

Understanding the private health sector in Pakistan



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Acronyms and abbreviations

CMW	community midwife	PPP	public–private partnership
GDP	gross domestic product	PSE	private sector engagement
HCC	health care commission	SHI	social health insurance
NCDs	noncommunicable diseases	SWOT	strengths, weaknesses, opportunities and threats
NGO	nongovernmental organization	UHC	universal health coverage
PHC	primary health care	WHO	World Health Organization
PPHI	Peoples' Primary Healthcare Initiative		



Acknowledgements

This report was developed by Dr Nasir Idrees, Health Systems, Policy, Reforms, Governance and Private Health Sector Specialist, and Ms Aya Thabet (WHO consultant), under the supervision of Dr Hassan Salah, (former Regional Adviser, Primary and Community Health Care, WHO Eastern Mediterranean Region) in response to a request by the WHO Regional Office for the Eastern Mediterranean. The structure and methods used in this study follow the guidelines and assessment tools developed by the WHO Regional Office in 2018.



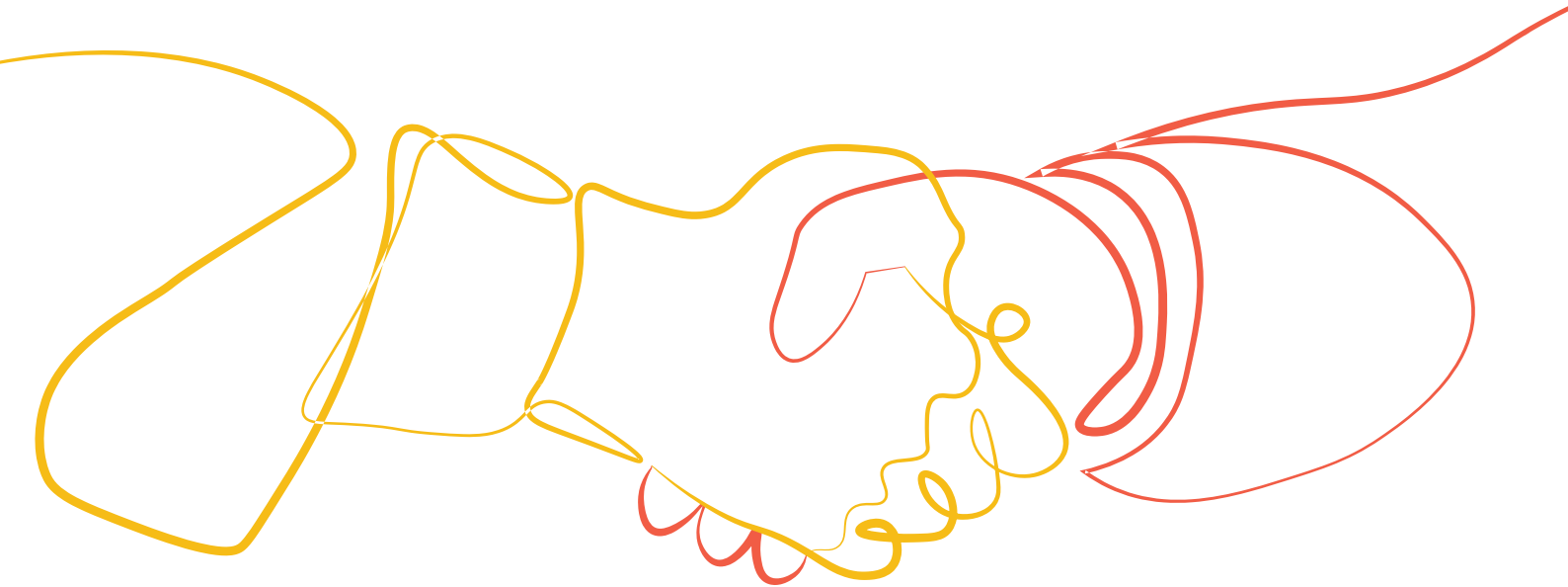
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Introduction



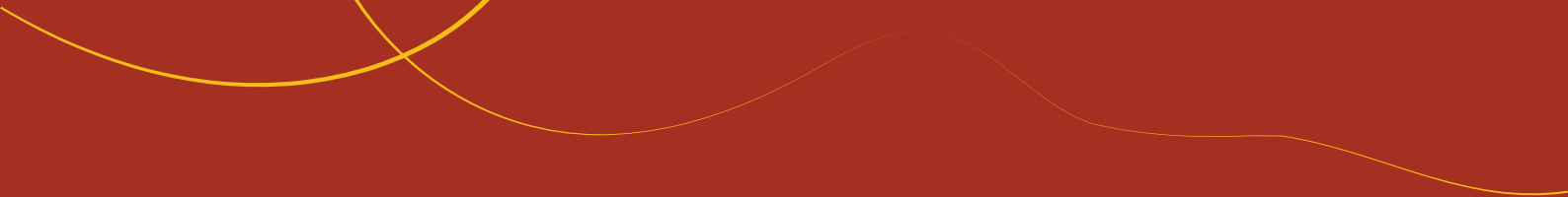
This assessment of the private health sector in Pakistan was undertaken as part of a broader regional study that aimed provide a comprehensive analysis of the operational environment of the private health sector in the World Health Organization (WHO) Eastern Mediterranean Region. It was prepared using an assessment tool developed by WHO in 2018, following the WHO Regional Committee for the Eastern Mediterranean Region’s endorsement of resolution EM/RC65/R.3 on private sector engagement for advancing universal health coverage. The resolution requested the WHO Regional Office for the Eastern Mediterranean to “support assessments to identify challenges and opportunities related to the engagement of private care providers in service delivery in order to develop strategic action plans for effective partnership towards achieving universal health coverage” (1).

The assessment tool is divided into two parts. The first involves conducting a desk review that aims to provide descriptive information and numerical data on the national context. The second requires conducting semi-structured interviews to gather qualitative insights from key stakeholders. For each part, the tool includes a detailed list of information to be compiled in the form of factual and analytical information, numerical data and subjective insights.



2

Context



2.1

Country context

Pakistan covers an area of 796 095 square kilometres and is the 36th largest country by total land area. It has a 1046-kilometre coastline along the Arabian Sea and a total of 6774 kilometres of land borders: 2430 kilometres with Afghanistan, 523 kilometres with China, 2912 kilometres with India and 909 kilometres with Islamic Republic of Iran.

According to the 2017 census, the population of Pakistan is 207.7 million; it is the sixth most populous country in the world. The male to female ratio is 104.91 males to 100 females (51% males and 49% females). The population density is 261 people per square kilometre, with 63.6% of the population living in rural areas and 36.4% residing in urban areas. The average urban growth rate from 1998 to 2017 was 3.01%, and the literacy rate is 58% (2).

2.2

Demographic, socioeconomic and human development indicators

A major demographic transition has occurred in Pakistan over the last 40 years, with a greater portion of the population now living in urban areas and the majority of the population being under 54 years of age (Table 1).

Table 1. Pakistan demographic profile

Population	207 684 626 (2017)
Age structure	0–14 years: 31.36% (male: 33 005 623 / female: 31 265 463) 15–24 years: 21.14% (male: 22 337 897 / female: 20 980 455) 25–54 years: 37.45% (male: 39 846 417 / female: 36 907 683) 55–64 years: 5.57% (male: 5 739 817 / female: 5 669 495) 65 years and over: 4.48% (male: 4 261 917 / female: 4 910 094) (2017 estimate)
Growth rate	2.40% (2017)
Net migration rate	-1.3 migrants per 1000 population (2017 estimate)
Urbanization	Urban population: 36.38% of total population (2017) Rate of urbanization: 2.70% (2017 estimate)
Major cities – population	Karachi – 14.910 million; Lahore – 11.126 million; Faisalabad – 3.203 million; Rawalpindi – 2.098 million; Multan – 1.871 million; Islamabad (capital) – 1.014 million (2015)
Sex ratio (total population)	105 male : 100 female (2017 estimate)
Sanitation facility access (total population)	Improved: 78.9% of population Unimproved: 21.1% (2020 estimate)
Literacy	Definition: age 15 and over can read and write (2018 estimate) Total population: 57% Male: 69% Female: 45%

Source: (2–4).

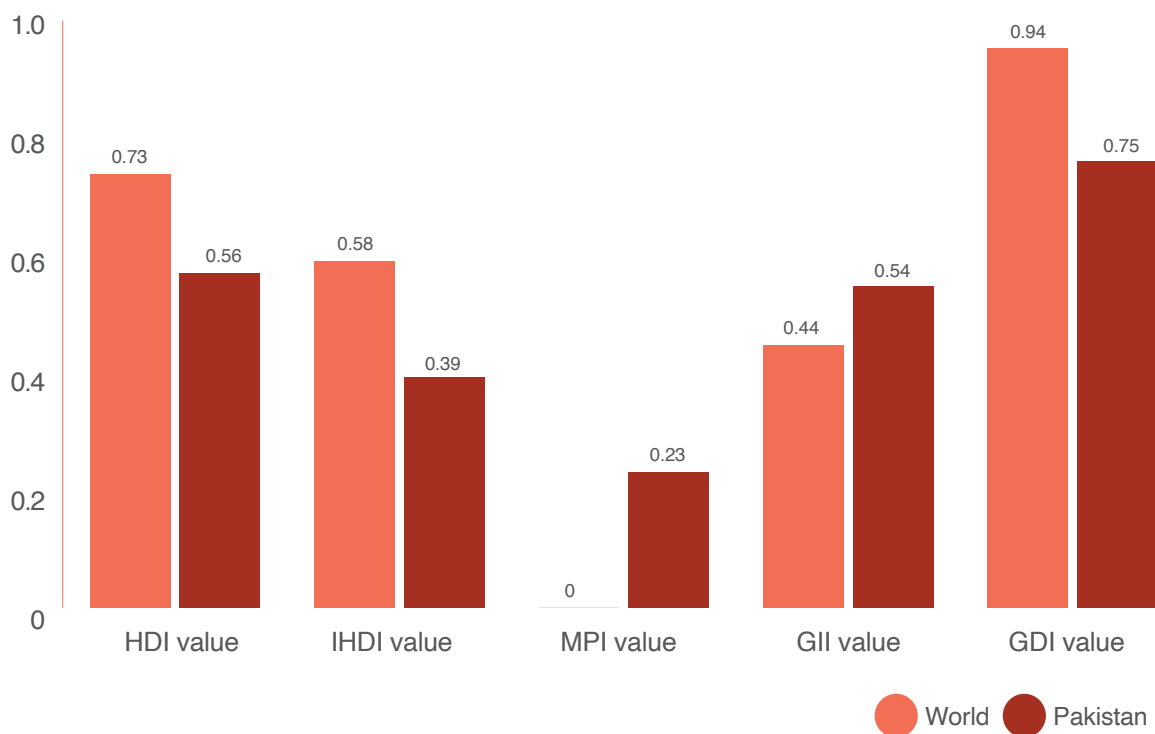
Pakistan is categorized as a lower middle-income country and had a per capita income of US\$ 1641 in 2017–2018. Its total expenditure on health as a percentage of gross domestic product (GDP) is around 2.8%, which is low compared to the 5.0% to 19.7% range for developed countries. Pakistan placed 152nd among 189 countries in the United Nations’ 2019 Human Development Index annual ranking (5). Overall, Pakistan has shown minimal improvement on human development indices. The United Nations Development Programme’s Human development indices and indicators: statistical update 2018 shows that values for Pakistan lag when compared with other countries (6) (Fig. 1).

