established country coordination mechanisms, comprising national committees that submit applications to the Fund. These are composed of all stakeholders, the affected population and representatives of the principal recipient and subrecipients. In the case of the Islamic Republic of Iran, the MOHME is the secretariat and the United Nations Development Programme is the principal recipient. The nature of the grant determines the subrecipient, which may be the MOHME, Ministry of Education, organization for prisons, welfare organizations or, at some stages, WHO. An additional safeguarding policy is followed for funding in the case of the Islamic Republic of Iran; this means that funding cannot be transferred directly to the subrecipient or, to be more specific, the Government.

The country receives a couple of smaller funds, including non-Gavi funds, which are for vaccine-related support through WHO. Some smaller funds are available to the country through the Joint United Nations Programme on HIV/AIDS. This funding is allocated to United Nations partners for HIV programmes in the country, including WHO, the United Nations Children's Fund, United Nations Population Fund, United Nations High Commissioner for Refugees and United Nations Office on Drugs and Crime.

10
Conclusion



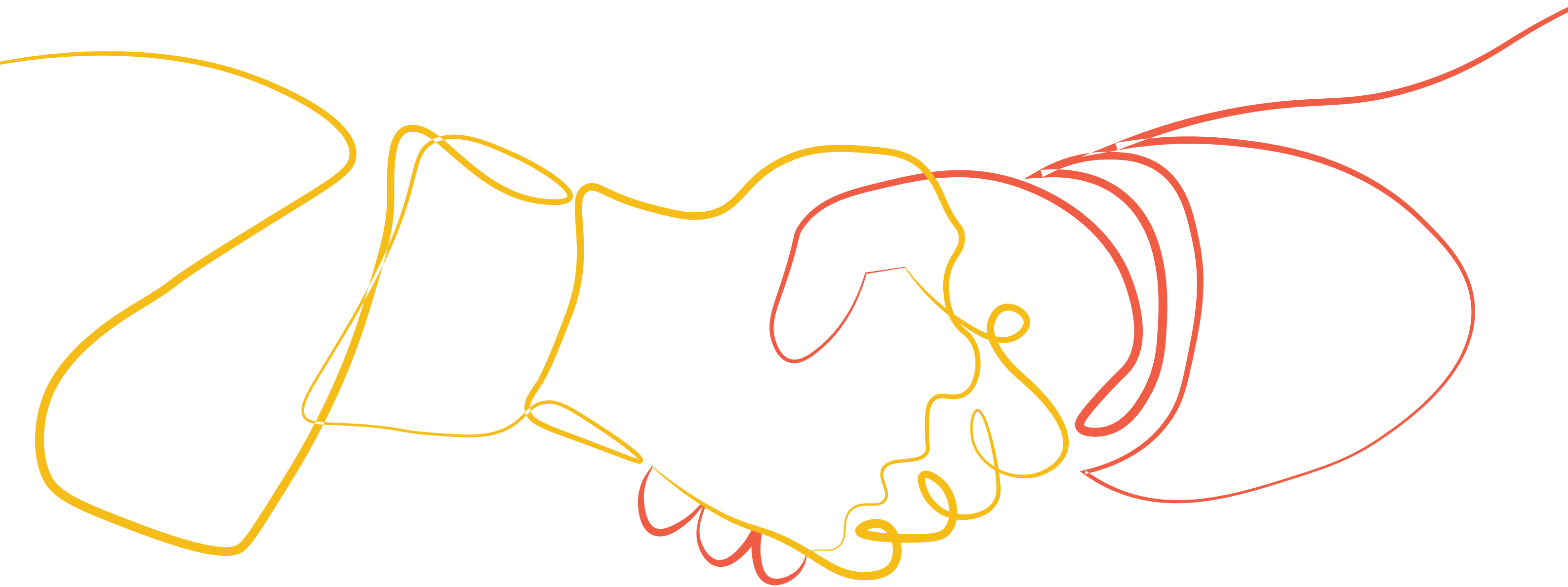
Some private sector providers are reluctant to be involved in a basic health insurance contract and prefer to contract supplementary health insurance packages

