



PRIMARY CARE SYSTEMS PROFILES & PERFORMANCE (PRIMASYS)

Pakistan Case Study

Overview

Pakistan is a lower middle-income country and the sixth most populous country with an estimated of 184.35 million.¹ Health gains are mainly influenced by the larger socioeconomic context. 61.4% of the population lives in rural areas, 21% of the population lives below the poverty line,² female primary school enrolment is 52.5%, and access to safe drinking-water is limited to 28% of the population.³

Pakistan key health indicators have seen only slow progress over the years. The infant mortality rate (IMR) is 74 per 1000 live births, and the maternal mortality ratio (MMR) is 274 per 100,000 live births, which is higher than that of neighbouring countries. Communicable diseases, maternal health and under-nutrition comprise around half of the national burden of disease. Pakistan is one of the two remaining countries where Polio is still endemic. Pakistan has the 7th highest tuberculosis (TB) burden globally, with hepatitis B and C endemic in the general population and malaria in focal geographical areas. Service coverage of primary care services is sub-optimal: 36% of mothers undergo the recommended 4+ antenatal care (ANC) visits during pregnancy; the contraceptive prevalence rate is 26% and only 54% of children are currently fully immunized.

Noncommunicable diseases now constitute a significant disease burden among the adult and economically productive age groups. Pakistan is among the top 10 countries in the world for diabetes prevalence, one in four adults over 18 years of age is hypertensive, and 41% of adult males are smokers. As a result, one quarter of the population over 40 years are estimated to suffer from cardiovascular diseases.

Pakistan spends only 2.8% of its gross domestic product (GDP) on Health. Of the total health spending, 36.8% is spent by the government and households contribute 55%. The remainder is contributed by local nongovernmental organization spending (6%), social security (3%), and donor contribution (2%).⁴

Disparities in service coverage are visible across income quintiles, with the lowest income quintile spending an estimated 6.6% of household income on health, as compared to 1.3% by the highest income quintile. Despite such a regressive burden of spending, the poorest income quintile nevertheless has a 50–60% lower coverage of ANC services compared to the highest income quintile. Similarly, inequities in access are present across geographical areas, with disadvantaged districts poorly covered for essential primary services compared to better resourced districts.

1 Population, reproductive health and family planning. Islamabad: National Institute of Population Studies; 2016. Available at: <http://www.nips.org.pk/>

2 Pakistan demographic and health survey 2012–13. National Institute of Population Studies and ICF International Calverton, Maryland, United States. Islamabad: National Institute of Population Studies; 2013. Available at: http://www.nips.org.pk/abstract_files/PDHS%20Final%20Report%20as%20of%20Jan%2022-2014.pdf

3 Pakistan social and living standards measurement survey 2013–14. Islamabad: Pakistan Bureau of Statistics, Government of Pakistan; 2014. Available at: <http://www.pbs.gov.pk/content/pakistan-social-and-living-standards-measurement-survey-pslm-2013-14-national-provincial>

4 Beliger M et al. Pakistan: Health equity and financial protection report. Washington, DC: World Bank Group; 2012. Available at: <http://documents.worldbank.org/curated/en/754461468064430920/Pakistan-Health-equity-and-financial-protection-report>

Financing

Table 1 Health spending and utilization

Indicator	Results	Sources of information
Total health expenditure (THE) as proportion of GDP	2.8%	Pakistan National Health Accounts 2011–12
Government health expenditure (proportion of GDP)	1%	Pakistan National Health Accounts 2011–12
Public expenditure on health (proportion of THE)	36.8%	Pakistan National Health Accounts 2011–12
Out-of-pocket payments (proportion of THE)	54.9%	Pakistan National Health Accounts 2011–12
Voluntary health insurance (proportion of THE)	0.2%	Health equity and financial protection: Pakistan (World Bank 2012) ⁵
Proportion of households experiencing catastrophic health expenditure	5%	HIES 2010–11 ⁵
Proportion of population consulting specific sectors for general health consultations:		
• Private sector	71%	PSLM 2008–9 ⁶
• Public sector	21%	PSLM 2008–9
• Homeopathy/'Hakeems'	4%	PSLM 2008–9