2.3

Health indicators

Pakistan’s key health indicators fall severely short of requirements (Table 2). For example, Pakistan’s newborn mortality rate is one of the highest in the world: for every 1000 babies born, 42 babies die within their first month. Declines in infant and child mortality rates have been far slower than in neighbouring countries (7). The infant mortality rate dropped from 106.1 in 1990 to 62.0 in 2018, and the under-5 mortality rate dropped to 74 in 2018, down from 138 in 1990 (7). From 1990 to 2014, life expectancy at birth increased by 6.1 years (8).

Fig. 1. Human Development Index comparisons, Pakistan and world total, 2018



Source:(6).

Note:GDI = Gender Development Index; GII = Gender Inequality Index; HDI = Human Development Index; IHDI = Inequality-adjusted Human Development Index; MPI = Global Multidimensional Poverty Index.

Table 2. Health indicators for Pakistan, 2018

Indicators	2018**
Birth rate (births/1000 population)	29
Life expectancy at birth, male/female (years, 2016)	66/67
Probability of dying between 15 and 60 years (per 1000 population, 2016)	Male: 178 Female: 139
Infant mortality rate*	62/1000
Under-5 mortality rate*	74/1000
Fully immunized children (all basic vaccinations)	65.6%
Neonatal mortality rate*	42
Contraceptive prevalence rate	34.2%
Antenatal coverage (4+ antenatal care visits)	51.4%
Skilled birth attendants	69.3%
Total fertility rate – births per woman	3.6
Unmet need for family planning	17 %

Source: (7,9).

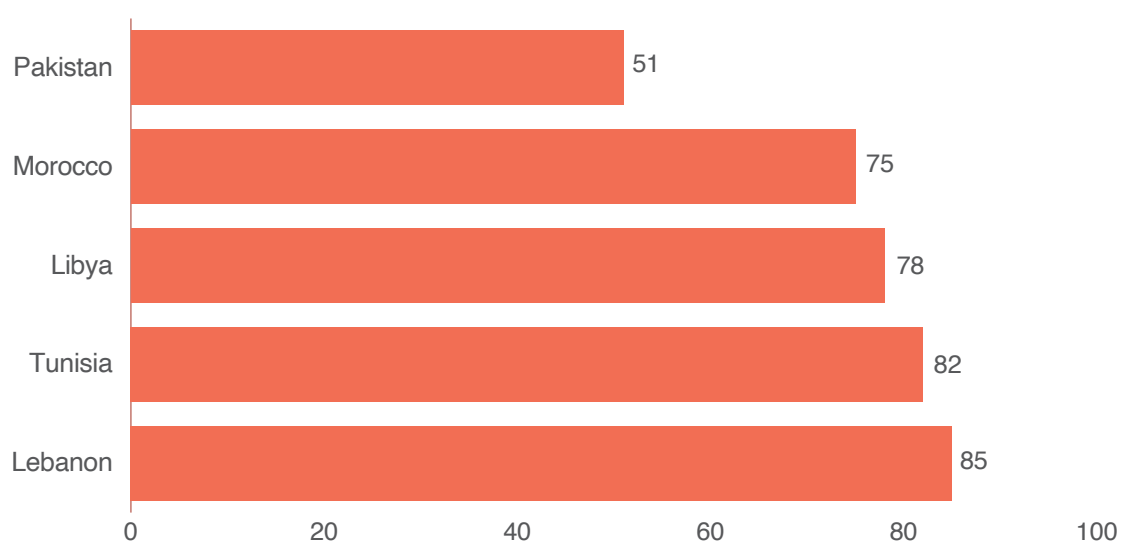
Note: * Expressed in terms of deaths per 1000 live births for the 5-year period preceding the Pakistan Demographic and Health Survey 2017–2018.

** All statistics for 2018, unless otherwise noted.

Pakistan is one of the few remaining countries with widespread polio (10). Infectious diseases continue to spread, including hepatitis B and C, HIV/AIDS and tuberculosis, and the burden of multidrug-resistant tuberculosis also poses a significant regional threat (11).

Noncommunicable diseases (NCDs) are also on the rise. According to WHO's noncommunicable diseases country profiles 2014, just over 50% of the burden of disease is attributable to NCDs in Pakistan (12) (Fig. 2).

Fig. 2. Burden of NCDs in selected countries of the Eastern Mediterranean Region, as a percentage



Source: (12).

3

Organization and delivery of health services in Pakistan



Historically, the Government of Pakistan’s main responsibilities to the health sector have included: policy and strategy development; international commitments; monitoring and evaluation; health communication; advocacy and information; and the prevention of cross-border disease transmission. At the provincial government level, primary responsibilities include planning; management and oversight; financing; implementation; medical education and training, monitoring and supervision; and regulation. In 2011, the 18th Amendment to the Constitution of Pakistan resulted in the devolution of the social sectors, including health care, to the provinces. The Federal Ministry of Health was retained to steer coordination in health, international treaties and agreements (e.g. the Sustainable Development Goals, the International Health Regulations (2005), antimicrobial resistance), cross-border transmission of disease including surveillance, research and statistics, drug regulations, export/import of goods and services, and health regulatory bodies. The overall public and private health service delivery system in Pakistan is depicted in Fig. 3.

3.1

Public health sector

The public health sector in Pakistan consists of three tiers: primary health care (PHC), secondary health care and tertiary health care. PHC is the first layer of service delivery, and secondary health care provides necessary referral services to PHC and linkage requirements for tertiary health care. In addition, community-focused preventive and promotional outreach services are a key strength of the health sector. Lady health workers (LHWs) and community midwives (CMWs) contribute substantially to improving Pakistan’s health indicators. The hierarchy of health services at the provincial level is depicted in Fig. 4.

Fig. 3. Health services provision landscape in Pakistan

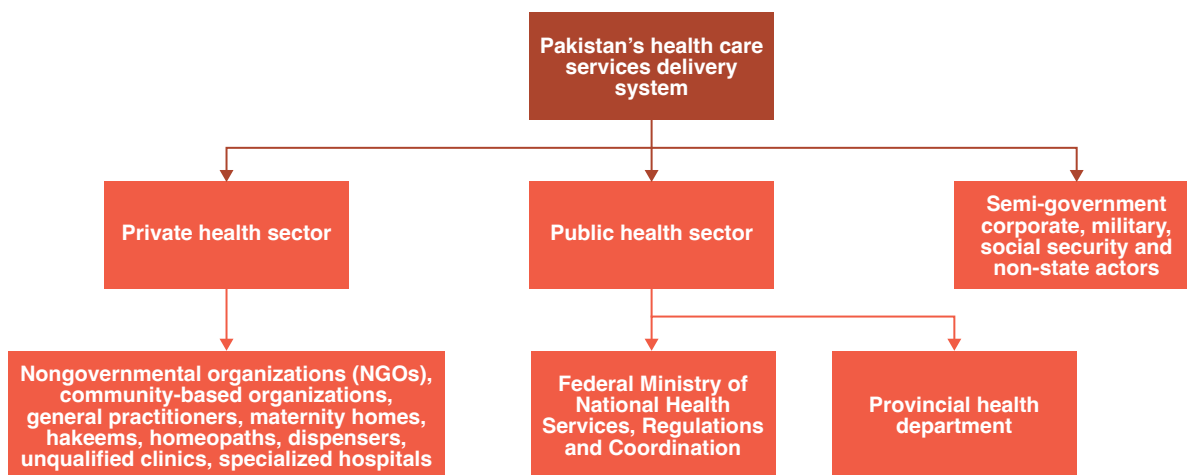
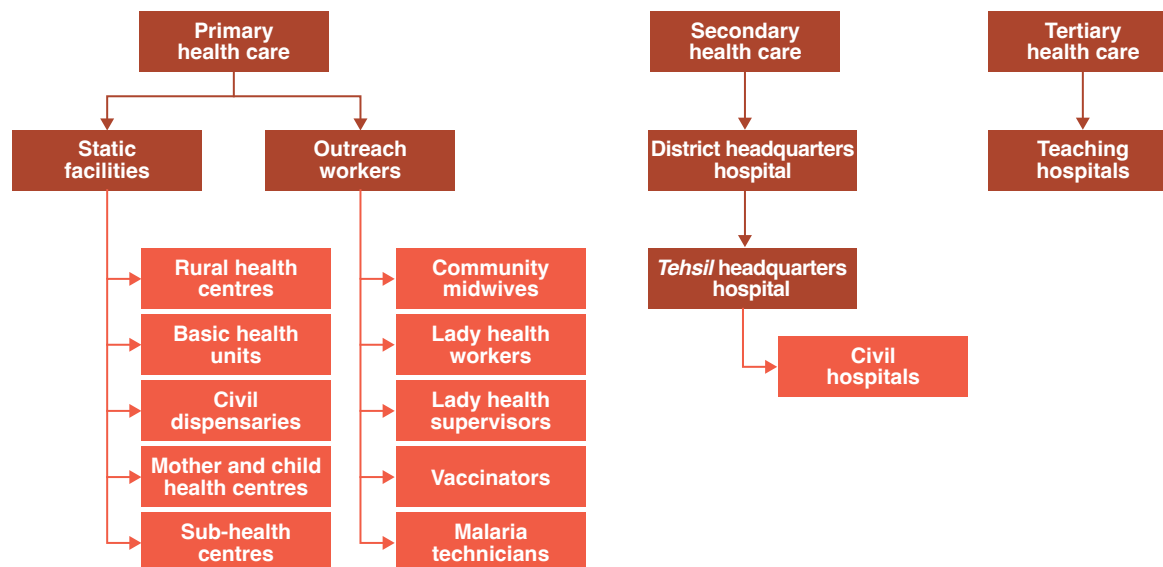


Fig. 4. Hierarchy of Pakistan's public sector health facilities at the provincial level



The most recent available health facility assessment for Pakistan was carried out in 2012. At that time, there were 6022 PHC and secondary health care facilities (13), a figure that is believed to have since increased (Table 3).

Despite a vast network of public health facilities in Pakistan, as shown in Table 3, the country's health system still faces challenges in terms of governance, allocation of finances, quality of care in service delivery, insufficient human resources, lack of introduction to new technologies, and supply and demand gaps, especially in the availability of medicines.

Table 3. Number and types of health facility by region, 2012

Province/region	No. of health facilities by type				Total
	District headquarters hospital	Tehsil headquarters/civil hospital	Rural health centre	Basic health unit	
Azad Jammu and Kashmir	6	12	34	208	260
Balochistan	27	10	82	549	668
Federally Administered Tribal Areas	4	14	9	174	201
Gilgit-Baltistan	5	27	2	15	49
Khyber Pakhtunkhwa	21	77	90	822	1010
Punjab	34	84	291	2454	2863
Sindh	11	56	130	774	970
Total	108	280	638	4996	6022

Source: (13).

Private health sector

Private health care facilities are diverse, are not mapped and are generally unregulated (14). Private sector facilities are most commonly found in the following forms:

- **major hospitals with specialized health facilities;**
- **other hospitals with variable quality/level of services;**
- **individually run clinics and general practitioners, including dental and eye care (these clinics are owned either by a sole proprietor or on a partnership basis);**
- **homeopaths, *hakeems*, *tabibs* and other traditional health providers;**
- **health care facilities from nongovernmental organizations (NGOs) including philanthropic organizations;**
- **ambulatory health services;**
- **pharmacies; and**
- **opticians.**

The overall number of hospitals and the number hospital beds are far below the population's needs. Additionally, hospitals are built without following proper standards and formats. Buildings and installations lack standardization for adequate spaces, distance between services, and basic installations including power and water supply, sanitary installations, and sewage and solid waste management systems. Finally, "hospitals are either too big or too small for the number of patients they receive, specifically in the outpatient departments" (15).

Medical equipment suffers from similar issues, starting from the basic diagnostic equipment required for medical consultation through to more sophisticated imaging, laboratory, sterilization, occupational therapy/intensive care unit and anaesthesia machines. These are all insufficient to adequately fulfil needs.