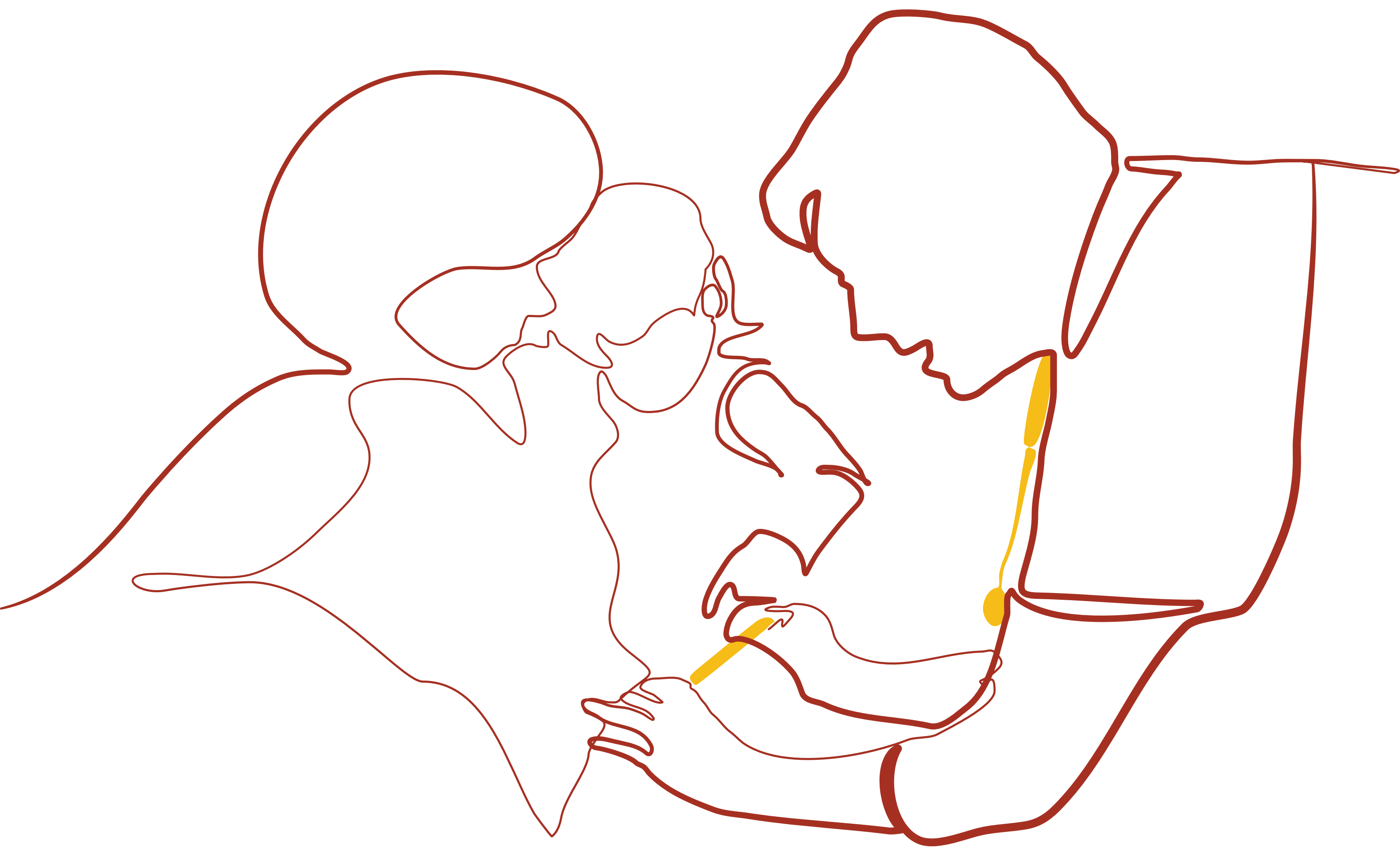
The findings of this study indicate that the main obstacle to qualitative and quantitative development of the private sector in the Islamic Republic of Iran is a negative perception of its performance. Factors negatively affecting the quality and quantity of services delivered by the private sector include the high levels of bureaucracy, the public sector's failure to meet its obligations and excessive Government control. The Government could develop policies and interventions to increase the private sector's contribution to the achievement of UHC and to health system performance, and work to build trust between the public and private sectors and to promote PPP.

One of the main concerns about the performance of the private health sector is high OOP payments *(38)*. High costs are the main reason for patients' dissatisfaction with health care in the private sector. The weak insurance structure in the private sector may be the cause of these high costs. Some private sector providers are reluctant to be involved in a basic health insurance contract and prefer to contract supplementary health insurance packages. Supplementary health insurance is not affordable for most of the population. The low service coverage of the basic health insurances, inadequate understanding of the principles of complementary/supplementary insurance and the lack of clear boundaries between basic and supplementary insurance are further issues that need to be resolved *(39,40).* Therefore, designing an efficient and transparent insurance structure and developing supportive packages for the private sector within that structure could be a useful strategy. The costs imposed by the private sector on the Government are constantly increasing due to weaknesses in the control and monitoring of the performance of the sector *(16)*. One of the main concerns with regard to costs is dual practice by specialists and superspecialists. This can lead to catastrophic costs and constitutes a major problem in the health system *(41).*

Since the introduction of the HTP, UHC has been recognized as a national health priority, the achievement of which can strengthen the health system and help the country to overcome some of the problems mentioned above. To work towards UHC, stakeholders in the health system should ensure that all people have access to integrated people-centred health services that are of high quality and are safe and acceptable to the population *(42).* Several plans and interventions have been launched to implement UHC in the country in recent years *(42)*. In this process, however, not much attention has been paid to the capacity and potential of the private health sector, particularly in secondary and tertiary services. On analysing the opinions of the various stakeholders who participated in this study, it may be concluded that the private health sector can play several important roles in the effort to achieve UHC. Further, the literature review indicated that most countries that have achieved UHC paid special attention to harnessing the capabilities of the private sector as a means of attaining the goal *(43–46).*

The study found that the private sector has remarkable potential in the sphere of expanding and improving the population's access to essential service packages at all levels of the health system. This is borne out by the sector's existing capacity and successful experiences, such as the establishment of the Moheb chain of hospitals, several mega hospitals in different provinces, chain laboratories, imaging centres, pharmacies and dialysis centres. Further, contracts have been drawn up with private sector entities for the provision of primary health care services to over 20 million people in urban areas, and the sector has also contributed to the family practice programme in rural and urban areas. Regarding the capabilities of the private sector and its potential to improve the quality and quantity of health services, it is recommended that the conditions and infrastructure required for the engagement of the private sector in the health system be made available under the stewardship policies. Policy-makers should also consider continuous monitoring and evaluation of the private sector's performance, implementation of cost control (OOP payments), and efforts to control the problems that often arise from unintended growth of the sector.