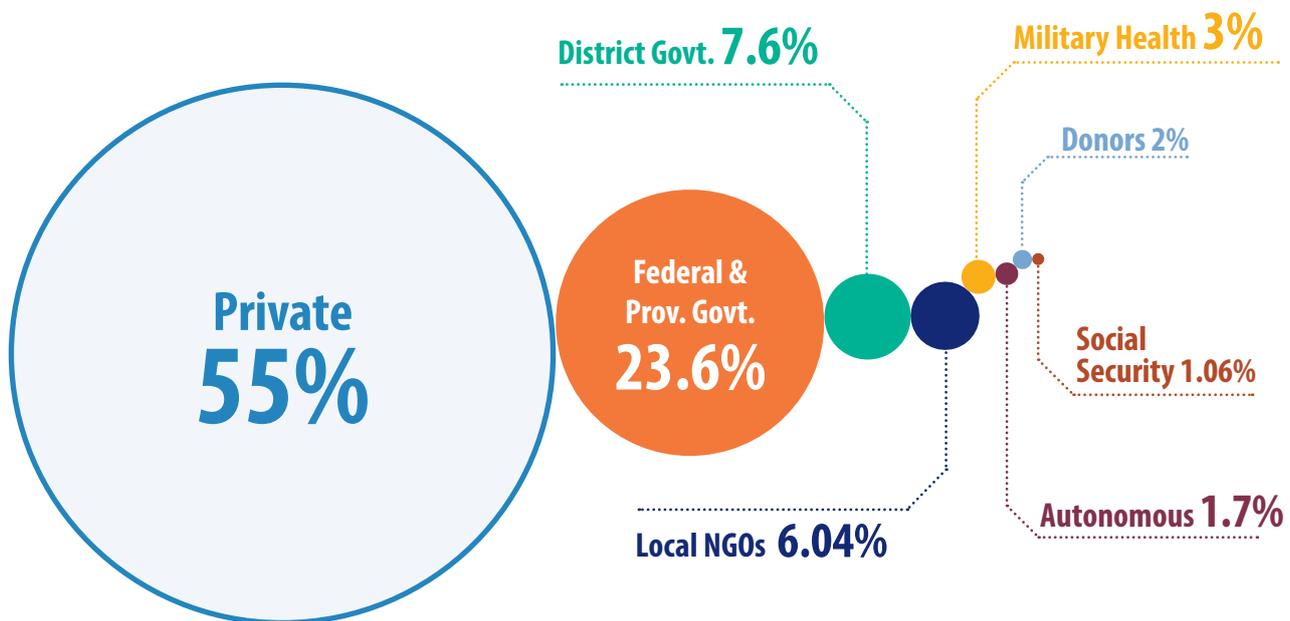
The health financing matrix involves a tax-funded public sector system providing free health care through government health facilities and a private for-profit sector financed mainly through out-of-pocket payments by households. Local nongovernmental organizations have emerged as an expanding 'third sector' funded by philanthropic contributions and the Islamic Zakat (charity tax) from citizens and private companies. The insurance sub-sector is small and mainly confined to social security for government sector employees. Voluntary health insurance comprises only 0.2% of national health expenditure.

Households mainly spend on medicines (67%) at both private and public sector facilities, followed by consultation (23%) mainly in the private sector and transportation to health facilities (10%), which can be formidable in disadvantaged areas.

Since decentralization of the health system, the proportion of government health spending has risen in all provinces, and is accompanied by higher policy ownership for health. However, allocations are still inadequate to meet the country's essential health needs and there is lack of strategic harnessing of other government sources and nongovernmental revenues. Spending efficiency also needs to be improved, as there are overlaps in services between government and private sector, as well as high government spending on infrastructure and specialist schemes as compared to preventive and primary care.

⁵ Household integrated economic survey 2010–11. Islamabad: Pakistan Bureau of Statistics, Government of Pakistan; 2012.

⁶ Pakistan social and living standards measurement survey 2008–9. Islamabad: Pakistan Bureau of Statistics, Government of Pakistan; 2009. Available at: http://www.pbs.gov.pk/sites/default/files/social_statistics/publications/pslm2008_09/report_pslm08_09.pdf

Figure 1 Health expenditures by financing agents

Source: Pakistan national health accounts 2011–12. Islamabad: Pakistan Bureau of Statistics, Government of Pakistan; 2013. Available at: http://www.pbs.gov.pk/sites/default/files/national_accounts/national%20health%20accounts/NHA_Report_2011-12.pdf

Service delivery

The Pakistan Government both directly provides and finances services through a large network of primary care facilities and referral hospitals, and remains the largest institutional provider of health services. Even though government sector general consultation is only estimated to be 21%, it is the main provider of public goods services such as immunization and contraception. Staff absenteeism and long distances to health facilities limit access to health facilities in many of the rural areas. The government also has one of the largest paid community health worker programmes globally, known as the Lady Health Worker (LHW) Programme. LHWs cover less than 50% of the population, the coverage has not expanded significantly over the past few decades, with more disadvantaged areas uncovered by core health workers. Eleven vertical programmes provide technical and financial support for preventive care activities through government health facilities and health workers.