Pakistan's private health sector provides services to nearly 70% of the population (outpatient department and hospitalized) (16). The private sector at the primary care level includes general practitioners ranging from individual allopathic doctors, indigenous providers such as *hakeems*, homeopathy, Ayurveda clinics and traditional birth attendants. At the secondary level, services include maternity homes, group-owned clinics and small hospitals; at the tertiary level, services include teaching hospitals with attached medical colleges.

In addition to the aforementioned, the main providers of exclusive PHC and partial secondary to tertiary health care services include the semi-government and corporate sector health care units serving their employees. The Pakistan armed forces also deliver primary and secondary health care services to remote locations. These units serve civilians on a fee-for-service model while providing free services to the armed forces. Furthermore, the non-state and philanthropic sectors have contributed immensely to the landscape of health care service delivery in Pakistan.

3.2.1 Private for-profit health sector

For-profit hospitals are owned and run as businesses, like any other small-to-medium enterprise owned by individuals or partners.¹ However, unlike charities, they are not tax exempt; the taxes paid by these hospitals are mainly recovered via patient bills. The numbers of private for-profit medical colleges and hospitals registered with the Pakistan Medical and Dental Council are listed in Table 4, by province/region.

There are almost 75 000 private clinics in Pakistan. They are largely unregulated and lack quality of care due to the absence of a proper regulatory structure. Additionally, there are 40 000 pharmacies in the private sector, mainly unregulated (19). In Pakistan, 60% of the country's diagnostic facilities are in the private health sector (Table 5). These facilities provide routine and tertiary diagnostics (e.g. computed tomography, magnetic resonance imaging). Except for certain high-tech diagnostic facilities in large cities, the quality of health care is a major concern. The high cost of these services also poses a major financial burden to the consumer (19).

Table 4. Number of private for-profit medical colleges and affiliated private hospitals, by province/region, 2017

Province/region	No. of private medical colleges and affiliated hospitals
Punjab	38
Sindh	15
Khyber Pakhtunkhwa	10
Balochistan	1
Azad Jammu and Kashmir	1
Total	65

Source: (18).

Table 5. Number and share of public and private PHC clinics and centres, pharmacies and diagnostic facilities

PHC clinics and centres		Pharmacies		Diagnostic facilities	
Private	Public	Private	Public	Private	Public
73 650 (92%)	5941 (8%)	40 000 (73%)	15 000 (27%)	2400 (60%)	1600 (40%)

Source: (19).

¹ For-profit hospital ownership rates, as published in 2011: individuals 62% and partnerships 32% (17).

3.2.2 Private non-profit health sector

The non-profit health sector in Pakistan comprises philanthropic organizations; NGOs working in the areas of PHC and population and development; the emergency services; and organizations providing advocacy and capacity-building services (20). For example, a 2011 assessment of the health strategy in Sindh Province found that “the philanthropic medical sector is the most well established in Sindh with more than 20 medium to large entities offering medical or specialty services and having large patient volumes. The NGO sector targeting PHC and population related development work has 11 well established entities”. It concluded that the emergency and response philanthropic network was probably the largest such network in the country and that it had outreach across most areas of Pakistan (20). The National health accounts Pakistan 2007–08 found that a little over 20% of local NGOs were engaged in the country’s health sector (Table 6).

The philanthropic sector and NGOs are working in both urban and rural areas. These organizations are also working in multiple sectors to improve communities by raising awareness about unhealthy practices and providing the basic amenities of life. The philanthropic sector collects donations, charity or alms from the community and uses the funds for deserving communities. Philanthropic organizations are registered under several different laws.

3.3

Health human resources

In 2019, Pakistan had 10.8 physicians providing services per 10 000 population and 4.69 nurses and midwifery personnel per 10 000 population (22,23). There is an inverse ratio of doctors to nurses (required minimum is 1:4), resulting in lower-quality health care delivery. The existing nurse-to-patient ratio in Pakistan is approximately 1:50, whereas the ratio prescribed by the Pakistan Nursing Council is 1:10 in general areas and 2:1 in specialized areas.

The population coverage by LHWs in the country is less than 50% of the target population, with the coverage gaps being more pronounced in remote and disadvantaged areas due to the lack of eligible community-based females. Given these statistics, one of the major challenges for the health sector is the shortage of health care workers, especially nurses, CMWs and LHWs. Additionally, there is an unequal distribution of the health care workforce between urban and rural areas, skills and skill mixes are inadequate, and poor job satisfaction and working environments are leading to difficulties in the retention of personnel.

Further, Pakistan has an essential/skilled health professional density of 1.4 per 1000 population, which includes physicians (such as specialists), nurses, lady health visitors (LHVs) and midwives. The threshold minimum of 4.45 per 1000 population is necessary to achieve universal health coverage (UHC) (24). These numbers include public and private sector personnel (Table 7).

Table 6. Number of local NGOs, by sector, 2007–2008

Health care	Other	Total
3825	14 420	18 245

Source: (21).

Table 7. Number and density of the registered essential/skilled health workforce, 2017

Physicians and specialists	Density/1000 population	Nurses, midwives and LHVs	Density/1000 population	Essential health workforce	Density/1000 population
205 152	0.96	104 046	0.49	309 198	1.45

Source: (24).

Regarding community workers, figures show that about 102 000 LHWs and 12 000 CMWs have been employed (24). The roles of LHWs and CMWs are crucial as they are the main community workforce, given the shortage and unavailability of physicians and nurses, particularly in rural and hard-to-reach areas and urban slums.

To summarize, Pakistan is facing shortages of health workers in all areas – especially skilled and essential health workers (e.g. physicians, nurses and midwives) and community-based workers – to deliver even basic and primary health services. For example, the Pakistan: Human Resources for Health Vision 2018–30 projected a need for 314 170 doctors and specialists by 2030. In 2017, there were 205 152 doctors and specialists in the country, with a projected total of 180 700 new professionals entering service through until 2030 (based on the country's production capacity rates at that time). However, given the country's attrition rate for these professionals,² the Vision document anticipated that there would still be a shortfall of 57 999 doctors required to meet the country's needs. Similarly, the Vision document estimated that the country would require 942 511 nurses and midwives by 2030. This number is daunting given that the 2017 total was 104 046, with only 126 464 new nurses and midwives expected to enter service by 2030, leaving a shortfall of 722 655 workers once high attrition rates had been factored in (24).

² The document assumed a 60% attrition of the 2017 total and 15% attrition among new registered professionals over the 2018–2030 period. Social, economic and job-related factors all contribute to these high attrition rates, with examples cited including poor job satisfaction, emigration and female professionals leaving the workforce after marriage.



4

Health care financing



Pakistan has three major categories of health financing sources – namely, public, private and the rest of the world (e.g. donor agencies and development partners)

Pakistan has three major categories of health financing sources – namely, public, private and the rest of the world (e.g. donor agencies and development partners). In the case of public funds, at the federal level the Ministry of Finance is the funding source for civil government and the military. The provincial finance departments provide funds at the provincial level, and the district government and cantonment boards provide funds for local bodies and district governments. The last category of public funds is the autonomous bodies/corporations working under federal and provincial governments. Funds here are spent on employee health care, either directly or indirectly through reimbursements, as well as on the health care facilities under their control.

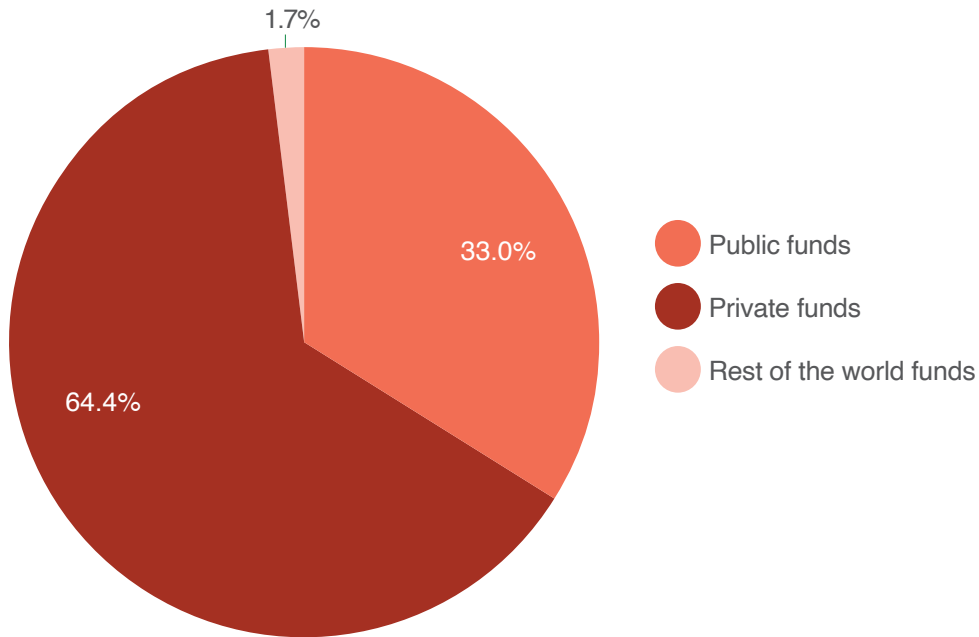
Development partners are also spending on health; however, only their direct spending is included in the national health accounts. The funds, which have been granted to the Government by donors (budgetary aid), are reflected in the budget and shown under government spending. Out of the total health expenditures in Pakistan, 33% is public spending and 64% is private spending, out of which 90.3% (i.e. 57.8% of the total health expenditure) is household out-of-pocket spending. The spending share of local NGOs is 4.9%, and the reimbursements covered by employers take a 1.7% share. Additionally, in Pakistan, insurance companies are not a financing source: they are agents instead. To a certain extent (premiums minus claims), they are also providers of administrative health services. Household funds mainly comprise out-of-pocket health expenditures and Bait-ul-Mal³ and zakat⁴ contributions made by households.

The annual per capita health expenditure for Pakistan, as per the National health accounts Pakistan 2015–2016, was US\$ 45 (PKR 4688) (14). Total health expenditures were 3.1% of GDP, at market price, in 2015–2016 (14,25). General government health expenditures were 9.7% of general government final consumption expenditures in 2015–2016, according to national accounts (25). Private health expenditures were 2.5% of household final consumption expenditure, also according to national accounts (14). National health accounts for the financial year 2015–2016 show that out of total health expenditures, 33% were made through public funds, 64% by private funds and 1.7% by donors/development partners (Fig. 5).

³ Pakistan Bait-ul-Mal, an autonomous body set up through an Act in 1991, works under the umbrella of the Ministry of Social Welfare and Special Education. It significantly contributes to poverty alleviation through its various services focused on the poorest of the poor and helping destitute, widowed, orphaned, invalid, infirm and other needy persons, as per eligibility criteria approved by the Bait-ul-Mal Board.

⁴ Zakat is an annual levy in the Islamic system that requires individuals who meet a certain financial threshold to contribute funds to support those in poverty and need.