11
Recommendations

Private sector

The private health sector can contribute to efforts to achieve UHC by:

- **increasing access to services and improving service coverage;**
- **active case-finding, screening and disease prevention;**
- **increasing the variety of services and developing the current service package;**
- **motivating the public to participate in health programmes and interventions;**
- **improving the health literacy of the population;**
- **conducting training of human resources to implement health plans; and**
- **improving the quality and quantity of services provided.**

Government and MOHME

The Government and MOHME can facilitate private sector involvement in efforts to achieve UHC by:

- **initiating a process of continuous dialogue between the MOHME, medical universities, insurance organizations, private sector, individual service providers and other stakeholders to build trust;**
- **reducing redundant regulations and bureaucratic hurdles and increasing transparency;**
- **preparing proper infrastructures, and providing adequate and continuous technical and management support;**
- **developing clear, detailed and specific service agreements to ensure strong contracts;**
- **designing an effective and transparent insurance structure including supportive packages for the private sector;**
- **developing a financial system to ensure timely payment to the private sector;**
- **designing and implementing a comprehensive information system for performance monitoring and information sharing by the private sector;**
- **announcing financial incentives for joint projects and guaranteeing private sector profits;**
- **designing and implementing a quality control system for systematic and efficient monitoring and evaluation of private sector performance, especially in the area of finance; and**

- **creating conditions that encourage people to seek care in the private health sector.**

Private sector contribution to insurance/social security schemes

Policy-makers made the following suggestions:

- **To make commercial insurances (fire, crash, third-party) attractive, insurance companies should include supplementary health insurance in these plans.**
- **Health insurance companies should cover part of the cost of basic health services and the better hotelling services of the private sector; most supplementary health insurance providers have a loss ratio over 100% and are not profitable.**
- **Obtaining licences, settling claims and detecting fraud related to payments are some of the problems faced by private insurance organizations.**

Service supervision

Policy-makers made the following recommendation for the supervision of services.

- **According to Paragraph 8 of the General Health Policies, there is a need for "improvement in the quality and safety of services and comprehensive and integrated health care with a focus on equity, responsiveness, clear communication, effectiveness, efficiency and productivity within the health networks and according to service levels and the referral system". Contracts with the private sector should be designed according to these requirements and then procured through a public process.**
- **To improve the quality of health services, a commission should be formed at national and medical university level to supervise the technical and service standards of health care provision. It should consist of representatives of health professionals, purchasers and the general public, and professionals in the areas of the social sciences and management.**
- **Public media (TV, social networks, etc.) and specialized media tools in the field of health (specialist magazines, specialist TV programmes, etc.) should be used to strengthen supervision of the private sector.**
- **Online systems for public supervision should be developed and made available so as to facilitate clear feedback from the private sector.**
- **Private providers of health services should be categorized and details of their performance, based on national or international accreditation, should be available online.**

- **Courts dealing with consumer complaints against the private sector should avoid conflicts of interest and dispose of cases promptly.**

Incentives and support for the private health sector

The following are suggestions for incentivizing and supporting PSE:

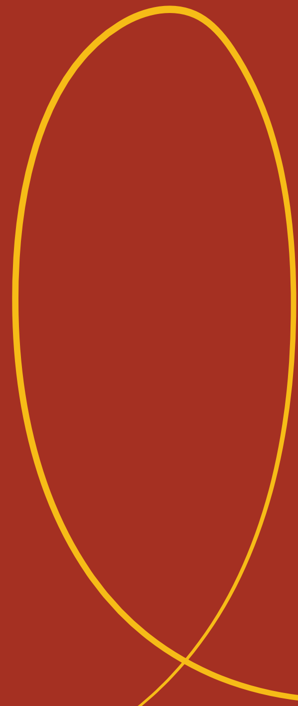
- **drawing up clear and transparent contracts, keeping in mind the benefits and interests of the private sector;**
- **ensuring that the public sector meets its obligations;**
- **ensuring fair assessment of private sector performance, with no bias in favour of the public sector;**
- **changing national laws and policies to facilitate interaction with the public sector;**
- **allowing privileges and tax breaks;**
- **helping with the procurement of advanced and expensive equipment in special cases;**
- **ensuring that private sector providers are protected by insurance companies;**
- **resolving issues related to licensing;**
- **promoting a positive attitude among the population with regard to the private sector and encouraging people to seek care from the sector;**
- **providing guarantees for the profitability of joint projects; and**
- **improving interactions with the private sector.**

Policy direction

According to this study, there are five essential stages in the development and implementation of strategies for PPP/PSE in the Iranian health system:

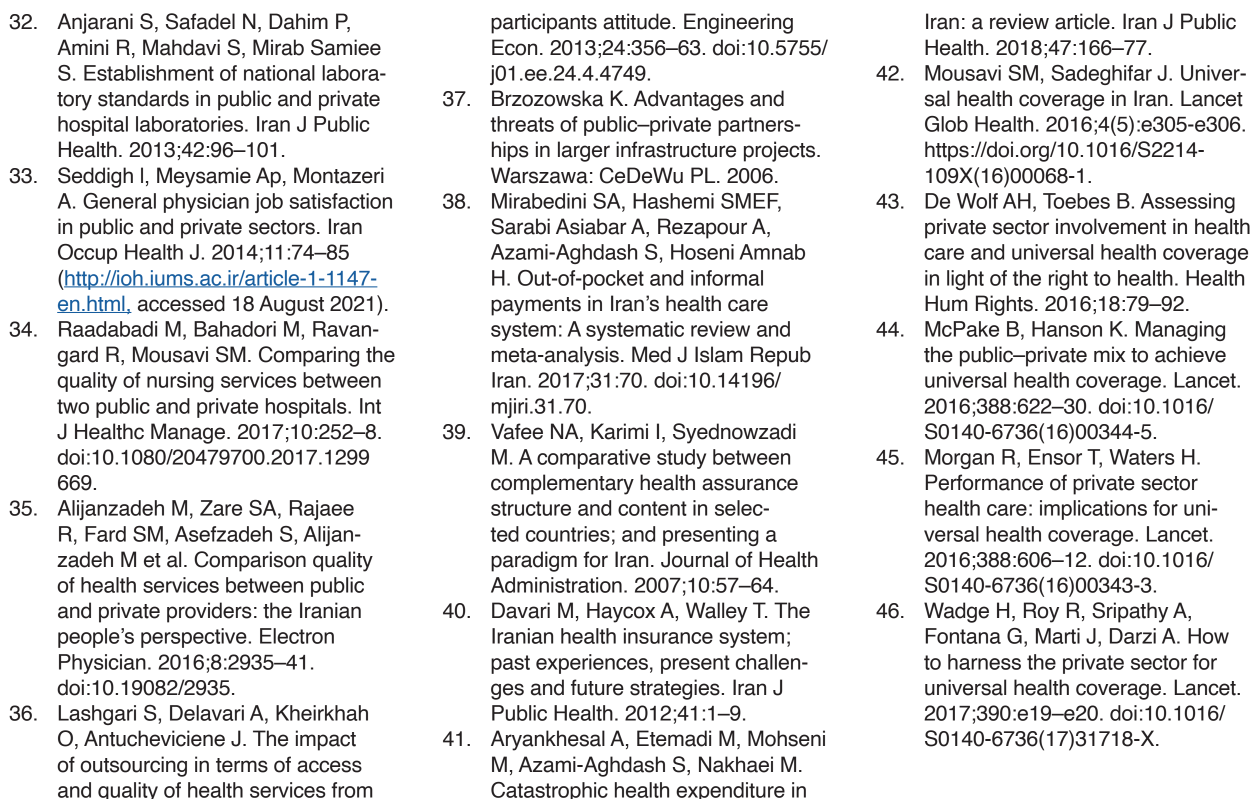
- **building political and administrative commitment;**
- **developing a policy framework;**
- **creating a dedicated financing mechanism for PPP;**
- **developing institutional systems for managing PPP and building capacity for a PPP unit; and**
- **scaling up best practices and innovati ng new models of PPP.**

References



References

1. Iran. New York, NY: IMUNA; 2023 (https://imuna.org/resources/country-profiles/iran-islamic-republic/, accessed 13 November 2023).
2. National census preliminary results released: Iran's urban population up [website]. Tehran: Financial Tribune; 2017 (https://financialtribune.com/articles/domestic-economy/61421/national-census-preliminary-results-released-irans-urban-population, accessed 18 August 2021).
3. Iran economy [website]. Traveldocs.com; 2011 (https://web.archive.org/web/20110608192955/http://www.traveldocs.com/ir/economy.htm, accessed 3 October 2023).
4. Iran's unrivaled tourist attractions welcome rising number of foreign tourists [website]. Islamic Republic News Agency; 2019 (https://en.irna.ir/news/83398224/Iran-s-unrivaled-tourist-attractions-welcome-rising-number-of, accessed 18 August 2021).
5. World bank ranking of Countries by GDP in PPP (Current International dollars) [website]. Washington, DC: World Bank; 2016 (https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.CD?end=2016&most_recent_value_desc=true&start=2004, accessed 14 November 2023).
6. Iran Oil Ministry annual bulletin, 5th edition [کتاب نفت و توسعه]. Archived from the original on 31 May 2009. Retrieved 4 November 2009 (in Farsi): 190–193.
7. Iran's banned trade unions: Aya-toiling [website]. The Economist; 2013 (https://www.economist.com/middle-east-and-africa/2013/04/20/aya-toiling, accessed 18 August 2021).
8. Sadrizadeh B. Primary health care experience in Iran. Iran Red Crescent Med J. 2001;7(1):12.
9. Sadrizadeh B. Health situation and trend in the Islamic Republic of Iran. Iran J Public Health. 2001;30:1–8.
10. Malekafzali H. Primary health case in Islamic Republic of Iran. Sci J Sch Public Health Inst Public Health Res. 2014;12:1–11.
11. Shadpour K. Primary health care networks in the Islamic Republic of Iran. East Mediterr Health J. 2000;6:822–5.
12. Tabrizi JS, Farahbakhsh M, Shahgoli J, Rahbar MR, Naghavi-Behzad M, Ahadi HR et al. Designing excellence and quality model for training centers of primary health care: a Delphi method study. Iran J Public Health. 2015;44:1367–75.
13. Tabrizi JS, Pourasghar F, Nikjoo RG. Status of Iran's primary health care system in terms of health systems control knobs: a review article. Iran J Public Health. 2017;46:1156–66.
14. Mehrdad R. Health system in Iran. JMAJ. 2009;52:69–73. (https://www.med.or.jp/english/activities/pdf/2009_01/069_073.pdf, accessed 18 August 2021).
15. Jalaee S, Samimi S. Study of the barriers to private sector investment in Iran (in accordance with Iran's communicated general policies). J Macro Strateg Policies. 2014;2:89–109.
16. Davari M, Haycox A, Walley T. Health care financing in Iran; is privatization a good solution? Iran J Public Health. 2012;41:14–23.
17. Kalhor R, Tajnesaei M, Kakemam E, Keykaleh MS, Kalhor L. Perceived hospital managerial competency in Tehran, Iran: is there a difference between public and private hospitals? J Egypt Public Health Assoc. 2016;91:157–62. doi: 10.1097/01.EPX.0000508180.48823.cd.
18. Sadeghi A, Barati O, Bastani P, Daneshjafari D, Etemadian M. Strategies to develop and promote public–private partnerships (PPPs) in the provision of hospital services in Iran: a qualitative study. Electron Physician. 2016;8:2208–14. doi: 10.19082/2208.
19. Islamic Republic of Iran health profile 2015. Cairo: WHO Regional Office for the Eastern Mediterranean; 2016 (https://iris.who.int/handle/10665/253768, accessed 11 May 2022).
20. Asefzade S. Principles of health economics, 3 ed. Qazvin, Iran: Hadise Emrooz; 2010.
21. Asefzade S, Rezapoor A. Health care management. Qazvin, Iran: Hadise Emrooz; 2012.
22. Eastern Mediterranean Region framework for health information systems and core indicators for monitoring health situation and health system performance. Cairo: WHO Regional Office for the Eastern Mediterranean, 2016.
23. Etemadian M, Shadpour P, Soleimani M, Biglar M, Hadi Radfar M, Jarrahi M. Iranian-Islamic model of public–private partnership in hospital management: introducing Moheb Hospital model. Int J Hosp Res. 2013;2:95–8. (https://iranjournals.nlai.ir/bitstream/handle/123456789/329951/47E1B95813917D5B68835F29AB088D9C.pdf?sequence=-1, accessed 18 August 2021).
24. Farahbakhsh M, Sadeghi-Bazargani H, Nikniaz A, Tabrizi JS, Zakeri A, Azami S. Iran's experience of health cooperatives as a public–private partnership model in primary health care: a comparative study in East Azerbaijan. Health Promot Perspect. 2012;2:287–298. doi:10.5681/hpp.2012.034.
25. Nikniyaz A, Farahbakhsh M, Ashjaei K, Tabrizi D, Sadeghi-Bazargani H, Zakeri A. Maternity and child health care services delivered by public health centers compared to health cooperatives: Iran's experience. J Med Sci. 2006;6:352–8. doi:10.3923/jms.2006.352.358.
26. Dutta S, Lahiri K. Is provision of healthcare sufficient to ensure better access? An exploration of the scope for public–private partnership in India. Int J Health Policy Manag. 2015;4:467–74.
27. Farahbakhsh M, Nikniaz A, Tabrizi J, Jahanbin H, Abdolahi H, Zakeri A et al. Comparison of government and cooperative health centers with regard to services and health cares. J Sch Public Health Inst Public Health Res. 2007;5:1–11 (http://sjsph.tums.ac.ir/article-1-171-en.html, accessed 18 August 2021).
28. Farahbakhsh M, Tajedini N, Tabrizi JS, Zakeri A. Experience of private sector participation in providing family planning services in East Azarbaijan province. Depiction of Health. 2011;1(3):5.
29. Nikniaz A, Farahbakhsh M, Tabrizi J, Farahi Shahgoli J, Hasanzadeh A, Jahanbin H. A comparison among private health cooperatives and public health centers on non-contagious diseases care and patients' satisfaction; (Tabriz: 2002). J Health Administration. 2006;9:7–16 (https://www.sid.ir/en/journal/ViewPaper.aspx?id=142997, accessed 18 August 2021).
30. Torabipour A, Gharacheh L, Lorestani L, Salehi R. Comparison of responsiveness level in Iranian public and private physiotherapy clinics: a cross-sectional multi-center study. Mater Sociomed. 2017;29:172–5. doi:10.5455/msm.2017.29.172–175.
31. Javadi M, Karimi S, Raiesi A, Yaghoubi M, Kaveh K. Comparison of patients' and nurses' viewpoints about responsiveness among a sample from public and private hospitals of Isfahan. Iran J Nurs Midwifery Res. 2011;16:273–7.