The private sector comprises 35% of all physicians and 17% of hospital beds in the country. Primary health care is mostly provided by general practitioners with individual practices, maternity homes, polyclinics and laboratories. Within the private sector it is private medical sector that is the most popular source for general consultation (71%), while alternative medicine such as homeopathy and 'hikmath' is utilized by only 4% of the population. The private sector includes those holding dual jobs in the government sector as well as unlicensed 'quack' providers. The actual private sector when adjusted to licensed providers who are not in government service is smaller and mainly confined to urban areas. Key challenges include non-standardized care, irrational medicine usage and missed opportunities for providing preventive care.

Human resources

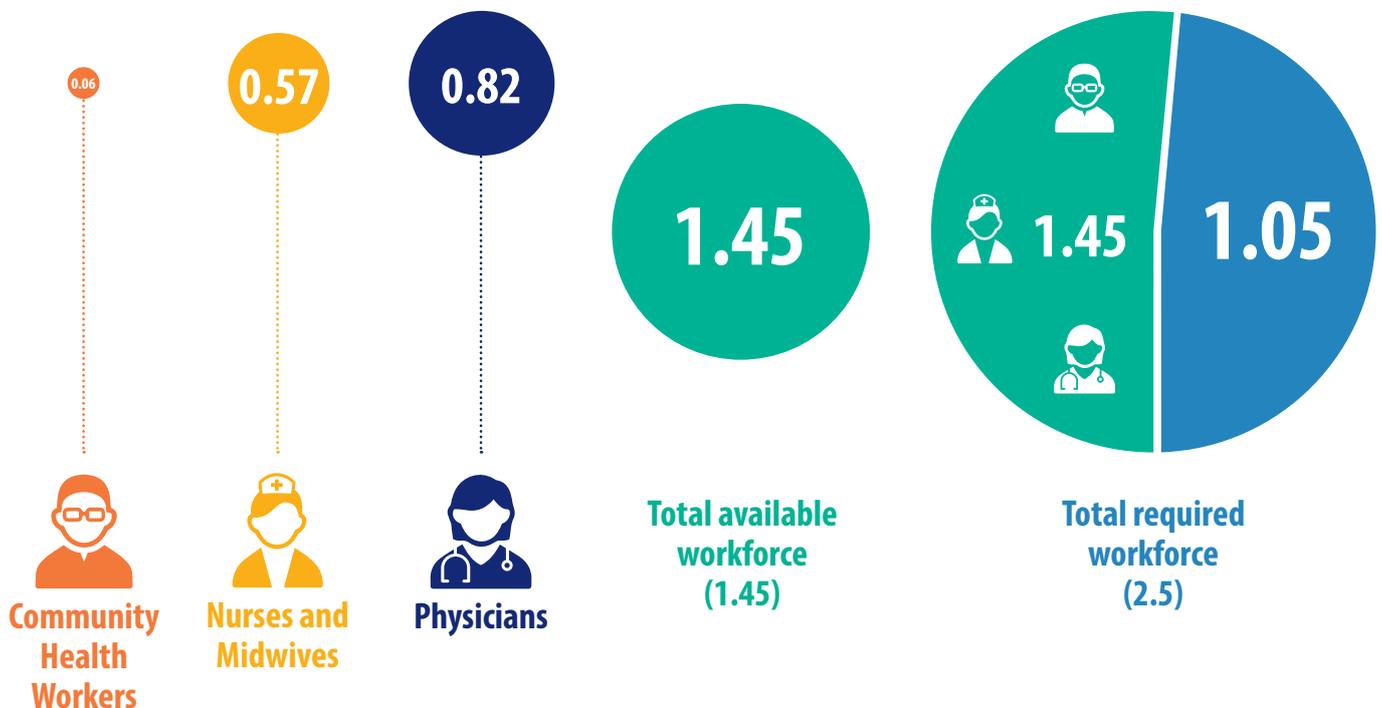
Pakistan has an estimated 0.82 physicians, 0.57 nurses and midwives, and 0.06 community health workers per 1000 population (Figure 2). There continues to be an inverse ratio of doctors to nurses, with fewer nurses produced than doctors, as a result of high out-migration of the former. There is also shortage of allied health professionals with 0.9 pharmacists/10 000 population, which is far below the WHO recommended ratio of 1 pharmacist per 2000 population. Policy emphasis continues to focus on the expansion of medical colleges and the number has grown exponentially with 2 in 1947 to 88 in 2012.⁷ Pakistan is also producing certified family physicians, although these are mostly destined for private

practice in urban areas because the government has not yet established a cadre to absorb family physicians in the public sector infrastructure.