Fig. 5. Total health expenditures, by source, 2015–2016

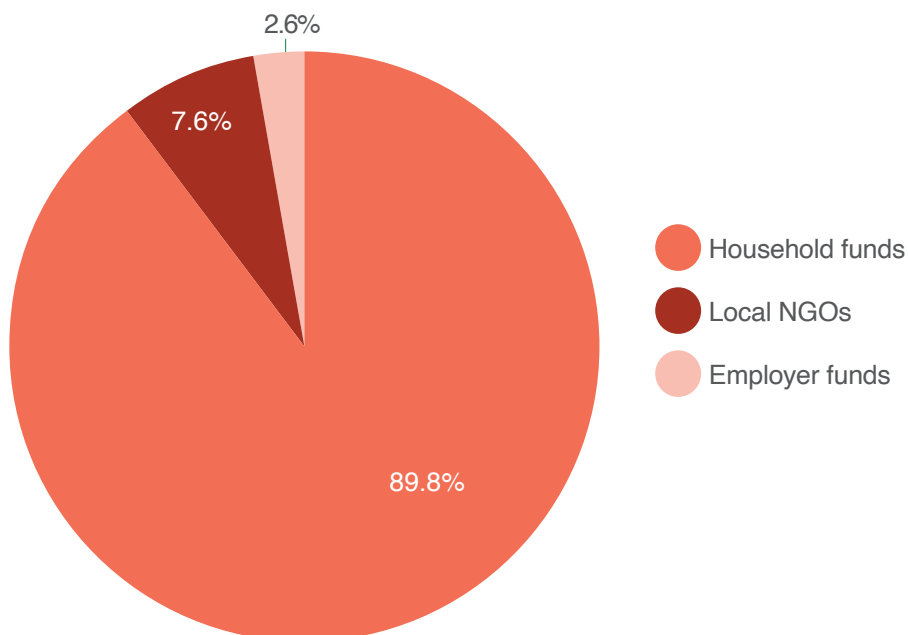


Source: (14).
Note: Percentages may not sum to 100% due to rounding.

4.2 Out-of-pocket expenditures

Out of a total expenditure share of 64% by the private health sector, out-of-pocket health expenditures account for 90% (meaning 57.8% of the total health expenditures are out-of-pocket) (Fig. 6). Only 4% of the total out-of-pocket expenditures are reimbursed by employers, while 96% are direct out-of-pocket expenditures from households.

Fig. 6. Breakdown of private expenditures by source, 2015–2016



Source: (14).

Analysis of out-of-pocket health expenditures from the national health accounts 2015–2016 data reveals that, in Pakistan, around 24% of the total out-of-pocket expenditure was incurred on inpatient services. A further 29% of out-of-pocket spending was on outpatient care treatment, and 47.32% was spent on medical products (e.g. medicines and essentials) (Table 8).

The level of out-of-pocket health expenditure in urban areas is much higher compared to rural areas: 68% of all out-of-pocket payments are made in urban areas (14).

4.3

Public sector social protection programmes

Currently the public sector has two health insurance programmes – the Prime Minister’s National Health Program and the Sehat Sahulat Program – which were introduced within the last three to four years.

The Prime Minister’s National Health Program is a fully subsidized health insurance programme aimed at providing health care insurance to identified underprivileged citizens, without any financial obligations on their part. The programme has registered 3 227 113 users to date and has enrolled a substantial number of secondary and tertiary hospitals.

Through the Prime Minister’s Program, secondary hospitals are providing inpatient services (all medical and surgical procedures), emergency treatment requiring admission, maternity services (normal delivery/caesarean section), maternity consultancy (four times before and once after delivery), treatment for fractures/injuries, post-hospitalization follow-up care, local transportation costs of PKR 350 (at 2018 exchange rates, approximately US\$ 3; provided three times per year), and transport to tertiary care hospitals. Priority teaching hospitals are providing inpatient services, including all medical and surgical procedures, and treatment for heart diseases (angioplasty/by-pass), diabetes, burns and road traffic accidents (life, limb-saving treatment, implants or prosthesis), end-stage kidney diseases/dialysis, chronic infections (hepatitis/HIV), organ failure (liver, kidney, heart or lungs), and cancer (chemotherapy, radiotherapy or surgery).

The Government of Khyber Pakhtunkhwa, with support from KfW Development Bank, launched a social health protection initiative in 2015, known as the Sehat Sahulat Program. By the end of 2017, premiums for up to 69% of the poorest of the population of Khyber Pakhtunkhwa were paid by the Government for inpatient secondary and tertiary health care services. Enrolment of voluntary premium contributing members has yet to start, although it was planned during the initiative’s launch.

Table 8. Share of out-of-pocket health expenditure by type of health care, 2015–2016

Inpatient	Outpatient	Medical products	Total
24.10%	28.58%	47.32%	100%

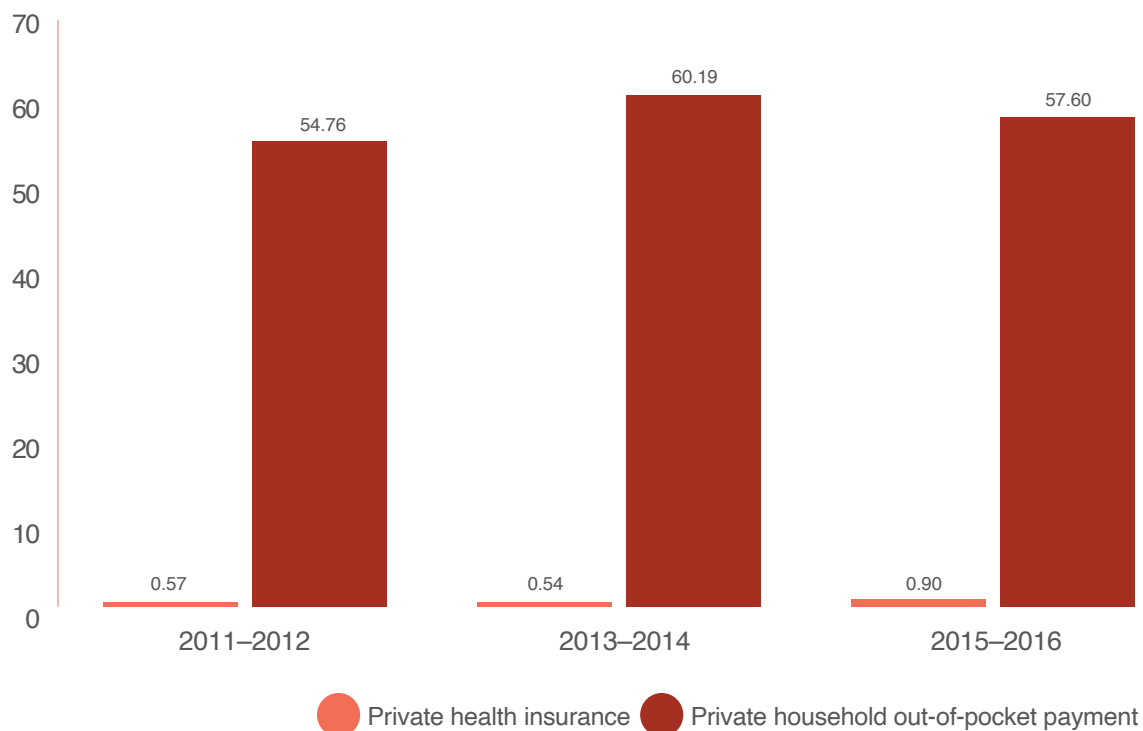
Source: (14).

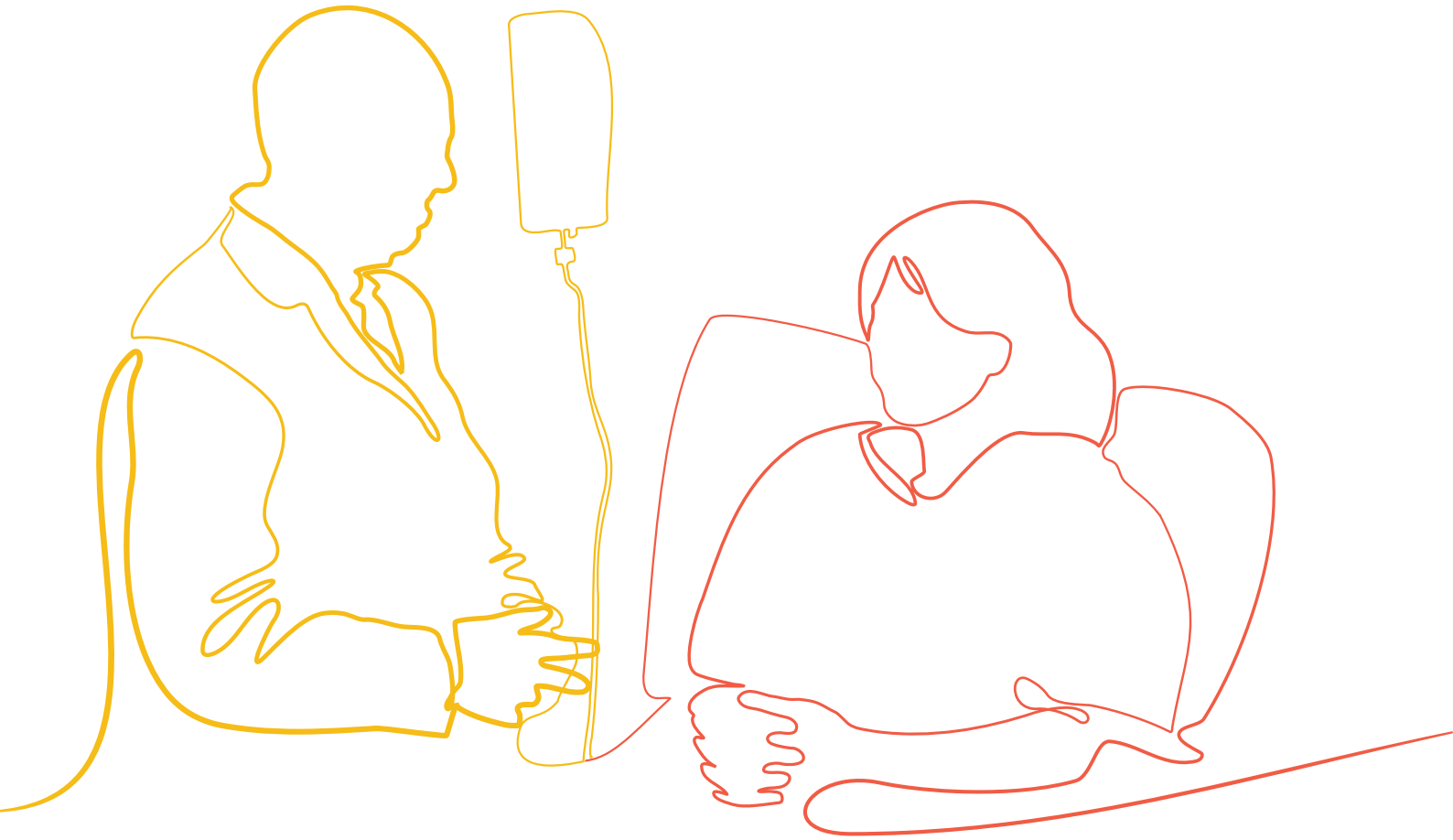
4.4

Private health insurance

Private health insurance payouts are a marginal proportion of the total out-of-pocket expenses, due to the limited private health insurance coverage of the general population (Fig. 7).