32. Anjarani S, Safadel N, Dahim P, Amini R, Mahdavi S, Mirab Samiee S. Establishment of national laboratory standards in public and private hospital laboratories. Iran J Public Health. 2013;42:96–101.
33. Seddigh I, Meysamie Ap, Montazeri A. General physician job satisfaction in public and private sectors. Iran Occup Health J. 2014;11:74–85 (http://ioh.iums.ac.ir/article-1-1147-en.html, accessed 18 August 2021).
34. Raadabadi M, Bahadori M, Ravangard R, Mousavi SM. Comparing the quality of nursing services between two public and private hospitals. Int J Healthc Manage. 2017;10:252–8. doi:10.1080/20479700.2017.1299669.
35. Alijanzadeh M, Zare SA, Rajaee R, Fard SM, Asefzadeh S, Alijanzadeh M et al. Comparison quality of health services between public and private providers: the Iranian people's perspective. Electron Physician. 2016;8:2935–41. doi:10.19082/2935.
36. Lashgari S, Delavari A, Kheirkhah O, Antucheviciene J. The impact of outsourcing in terms of access and quality of health services from participants attitude. Engineering Econ. 2013;24:356–63. doi:10.5755/j01.ee.24.4.4749.
37. Brzozowska K. Advantages and threats of public–private partnerships in larger infrastructure projects. Warszawa: CeDeWu PL. 2006.
38. Mirabedini SA, Hashemi SMEF, Sarabi Asiabar A, Rezapour A, Azami-Aghdash S, Hoseni Amnab H. Out-of-pocket and informal payments in Iran's health care system: A systematic review and meta-analysis. Med J Islam Repub Iran. 2017;31:70. doi:10.14196/mjiri.31.70.
39. Vafee NA, Karimi I, Syednowzadi M. A comparative study between complementary health assurance structure and content in selected countries; and presenting a paradigm for Iran. Journal of Health Administration. 2007;10:57–64.
40. Davari M, Haycox A, Walley T. The Iranian health insurance system; past experiences, present challenges and future strategies. Iran J Public Health. 2012;41:1–9.
41. Aryankhesal A, Etemadi M, Mohseni M, Azami-Aghdash S, Nakhaei M. Catastrophic health expenditure in Iran: a review article. Iran J Public Health. 2018;47:166–77.
42. Mousavi SM, Sadeghifar J. Universal health coverage in Iran. Lancet Glob Health. 2016;4(5):e305-e306. https://doi.org/10.1016/S2214-109X(16)00068-1.
43. De Wolf AH, Toebes B. Assessing private sector involvement in health care and universal health coverage in light of the right to health. Health Hum Rights. 2016;18:79–92.
44. McPake B, Hanson K. Managing the public–private mix to achieve universal health coverage. Lancet. 2016;388:622–30. doi:10.1016/S0140-6736(16)00344-5.
45. Morgan R, Ensor T, Waters H. Performance of private sector health care: implications for universal health coverage. Lancet. 2016;388:606–12. doi:10.1016/S0140-6736(16)00343-3.
46. Wadge H, Roy R, Sripathy A, Fontana G, Marti J, Darzi A. How to harness the private sector for universal health coverage. Lancet. 2017;390:e19–e20. doi:10.1016/S0140-6736(17)31718-X.