There are also notable urban–rural discrepancies in human resources, particularly for doctors. An estimated 14.5 physicians per 10 000 population in urban areas is contrasted with 3.6 per 10 000 population in rural areas. There is a smaller but nevertheless significant discrepancy in distribution of nurses and midwives, with a higher urban concentration of 7.6 midwives compared to 2.9 per 10 000 population in rural areas (see Figure 3).

Figure 2 Human resources for health in Pakistan

Per 1000 Population



Source: World development indicators: Health systems. Washington DC: World Bank Group: 2008–2014. Available at: <http://wdi.worldbank.org/table/2.15>

⁷ Ghaffar A et al (2013). Medical education and research in Pakistan. *The Lancet*, 381: 2193, p 2234–2236.

Figure 3 Urban–rural distribution of human resources for health in Pakistan

Density in 10,000 population



Physicians



Nurses and midwives



Source: World Health Organization

Pakistan has a sizeable number of front-line health staff for primary care in rural areas. These include village-based 'Lady Health Workers' (LHW) who act as a first point of contact for primary health care, community midwives introduced using a private practice model to gradually replace traditional birth attendants, and vaccinators to provide immunizations and related outreach. However, weak performance accountability and technical supervision has reduced front-line health worker performance, and the most disadvantaged areas remain almost completely uncovered by front-line health workers.

Policy and planning

Pakistan is a federation with three levels of government: federal, provincial and district. In its 68 year history, the country has only come up with three national health policies (i.e. in 1990, 1997 and 2001) and even within these, the primary care targets were ambitious and not translated into operational planning. The PHC sector has lacked a strategic policy direction and related planning has usually followed a project-based mode, shaped by the priorities of various government- or donor-funded strategies.

Key PHC policy initiatives have included investments focused in specific preventive care areas such as those tackling the priorities outlined in Table 2. Several of these have not been brought onto the recurrent budgets of the Government, compromising their sustainability.

Table 2 Policy initiatives for primary care

Year	Initiative
1961	Rural Health Centres Scheme
1976	School Health Services Programme
1982	Expanded Programme of Immunization
1990	Social Action Programme (primary care targets)
1993	Family Health Project (management and capacity building)
1994	Lady Health Workers Programme
1998	Roll Back Malaria Partnership
2000	Tuberculosis Treatment Programme
2003	Enhanced HIV Programme
2005	Peoples Primary Health Care Initiative (contracting out basic health units)
2008	Community Midwifery Programme
2014	Nutrition Programme

In a major political reform of 2011 major responsibilities for health and other social sector areas such as education, food, water etc. have been devolved to the Provincial Ministries along with the increased fiscal space to support development and delivery of context-specific solutions. Following this period of decentralization, health sector strategies and implementation plans have been developed by all provinces with a significant focus on PHC. Although local ownership of health has increased, and planning with targets is in place, it is yet to be seen whether these are effectively implemented.

Governance and reforms

The major post-devolution responsibility for governance rests with respective provinces and includes health sector policy, legislation, programming, implementation, budgeting and monitoring. The Federal Health Ministry is now overall responsible for several areas: International agreements and trade; regulation of drugs, technology and human workforce; research; and inter-provincial coordination on planning, information and surveillance. There have been recent governance innovations to improve the working of the primary care sub-sector. However, capacity in provincial ministries is uneven, particularly in relation to executing governance reforms, and is further constrained by frequent turnover of senior leadership.

Contracting out of government health facilities: An extensive contracting initiative is in place in Pakistan called the 'Peoples Primary Healthcare Initiative', whereby the management of several basic health units has been outsourced to a semi-government entity in order to improve the functionality of corresponding primary care facilities. Initial results are mixed with increase in outpatient volume but only smaller gains in preventive health care targets. In the post-decentralization period, contracting has been extended to government secondary hospitals in most provinces. However, government capacity to manage contracting has been weak and there has been no initiative, as yet, to contract services from the private sector in order to expand coverage.