Fig. 7. Share of private health insurance and out-of-pocket payments as percentage of total health expenditure, 2011–2016





5

Legal and regulatory framework

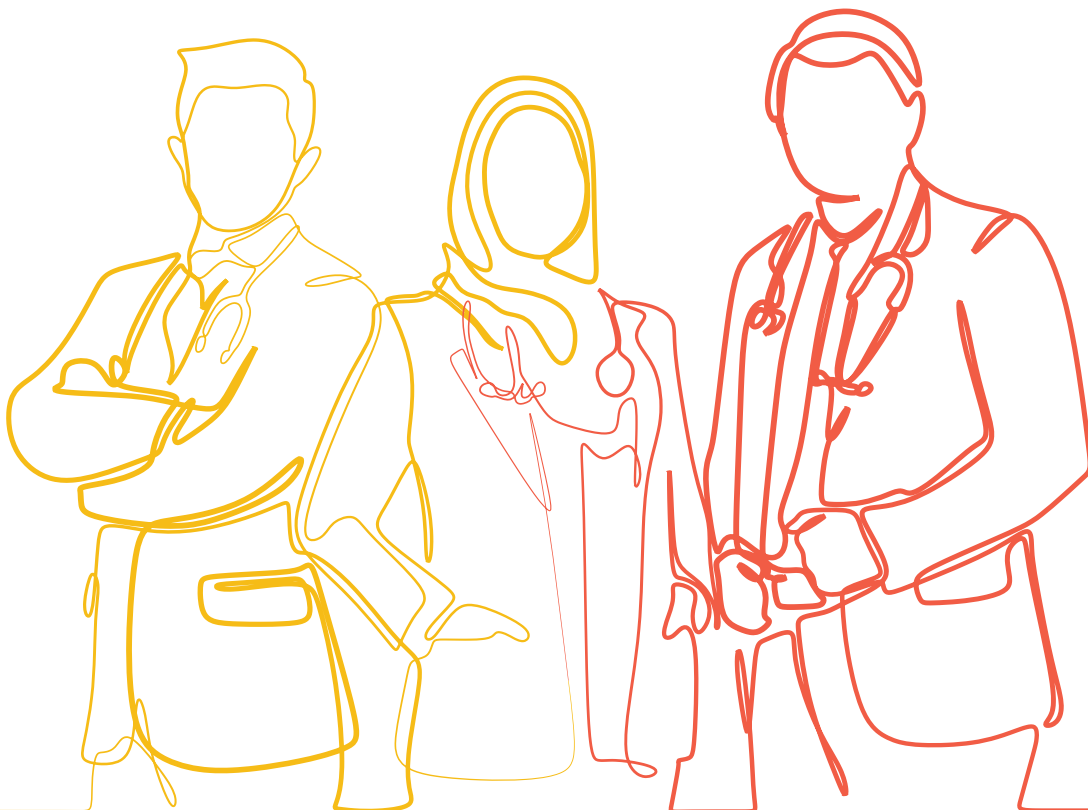


No legislation exists for accrediting institutions such as hospitals, and quality assurance mechanisms remain absent

Legislation on the registration and licensing of doctors, nurses and lady health visitors has long been protected. This law requires all health care providers to be registered with their respective regulatory bodies, such as the Pakistan Medical and Dental Council, the Nursing Council of Pakistan or the Homeopathic and Tibb Council. Registration has been inconsistent, however. Additionally, no legislation exists for accrediting institutions such as hospitals, and quality assurance mechanisms remain absent. There are no licensing mechanisms or permissions required to open or operate a health care institution.

Recently, however, the provincial governments of Khyber Pakhtunkhwa, Punjab and Sindh have established health care commissions with the mandate to register, license and accredit public and private health entities. These health care commissions are established as autonomous health regulatory bodies, aiming to improve the quality, safety and efficiency of health care service delivery. The commissions are responsible for enforcing minimum service delivery standards at all levels of health care, and establishments are licensed only if they implement these standards. Health care commissions are governed by a board of commissioners and have executive support with administrative, quality control and accreditation units.

Moreover, regulation of the pharmaceuticals industry in Pakistan has been a major challenge, especially regulating the quality and prices of essential medicines (26). Health care NGOs in Pakistan work with the permission of the relevant ministries and departments of health, but regulation of them is lacking. Although registration and permits are important steps in starting an NGO, the latter processes of licensing, quality control and accreditation are not adhered to.



6

Stakeholder-perceived views



As noted in the introduction, the assessment tool developed by WHO following the adoption of resolution EM/RC65/R.3 on private sector engagement for advancing UHC entails data collection from both a desk review and key informant interviews. This section presents findings from the interviews.

6.1

Regulation

The key informant interviews supported the findings from the desk review that the regulation of the private health sector has remained weak over the decades and that the Government of Pakistan had done little to set up institutions for regulation until more recently, when provincial governments took the initiative to establish health care commissions in the provinces of Punjab, Khyber Pakhtunkhwa and Sindh. Nonetheless, it is believed that the health care commissions are at different stages of evolution. The Punjab health care commission has been able to take the lead in most activities and has set an example for registration and licensing of both public and private health sector facilities, whereas health care commissions are yet to be fully established in the rest of the provinces.

6.2

Reasons for growth of the private health sector

Interviewees reported that the private health sector has grown in the country in response to the shortcomings of the public sector.

PHC is widely distributed, but the majority of tertiary health care services are established in urban areas only. Despite a vast public sector network, it was observed that many health facilities remain non-functional due to the unavailability of health care staff. The number of existing public health facilities and services is not enough to deliver services for the country's rapidly increasing population.

This assessment demonstrates failure by the public health sector to address growing demands for health services due to a lack of meaningful government reforms. The health system shows stagnancy and there is no impetus to improve it. The Government is initiating steps in certain areas pointing towards the recovery of public health care delivery, such as the establishment of regulatory bodies (e.g. health care commissions) and outsourcing service delivery, but this falls short of the required needs.

The private health sector, when compared to the public health sector, shows advanced capability to meet client demands, provide quality services and offer the latest approaches to treatment. However, there are substantial concerns among interviewees that the private health sector lacks regulation and oversight (which could lead to malpractice and deceitful practices) and may be more expensive for patients. This latter factor can lead to a vicious circle of increasing poverty.

Stakeholder views on quality of care

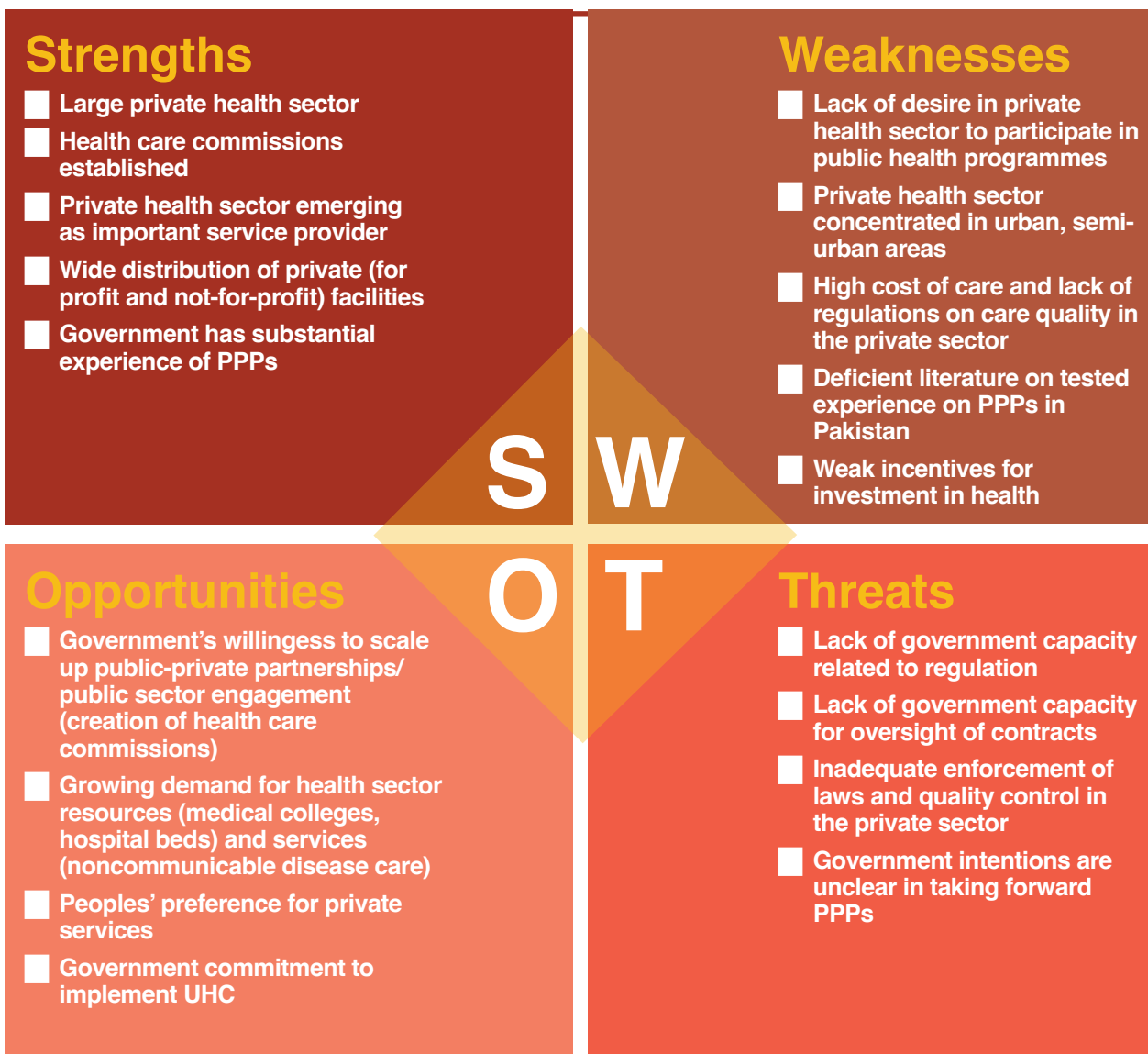
Key informant interviews highlighted major concerns regarding the quality of care offered by public sector facilities. These facilities do not follow any set standard practices, diagnostic and treatment guidelines, procedural guidelines or treatment follow-up plans. Health care commissions mandated to improve the quality, safety and efficiency of health care services for both public and private health care establishments are implementing standards and packages. These, however, are in their infancy and require much further work. The existence of informal and/or unqualified health care practitioners who provide prescription and diagnostic services makes it even more essential that health departments devote immediate attention to their management.

In addition, public sector hospitals have been built without following proper standards or formats. As a result, the infrastructure does not follow quality of care standards, such as providing adequate spaces, sufficient distance between wards offering different health services, and basic installations (such as for power and water supplies, sanitary installations, and sewage and solid waste management systems). Hospitals are either too big or too small for the number of patients they receive, specifically in the outpatient departments. Some secondary-level hospitals function as de facto outpatient clinics, with patient turnovers suggesting both a high percentage of PHC services, as well as limited quality of care (e.g. less than five minutes available to consult, examine and provide advice to the patient or the parents of a patient). Inpatient numbers sometimes only represent a small fraction of the total workload. This is partially due to inappropriate infrastructure. Private health sector hospitals, however, show well-planned infrastructure and have therefore been attracting more patients.

Strengths, weaknesses, opportunities and threats (SWOT) analysis

Fig. 8 shows that while engagement in the private health sector is highly debated among those in health care governance, the analysis requires further discourse, particularly in the context of unique country-specific setups. Additionally, analysis of public–private partnerships (PPPs), though tested through different models, finds scepticism among governments and the private health sector alike in scaling-up partnerships.

Fig. 8. SWOT analysis of private sector engagement in Pakistan



Source: Document review and key informant interviews.

The Government wishes to leverage the strengths of the private health sector in Pakistan but lacks requisite knowledge on how to model this approach. Meanwhile, the private health sector remains apprehensive about partnering with the Government. These fears relate to concerns about disclosing finances (which are largely kept secret by the private health sector in Pakistan), being regulated by the Government (given the comfort of the existing unregulated status) and being required to reduce prices for services offered.