Annex

Table A.1. Perceptions of private health sector representatives regarding private sector collaboration in service delivery in the Islamic Republic of Iran

Statement	Neutral (number/%)	Disagree (number/%)	Agree (number/%)
The growth of the private sector in the country is primarily due to the absence of effective regulation.	5 (21.7)	9 (39.1)	9 (39.1)
The growth of the private sector is also due to the declining capacity of public health facilities to provide quality services.	1 (4.5)	7 (31.1)	14 (63.6)
The private sector provides services that are of better quality and are more efficient.	1 (4.8)	11 (47.8)	11 (47.8)
Given the growth of the private sector and the proportion of people seeking its services, it is inevitable that the Government will engage the private sector in improving health service delivery.	8 (34.8)	6 (26.1)	9 (39.1)
The Government should focus on providing people access to quality health services, and not be concerned about the source of delivery of the services.	1 (4.3)	1 (4.3)	21 (91.3)
The Government should focus its resources on providing free primary care from its own facilities, while purchasing specialist services from the private sector.	2 (8.7)	10 (43.5)	11 (47.8)
The private sector is capable of self-regulation. Therefore, except for licensing, the Government should allow private providers to operate independently, without imposing regulatory or quality control regimens.	2 (8.7)	6 (26.1)	15 (65.2)
The purpose of PPP/PSE should be to improve access to services only for the poor, and not for all.	2 (8.7)	18 (78.3)	3 (13)
The for-profit sector is interested only in profits and creates inequities. Therefore, the Government should engage only with not-for-profit organizations.	3 (13.6)	14 (63.6)	5 (22.7)
The private sector (except nongovernmental organizations) is not keen to collaborate with the Government due to fear of control, payment delays, etc.	1 (4.3)	9 (39.1)	13 (56.5)
Engaging the private sector in the delivery of health services will lead to privatization in the long run and will not be in the interest of the country's health system.	0	6 (26.1)	17 (73.9)
Since private sector facilities are concentrated in urban areas, they are less willing to provide services in unreachable/underserved areas.	2 (8.7)	6 (26.1)	15 (65.2)