Service integration: The presence of multiple vertical preventive programmes and their duplicated, siloed working approach has been a long-term challenge for PHC management. Since decentralization, two provinces have moved to single management and reporting systems through integration of vertical programmes, and are moving these changes through the implementation stages. Another governance initiative has been the development of 'essential packages of health services' and adoption of minimum service delivery standards across primary health care networks. Even though these approaches are well articulated in planning documents, however, both initiatives have faced significant execution delays due to territorial disputes among mid-level managers.

Services regulation: Health Regulatory Commissions have been established in two provinces to regulate health services across the public and private sector. The work is mainly centred on licensing of government health facilities and is yet to upscale to private sector regulation, which is anticipated to be a far more complex task.

HR management: The long-term inadequate staffing capacity in rural frontline health facilities is largely due to the underlying factors of frequent absenteeism, political patronage and rigid adherence to seniority rather than performance-oriented career development pathways. One province has recently initiated a system of salary top-ups based on remote postings and performance. Another province has begun implementing real-time monitoring of staff attendance, and has introduced the use of a balanced scorecard approach. However, a coherent human resource strategy that provides strategic direction for staff deployment, retention, performance enhancement and capacity building is seriously lacking.

Way forward

Pakistan's movement towards the Sustainable Development Goals requires specific actions to achieve equitable access, quality and efficiency of primary health care. Key elements are:

- Stewardship of the primary health sub-sector bringing together both public and private providers for essential health services delivery, reducing overlaps and standardizing for minimal quality of care.
- Progressive increases in the financing of PHC, involving both greater proportionate share from existing government spending on health, as well as harnessing private corporate sector, employers and household payments.
- Striving for equity to fill gaps in PHC service provision – in rural contexts this means expansion in community-based health workers as well as innovations to revitalize the large government system. In urban settings, this calls for contracting from the growing private sector to boost the currently inadequate PHC system.
- Developing and nurturing human resources for the PHC sub-sector, especially frontline health workers, and reducing private operation *within* the public sector.
- Stronger PHC governance through integration of preventive programme delivery that is currently located in entrenched siloes. This will also require exploiting of synergies with other sectors, such as population control, nutrition, communicable diseases, and noncommunicable diseases.
- Strengthen monitoring and evaluation through better health information systems, including integrated disease surveillance and response.
- Up-scaling visibility of the PHC sector in terms of planning, regulation, governance and purchasing, supported by essential decision-making structures, budgets and adequate leadership capacity.

Research needs

A wealth of research has been undertaken on PHC outcomes in Pakistan, but much less on policies and systems for a better functioning PHC system. Importantly, a number of health reforms have recently started in Pakistan in the post-decentralization period. Health systems research is needed to explore two primary areas: i) Implications of reforms for PHC access, quality, equity and efficiency; ii) the impact of supportive and detrimental factors on PHC, such as institutional decision space, technical capacity, and political support.

This case study was developed by the Alliance for Health Policy and Systems Research (AHPSR) in collaboration with the Bill & Melinda Gates Foundation, as part of the Primary Care Systems Profiles and Performance (PRIMASYS) initiative. PRIMASYS supports the development of case studies of primary health care (PHC) systems in low- and middle-income countries (LMICs) in order to bridge the knowledge gap on PHC systems at national and sub-national levels. Using findings from a combination of key informant interviews and focus group discussions with key stakeholders, as well as quantitative data available nationally, PRIMASYS provides insights to support PHC system strengthening and improve implementation, effectiveness and efficiency of health programmes in LMICs.

Assoc Prof Shehla Zaidi
Department of Community Health
Sciences & Women and Child Health
Division Aga Khan University, Pakistan

Dr Nasir Idrees
Department of Community Health
Sciences, Aga Khan University, Pakistan

Mr Atif Riaz
Department of Pediatrics and Child Health,
Aga Khan University, Pakistan

Ministry of National Health Services,
Regulations and Coordination, Pakistan

Health Department
Government of Khyber Pakhtunkhwa

Health Department
Government of Punjab

Health Department
Government of Balochistan

Health Department
Government of Sindh



**World Health
Organization**



**Alliance for
Health Policy and
Systems Research**

**BILL & MELINDA
GATES foundation**

The Alliance for Health Policy and Systems Research

20 avenue Appia,
1211 Geneva, Switzerland
Tel.: +41 22 791 2973
Fax: +41 22 791 4817
E-mail: alliancehpsr@who.int