The challenges are so immense and deeply rooted that only intensive discussion, with agreed positions of the two sectors and mutual

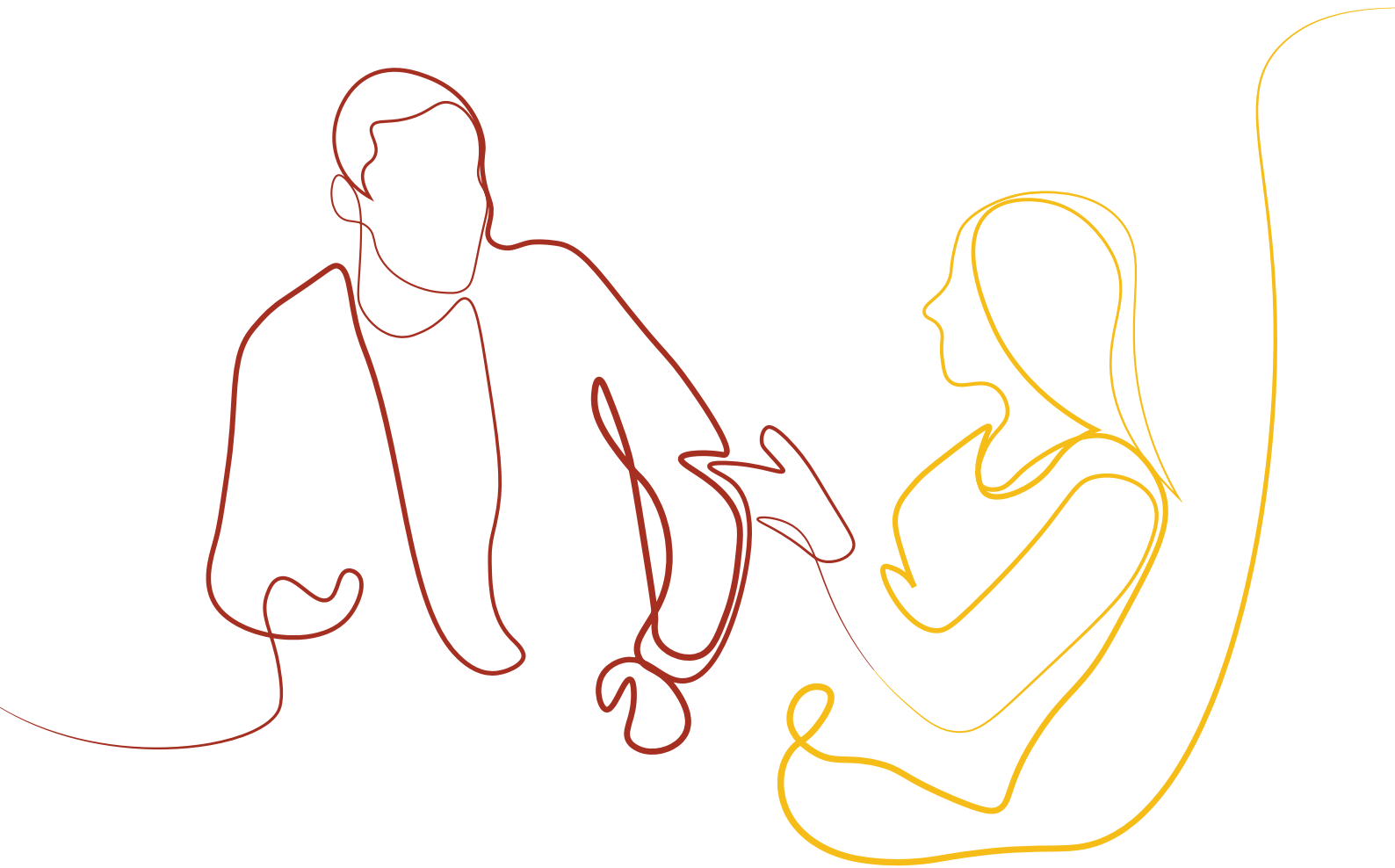
consensus, can implement such a partnership. The Government needs to articulate its policy and future direction so that the private health sector can adjust and position its future actions to align with government policy.

Once aligned, the Government will be required to strengthen its capacity to effectively manage contracts and monitor and regulate both the private and public health sectors using agreed standards. These partnerships can take many forms given the magnitude of the population, the geographical size of Pakistan and the large number of private health establishments. Partnerships can be moulded to reach rural populations, as currently the private health sector is mainly concentrated in urban areas. The private health sector shies away from rural areas given the population's low economic status. However, contracting services through one-budget-line transfers by the Government to the private health sector to operate rural institutions may be a good initial approach. Similarly, partial outsourcing of diagnostics (such as MRI and CT scans) and specialized clinical services (such as angiography and passing stents) are good approaches to consider in unutilized rural facilities at the secondary health care level.

It was generally perceived that the benefits of PPPs bring improved quality of care (69% of the respondents of the survey). Private health sector stakeholders believe they can offer better management and can introduce best practices given their experience. The private health sector can also help mobilize resources to improve hospitals and health institutions. These views come amid fears of an increased cost of care attached to private sector engagement (PSE). There was a consensus that the Government believes it should be the sole provider of health care to its population; however, it is recognized that this is not sustainable nor realistic and that alternatives must therefore be sought.

The major barriers mentioned in the key informant interviews were as follows:

- **deficiency of information on the private sector;**
- **lack of private providers/NGOs in areas where a PPP could be beneficial;**
- **lack of understanding about expectations;**
- **lack of coordination and communication between the public and private health sectors;**
- **poor standards/lack of accreditation facilities;**
- **poor regulatory control;**
- **mutual suspicion and lack of trust between the Government and private sector; and**
- **lack of a dedicated unit within the Government to design, negotiate and implement PPPs.**



7

Public-private partnership experiences in Pakistan



Key lessons include that there was a lack of regulation and insufficient capacity at the government level to manage partnership implementation

Over the years, the delivery of primary and secondary health care services has been contracted externally through various PPP models. A few are being further pursued. The Peoples' Primary Healthcare Initiative (PPHI) is the largest external model of service delivery. Through this initiative, the management of government-run basic health units was contracted to a national NGO that managed 48% of all PHC facilities across Azad Jammu and Kashmir, and Gilgit-Baltistan (27).

Additionally, from 2003 to 2008, HIV services were managed externally by NGOs using government performance-based contracts (28). According to the findings of a third-party evaluation, significant improvements in the delivery of services, staffing and facilities were achieved in districts where PPHI was operating. As examples, the evaluation's report states that the availability of doctors and health care staff was improved and that non-functional basic health units were made functional. However, the report pointed towards room for improvement in certain areas. Administrators raised concerns that outsourcing created a parallel system and feared that PPHI was functioning at the cost of the district health system. Moreover, the long-term sustainability of PPHI was questioned (27).

In Khyber Pakhtunkhwa, outsourcing of district health delivery to national and international NGOs was undertaken in six underserved districts, whereby the NGOs selected were responsible for entire district health systems – from district hospitals to PHC facilities and community outreach programmes. In addition, public sector hospitals in two districts with primary care facilities were formally contracted to four local NGOs and one international NGO.

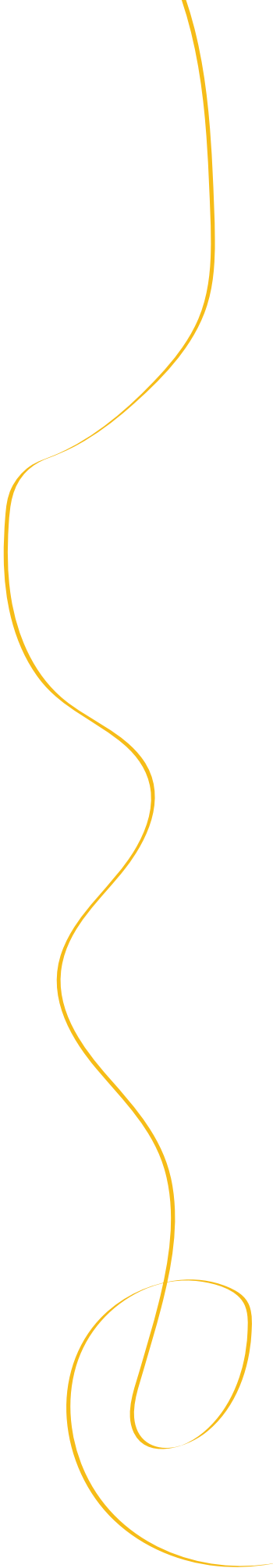
In Balochistan, Zaidi et al. noted that the province “has 3 major PPP initiatives to expand access to services whereby large international NGOs, namely Mercy Corps, Médecins Sans Frontières and Save the Children have entered into formal agreements with the Government to strengthen health care facilities, including 90 basic health units, four district hospitals and establishment of birthing stations” (28). In Sindh, NGO management of poorly functioning rural health centres and secondary care *taluka* hospitals in nine districts was outsourced to expand access to underserved districts (29). These contracts implemented an essential package of health services at the facility and outreach levels and were government financed. Maternal and child health conditional cash transfers and vouchers for services were contracted in two districts of Sindh through the Norway–Pakistan Partnership Initiative; however, issues with the initiative caused the contracts to be abandoned.

Key lessons include that there was a lack of regulation and insufficient capacity at the government level to manage partnership implementation. Additionally, major constraints, including concern over strict regulation and government taxation, have led to a lack of partnership interest on the private health sector's part. As well, most of the initiatives were not given enough space and time to bring beneficial results.



8

Conclusions and recommendations



Assessing and mapping the private health sector in Pakistan is a key priority identified by the WHO Regional Office for the Eastern Mediterranean, based on a series of consultations with Member States over the past few years. These consultations identified three critical approaches required for the engagement of the private sector: (i) a countrywide private health sector assessment; (ii) the strengthening of the legal and regulatory framework for the private health sector; and (iii) the engagement of the private sector in the form of PPPs. It was also agreed that a private sector assessment should be a prerequisite for regulation and partnership. Pakistan must learn from these discussions, from past experiences and from other countries. Although the growth of the private health sector in Pakistan is altruistic, it is largely unregulated and unmapped. The following recommendations stem from these gaps and from assessment findings.

1. The assessment finds that policies for PSE and PPPs are articulate. Although the National health vision Pakistan 2016–2025 and Pakistan human resources for health vision 2018–30 documents do mention the private sector, they are vague and do not provide a strategic outlay or broad targets for engaging with the private sector. These two documents and the provincial health sector strategies (which are now outdated) are also viewed as inadequate because they do not mention how the private sector may be included in an overarching UHC plan.

A step-by-step approach towards developing and implementing strategies for PPP/PSE in the health sector includes the following:

- **Political and administrative commitment: political leadership and the Government currently lack policy direction and a strategic approach. Therefore, to begin, awareness must be built among the political leadership and policy-makers.**
 - **Policy framework: a next step is to develop a policy framework for engaging the private health sector.**
 - **Institutional system for management and capacity-building: once a framework is developed, PPPs and other models of PSE will require dedicated units within governments at the federal and provincial levels to fulfil contractual requirements and monitor engagements.**
 - **Dedicated financing mechanism: the fourth step is that developing financing options for engaging the private for-profit sector should be thoroughly discussed before implementation.**
 - **Scale up best practices and innovate new models: a final step, and after models of engagement have been tested, is to scale for replication and expansion.**
2. Regulation of private sector health services remains a significantly overlooked area across most countries and territories of the Eastern Mediterranean Region and is critically required to manage the expansion of the private sector in pursuit of the goal of UHC (28). Private sector regulation seems convoluted, and the Government must take key steps to effectively govern the sector and to protect its citizens from catastrophic expenses.

Social health insurance (SHI) is an important alternative that can bring quality to the sector and also provide an enabling environment for regulation, which may otherwise be difficult to achieve. Although this insurance has been initiated at the federal level and in the provinces of Khyber Pakhtunkhwa and Punjab, these are fully subsidized models. SHI is an important alternative financing mechanism tried and tested in many countries with reported successes. It can work well if the formal and informal sectors are included in a phased manner and the premiums are pooled for expansion towards UHC. It is not possible for a country to subsidize its whole population, and inclusions or enrolments through premium pooling are essential.