Fig. A.1. Services for which PPP/PSE is needed

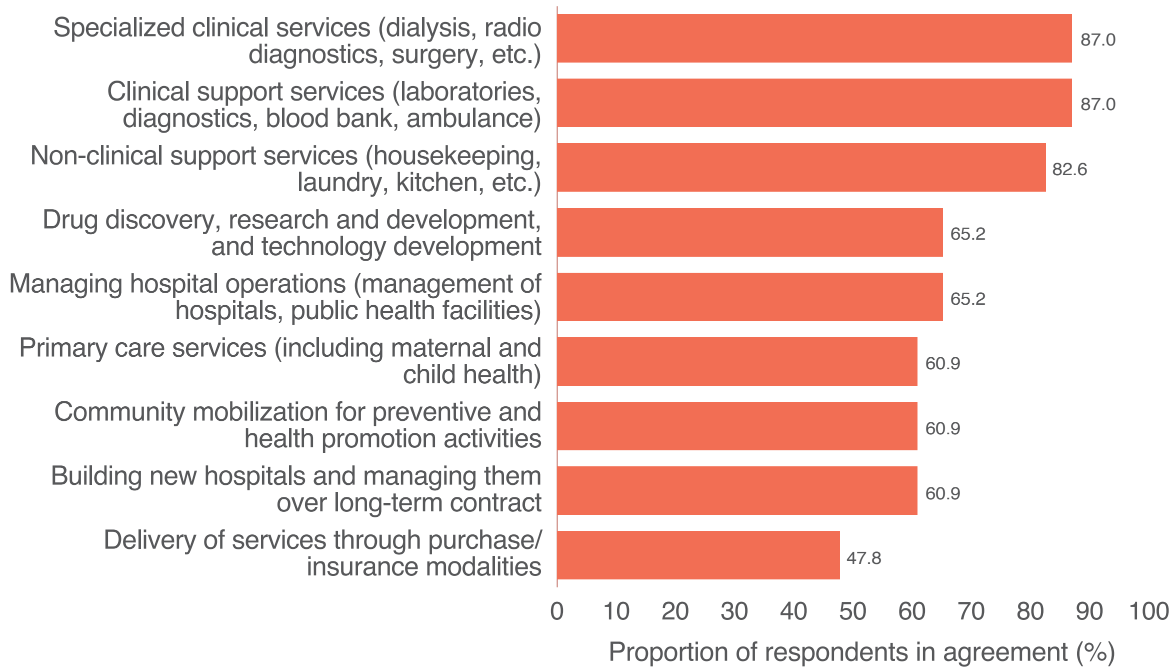


Fig. A.2. Representatives' views regarding appropriate PPP models

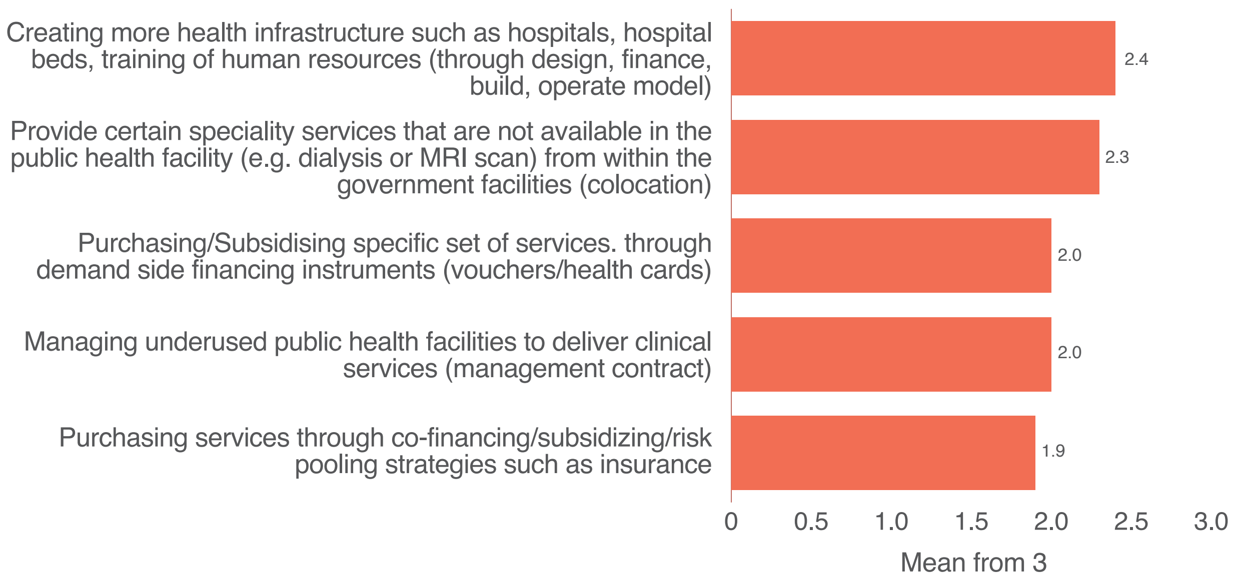


Table A.2. Benefits and drawbacks of PPP in provision of health services, according to private sector representatives

Benefits	Drawbacks
▪ Improved quality	▪ Increased cost of services
▪ Improved efficiency	▪ Government inefficiency in managing contracts, leading to poor service delivery
▪ Optimal pooling of resources (human resources, technology, space)	▪ Brain-drain among public sector health professionals
▪ Reduced out-of-pocket spending for poor households	▪ Irrational/unnecessary clinical practices
▪ Existence of regulatory control	▪ Referring complicated cases to Government facilities
▪ Adoption of best practices and better management systems	▪ Loss of capacity of the public sector health system to provide services in the long run
▪ Access to services not available in the public sector	▪ Focus on meeting minimum performance indicators rather than on larger health issues
▪ Mobilization of resources to invest in creation of health infrastructure in the country	▪ Less interest in public health objectives, such as health promotion and preventive services

Fig. A.3. Main potential barriers to PPP/PSE in the provision of health services, according to representatives of the nongovernmental sector