Literature shows that SHI agencies set minimum quality standards and certify quality. SHI agencies usually start with existing government accreditation and certification standards, modified over time through emerging concepts. SHI can bring additional efficiency and quality through selective contracting. The contracting process also standardizes fee prices, negotiated between the provider and the purchaser, at the time of contracting. When SHI uses bundled payment methods such as capitation, per admission or diagnostic-related group to pay, providers with higher costs tend not to want to contract with SHI unless they can lower their costs at the payment level. Hence high-cost providers are inclined to reduce their costs (30).

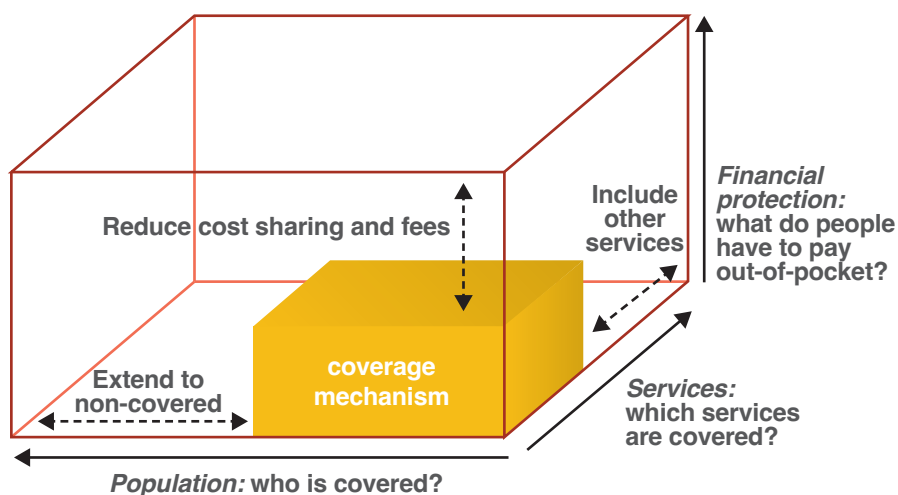
3. Pakistan's private health sector is unmapped. Data supporting its capacity, technical competencies, support mechanisms, processes and equipment, as well as standards are therefore not seen as satisfactory. The number and type of human resources that the private sector accumulates (or, for that matter, the technical strength of individual private sector hospitals) is not known, reported or asked. Is there a client report system and research wing? Does it report into a health information system or register, license and accredit? These are questions requiring a full assessment at a larger scale and within the ambit of government bodies. This supports the importance of developing an institutional system for managing PPPs and building capacity within government setups at the provincial level.
4. Pakistan's health system lacks approved standard operating procedures and protocols; an International Classification of Diseases listing of diseases; accrediting bodies; death and cause of death reporting tools; and procedure and guidance documents. PSE without these established institutional capacities will be a mechanism distanced from desired outcomes. Standard treatment guidelines, operating procedures and service delivery standards for all levels of health care need to be developed, reviewed and approved before PSE proceeds. Contracts with the private health sector should include benchmarked standards and protocols so they may be monitored and evaluated for quality.
5. The assessment finds that government spending on the health sector is far from desired (less than 1% of GDP). Additionally, the expansion of the private sector over time is notable. These two findings, along with the government's resource constraints (plus GDP not rising over the last decade), call for an alternate financing

mechanism to meet UHC. Purchasing private health services has been more widely practised in developing economies and has growing evidence regarding its effectiveness. Purchasing provides formal controls to the state over the cost, quality and service package offered by the private sector.

The Government of Pakistan needs to consider the concept of the purchaser/provider split and use this as an alternative, instead of remaining the sole provider at the state level. Essential health service delivery packages are already developed and approved at the federal and provincial levels. These can serve as the first source towards tendering for purchase of services for at least the PHC level, phasing to secondary and tertiary health care with safety nets for the poor. SHI can serve the needs of an alternate mode of financing for reducing care costs, improving quality, adding services and providing additional funds to extend to areas previously unserved, while ensuring financial protection (Fig. 9).

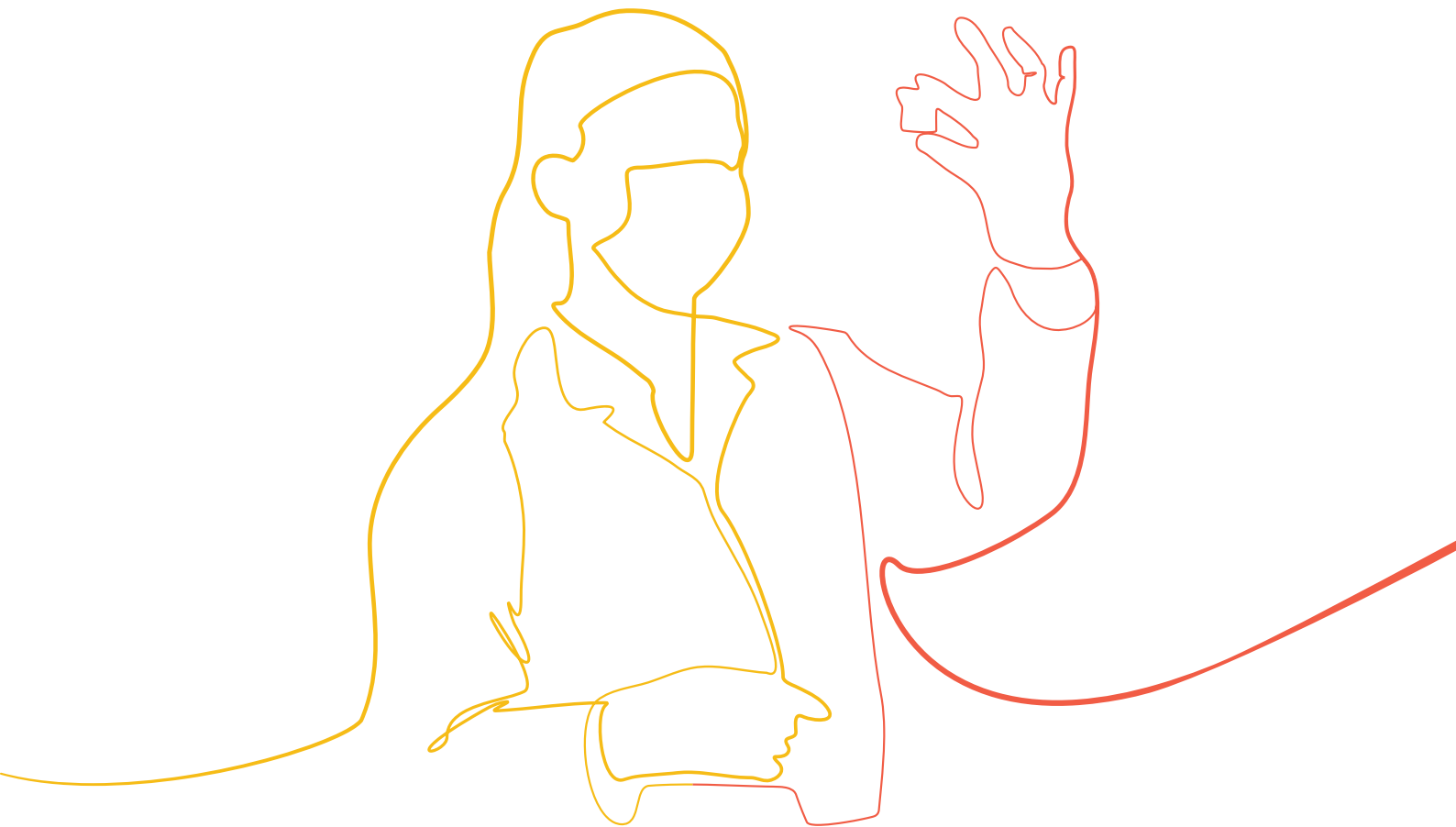
6. Increasing demand, the availability of new methods and scarce resources highlight the need for governments to find new ways to provide family planning for all. Meeting family planning needs by ensuring access to contraceptives now and in the future requires recognition and integration of various market sectors, including NGOs, as well as subsidized and self-financing options. In other words, a total market approach. However, it is rare that managers of family planning programmes make plans and decisions in the context of the “total market”, in which different providers reach different consumer markets. Others have described this role as stewardship, or “setting and enforcing the rules and incentives that define the environment and guide the behaviours of health-system players” (32). This total market approach concept, tested in family planning, can also be used in PSE models of health care service delivery.

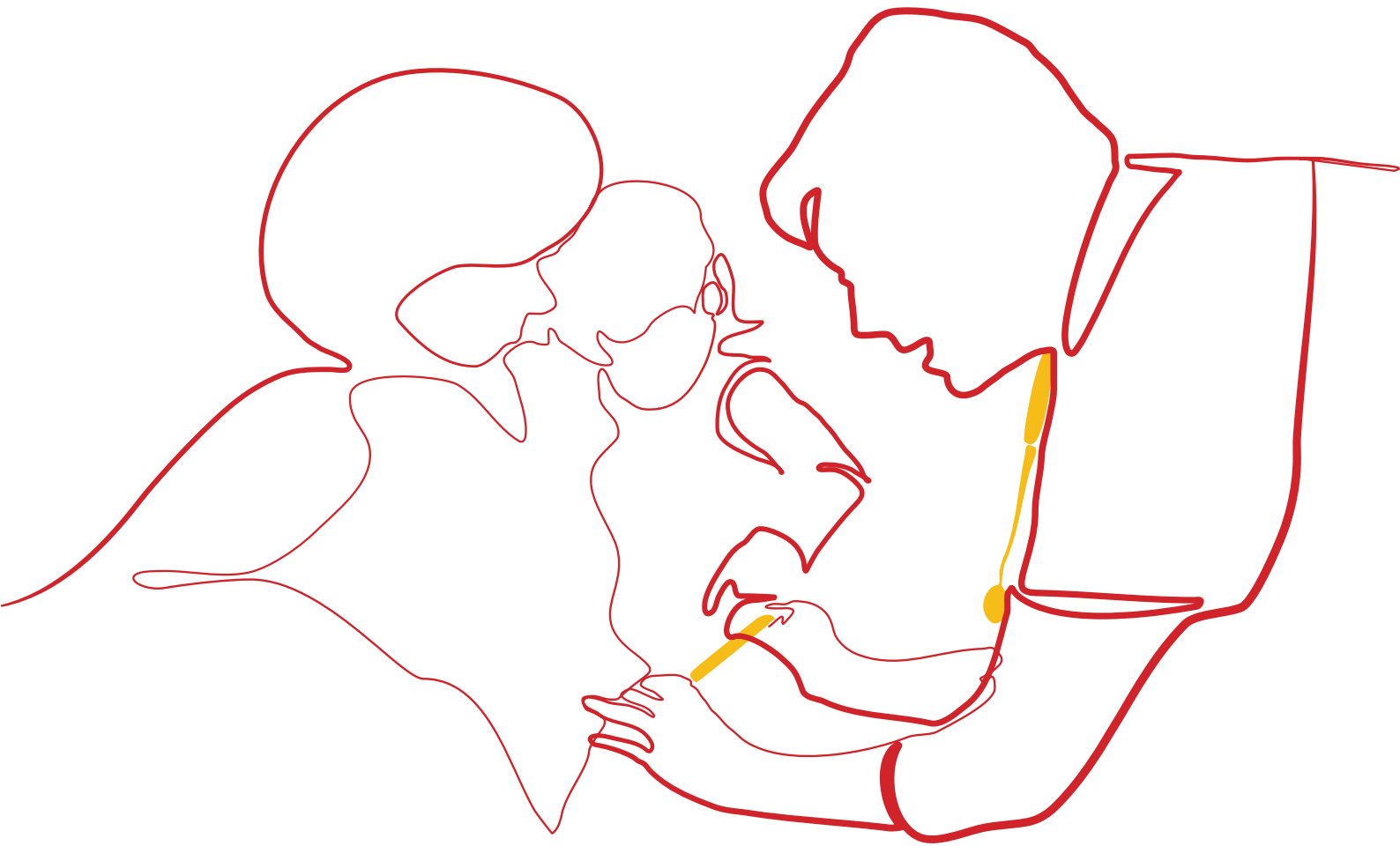
Fig. 9. Financial protection and UHC



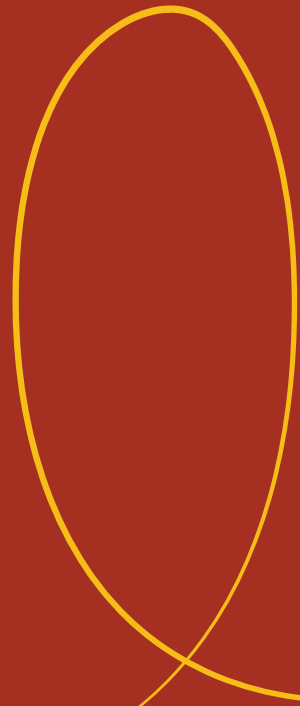
Source: (31).