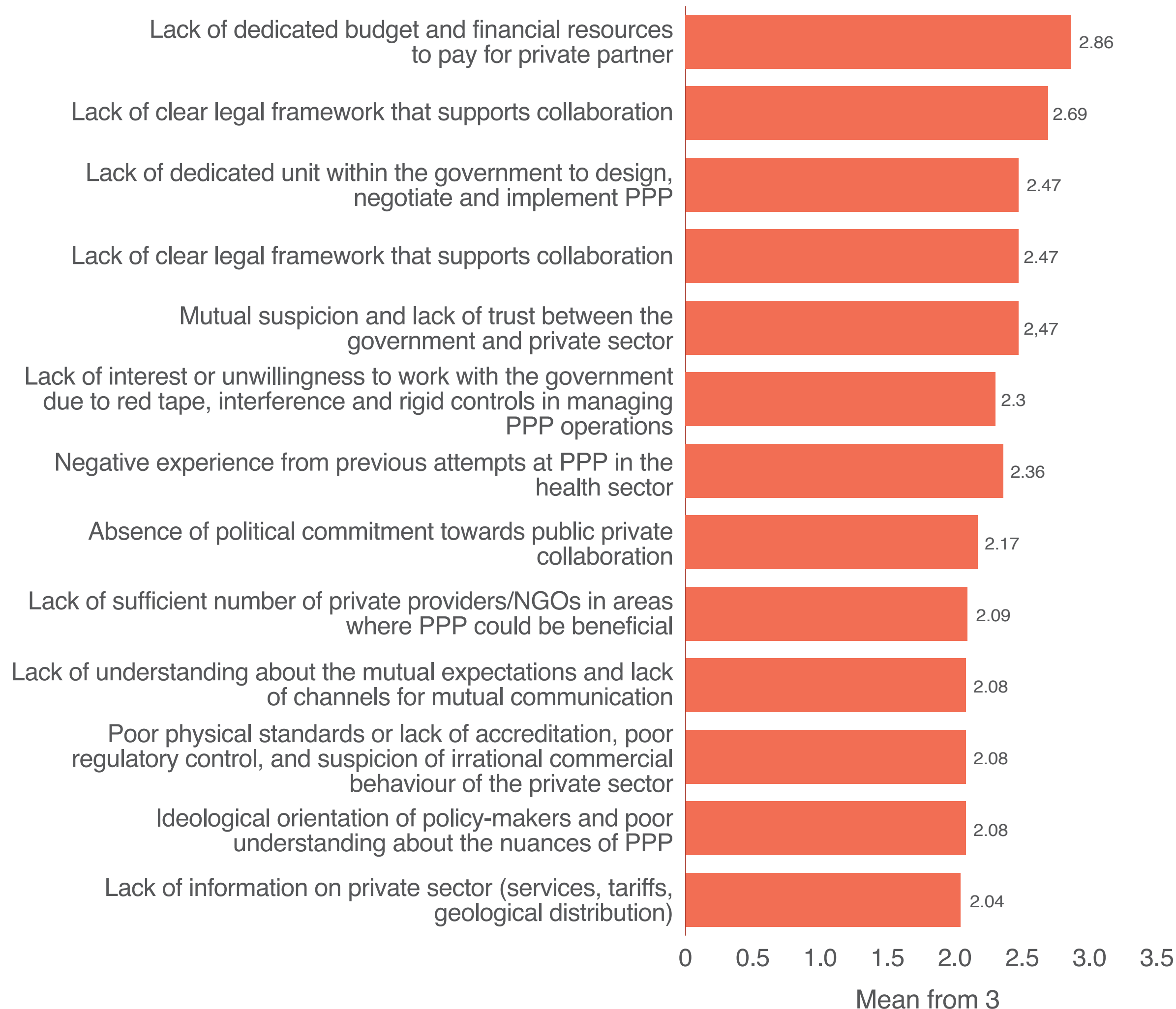


Table A.3. Demographic information of participants and pattern of use of private sector services (N=1236)

Variable	Variable levels	Number (%)	Variable	Variable levels	Number (%)
Sex	Male	512 (41.4)	Education	Elementary	167 (13.5)
	Female	724 (51.6)		Guidance school	74 (5.9)
Data collection setting	Tabriz	602 (48.7)		High school	425 (34.3)
	Tehran	243 (19.6)		Graduate	463 (37.4)
	Hamadan	200 (16.1)		Postgraduate	117 (9.4)
	Qazvin	191 (15.4)	Area of residence	Urban	1117 (90.4)
Type of service provider	Private hospital	713 (57.6)		Rural	119 (9.6)
	Charity hospital	58 (4.6)	Ratio of income to living cost	Less	406 (32.8)
	Laboratory	226 (18.2)		Equal	773 (62.5)
	Radiology	105 (8.4)		More	57 (4.6)
	Clinic	134 (10.8)	Employment	Housewife	367 (29.6)
Type of service	Outpatient counselling	392 (31.7)		Employed	628 (50.8)
	Delivery	123 (9.9)		Retired	77 (6.2)
	Diagnosis	563 (45.5)		Disabled	25 (2)
	Surgery	158 (12.7)		Unemployed	111 (8.9)
Frequency of private sector use	Always	190 (15.4)		Student	28 (2.2)
	Often	624 (50.5)	Frequency of public sector use	Often	451 (36.5)
	Rarely	422 (34.1)		Rarely	589 (47.7)
				Never	196 (15.9)

Fig. A.4. Patients' reasons for seeking services from the private rather than public health sector

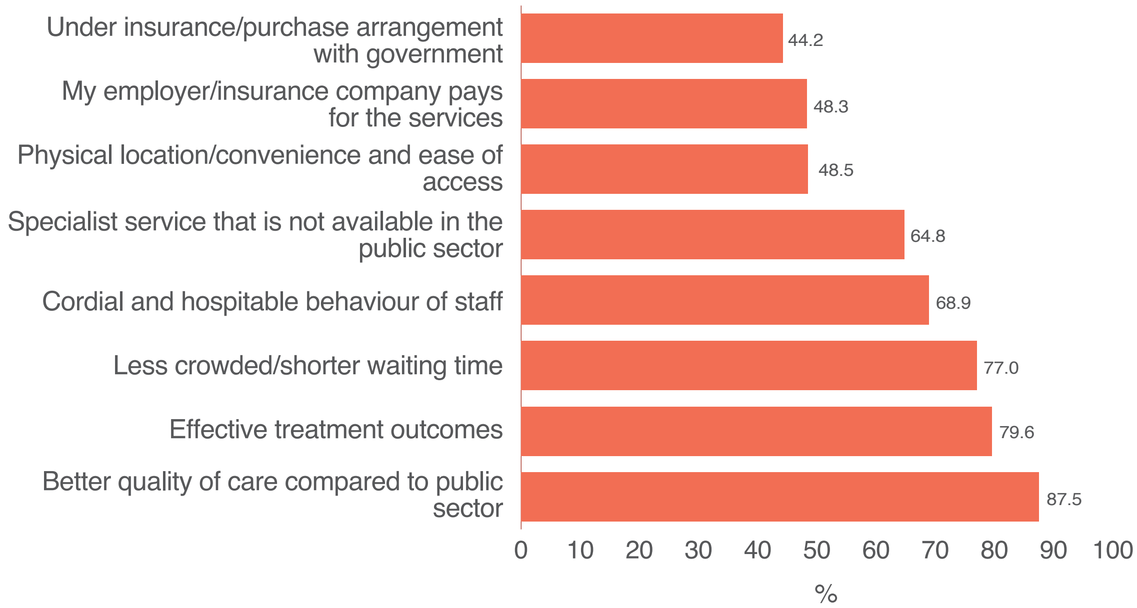


Fig. A. 5. Main reasons for dissatisfaction with private providers