7. While the policy push for PPPs has usually come from international donors, caution is required in the use of donor funding to embark on PPPs for UHC as this can lead to fragile programmes. International partner involvement may instead be best used for short- and medium-term technical assistance in harnessing the private health sector for UHC (28).
8. Lastly, building government capacity to design, implement and manage contracts, organizational units for PPP, private sector mobilization, including developing a favourable ecosystem, the costing of services and a legal framework for partnerships are other areas that the Government must research if it wishes to seriously undertake and build a PPP/PSE with the private health sector.





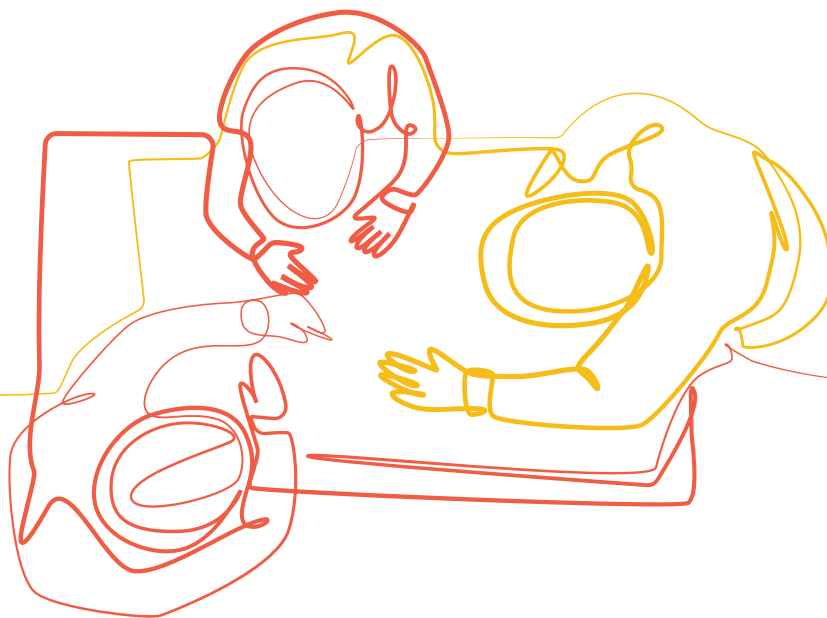
References



References

1. Sixty-fifth Regional Committee for the Eastern Mediterranean, Khartoum, Sudan, 15–18 October 2018: resolution: private sector engagement for advancing universal health coverage. Cairo: WHO Regional Office for the Eastern Mediterranean; 2018 (EM/RC65/R.3; <https://emro.who.int/about-who/rc65/documentation.html>, accessed 30 March 2024).
2. Final results census 2017. Pakistan Bureau of Statistics [website]. Pakistan Bureau of Statistics; 2021 (<https://www.pbs.gov.pk/content/final-results-census-2017>, accessed 7 June 2024).
3. Field listing – sanitation facility access. The World Factbook [website]. Central Intelligence Agency; 2024 (<https://www.cia.gov/the-world-factbook/field/sanitation-facility-access/>, accessed 30 August 2024).
4. Literacy rate, adult total (% of people ages 15 and above) - Pakistan. World Bank Open Data [online database]. Washington, DC: World Bank Group; 2024 (<https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=PK>, accessed 30 August 2024).
5. KCCI Research Department. Pakistan ranks 152nd in UN's Human Development Index [news release]. Karachi Chamber of Commerce & Industry; 11 December 2019 (<https://www.kcci.com.pk/research/pakistan-ranks-152nd-in-uns-human-development-index/>, accessed 30 August 2024).
6. Human development indices and indicators: statistical update 2018. New York: United Nations Development Programme; 2018 (<https://hdr.undp.org/content/statistical-update-2018>, accessed 7 June 2024).
7. Pakistan demographic and health survey 2017–18. Islamabad, Pakistan, and Rockville, United States: Pakistan, National Institute of Population Studies and ICF; 2019 (<https://dhsprogram.com/publications/publication-FR354-DHS-Final-Reports.cfm>, accessed 7 June 2024).
8. Khaliq F, Ahmad W. State of health sector in Pakistan. Karachi: State Bank of Pakistan; 2018 (SBP Staff Notes 01/18; [https://www.sbp.org.pk/publications/staff-notes/State-of-Health-Sector-in-Pakistan-\(06-04-2018\).pdf](https://www.sbp.org.pk/publications/staff-notes/State-of-Health-Sector-in-Pakistan-(06-04-2018).pdf), accessed 7 June 2024).
9. Global Health Observatory data repository: adult mortality – data by country. World Health Organization [website]. World Health Organization; 2018 (<https://apps.who.int/gho/data/view.main.1360>, accessed 30 August 2024).
10. Poliomyelitis (polio). World Health Organization [website]. World Health Organization; 2024 (<https://www.who.int/health-topics/poliomyelitis>, accessed 30 August 2024).
11. Pakistan: communicable disease surveillance and response. World Health Organization Eastern Mediterranean Region [website]. WHO Regional Office for the Eastern Mediterranean; 2024 (<http://www.emro.who.int/pak/programmes/communicable-disease-a-surveillance-response.html>, accessed 30 August 2024).
12. Noncommunicable diseases country profiles 2014. Geneva: World Health Organization; 2014 (https://iris.who.int/bitstream/handle/10665/128038/9789241507509_eng.pdf, accessed 7 June 2024).
13. Health facility assessment – Pakistan national report. Technical Resource Facility; 2012 (<https://web.archive.org/web/20150627054902/http://www.trfpakistan.org/LinkClick.aspx?fileticket=cGyiwxr1xkA%3D&-tabid=2618>, accessed 30 August 2024).
14. Pakistan Bureau of Statistics. National health accounts Pakistan 2015–16. Islamabad: Government of Pakistan; 2018 (https://www.pbs.gov.pk/sites/default/files/national_accounts/national_health_accounts/NHA_Pakistan_2015-16.pdf, accessed 30 August 2024).
15. Khyber Pakhtunkhwa Health Systems Strengthening Program: program soundness assessment. Asian Development Bank; 2022 (<https://www.adb.org/sites/default/files/linked-documents/54297-001-ld-01.pdf>, accessed 30 August 2024).
16. Pakistan social and living standards measurement survey 2014–2015. Islamabad: Pakistan Bureau of Statistics; 2016 (<https://ghdx.healthdata.org/record/pakistan-social-and-living-standards-measurement-survey-2014-2015>, accessed 17 June 2024).
17. IFC Advisory Service in the Middle East and North Africa. Health and social work – private sector hospitals. Washington, DC: International Finance Corporation; 2011 (<https://www.sbp.org.pk/departments/ihfd/Sub-Segment%20Booklets/Health%20and%20Social%20Work-Private%20Sector%20Hospitals.pdf>, accessed 30 August 2024).
18. Private medical colleges. Pakistan Medical and Dental Council [website]. Pakistan Medical and Dental Council; 2018 (<https://pmdc.pk/Colleges/PrivateMedicalColleges>, accessed 31 December 2018).
19. Analysis of the private health sector in countries of the Eastern Mediterranean: exploring unfamiliar territory. Cairo: WHO Regional Office for the Eastern Mediterranean; 2014 (<https://iris.who.int/handle/10665/326803>, accessed 24 October 2024).
20. Zaidi S, Narejo S, Akhund G, Rehman F, Idrees N, Sancho J. Situation analysis for post devolution health sector strategy of Sindh Province; 2011 (https://www.researchgate.net/publication/299391057_Situation_Analysis_for_Post_Devolution_Health_Sector_Strategy_of_Sindh_Province, accessed 24 October 2024).
21. National health accounts Pakistan 2007–08. Islamabad: Pakistan Bureau of Statistics; 2012 (https://www.pbs.gov.pk/sites/default/files/national_accounts/national_health_accounts/National_Health_Account_2007-08.pdf, accessed 24 October 2024).
22. Density of physicians (per 10 000 population). World Health Organization Data [online database]. Geneva: World Health Organization; 2024 (<https://data.who.int/indicators/i/CCCEBB2/217795A>, accessed 30 August 2024).
23. Density of nursing and midwifery personnel (per 10 000 population). World Health Organization Data [online database]. World Health Organization; 2024 (<https://data.who.int/indicators/i/B54EB15/5C8435F>, accessed 30 August 2024).
24. Pakistan: human resources for health vision 2018–30. Pakistan,

-
- Ministry of National Health Services, Regulations & Coordination; 2018 (<https://nhsrsc.gov.pk/SitelImage/Misc/files/HRH%20Vision%202018-30%20Final.pdf>, accessed 19 June 2024).
25. National accounts tables base 2015–16. Pakistan Bureau of Statistics [website]. Pakistan Bureau of Statistics; 2023 (<https://www.pbs.gov.pk/national-accounts-tables>, accessed 7 June 2024).
26. Pakistan, Planning Commission. Medium term development framework, 2005–10. Islamabad: Government of Pakistan; 2005.
27. Martinez J, Pearson M, England R, Donoghue M, Lucas H, Khan MS, et al. Third-party evaluation of the PPHI in Pakistan. Islamabad: DFID-HLSP, Technical Resource Facility and SOSEC; 2010.
28. Zaidi S, Riaz A, Thaver A, Mukhi A, Khan L. Role and contribution of private sector in moving towards universal health coverage in the Eastern Mediterranean Region. Department of Community Health Sciences, Aga Khan University; 2012 (https://ecommons.aku.edu/pakistan_fhs_mc_chs_chs/193, accessed 17 June 2024).
29. Post devolution operational plan to implement phase 1 (2014–2017) of the health sector strategy Sindh. Department of Health, Government of Sindh; 2014.
30. Hsiao WC, Shaw RP. Social health insurance for developing nations. Washington, DC: International Bank for Reconstruction and Development / World Bank; 2007 (https://www.hsph.harvard.edu/wp-content/uploads/sites/100/2012/09/hsiao_and_shaw_2007_-_shi_for_developing_nations.pdf, accessed 18 June 2024).
31. Universal health coverage. World Health Organization Eastern Mediterranean Region [website]. WHO Regional Office for the Eastern Mediterranean; 2024 (<http://www.emro.who.int/health-topics/uhc/introduction.html>, accessed 2 September 2024).
32. Drake JK, Espinoza H, Suraratdecha C, Lacayo Y, Keith BM, Vail JG. Stakeholder perceptions of a total market approach to family planning in Nicaragua. *Rev Panam Salud Publica*. 2011;29(5):329–36 (<https://iris.paho.org/handle/10665.2/9532>, accessed 3 September 2024).







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