

Reimagining the Future of Global Health Initiatives

Country Case Study Summary

Pakistan

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Acronyms and Abbreviations

CSO	Civil Society Organisation
CMU	Common Management Unit
DEOC	District Emergency Operations Center
DLI	Disbursement Linked Indicators
DOTS	Directly Observed Treatment, Short-course
EMR	Eastern Mediterranean Region
EOC	Emergency Operations Centre
EPI	Expanded Programme on Immunisation
Gavi	Gavi, the Global Vaccine Alliance
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GHI	Global Health Initiative
HIV	Human Immunodeficiency Virus
HSS	Health Systems Strengthening
IPV	Inactivated Polio Vaccine
LHW	Lady Health Worker
NEOC	National Emergency Operations Center
NGO	Non-Governmental Organisation
NHSP	National Health Service Program
NICC	National Immunization Coordinating Committee
NTF	National Task Force for Polio Eradication
NTP	National TB Control Program
OOP	Out-of-pocket Payments
PCV	Pneumococcal Conjugate Vaccine
PEA	Political Economy Analysis
PEOC	Provincial Emergency Operations Center
PHC	Primary Health Care
SEARO	South East Asia Region
SDG	Sustainable Development Goals
TA	Technical assistance
TB	Tuberculosis
TCV	Typhoid Conjugate Vaccine
UHC	Universal Health Coverage

1. Introduction

Pakistan is a major recipient of GHI funding and is an important case study to help illustrate and better understand the challenges facing recipient countries and how to improve the efficiency, effectiveness, and equity of the Global Health Initiatives (GHI) ecosystem.

The Pakistan case study, through the participation of actors involved with the GHIs, answers the following questions: What is a vision of success for the GHI ecosystem? What changes are needed to achieve this vision over the next 15-20 years? How can these changes be delivered?

2. Methods

The research is framed by a Political Economy Analysis (PEA) of the GHI ecosystem within the country. The Pakistan country case study consists of a document review, interviews with key informants, and regional consultations (Eastern Mediterranean Region, EMR, and South-East Asia Region, SEAR) to ascertain preferences for changes to the GHI ecosystems, determine areas of convergence with the country study, and help triangulate and synthesise findings. Multiple sources of data were reviewed including country disease data sources, health financing data, programmatic review reports where available, published literature and online website content of GHIs. Nineteen country stakeholders were interviewed using a standardised topic guide (Table 1).

Interview data was coded according to the five main themes: (i) governance architecture; (ii) alignment; (iii) what change is needed; (iv) past attempts at change; and (v) how change can be managed. These were further coded into context, actors (power/interests/interactions), framing, and process (ease/difficulty). Ethics approval was obtained from the Aga Khan University Ethics Review Committee-Social Sciences, Humanities and Arts (057-ERC-SSHA-2023). Informed consent was obtained from respondents while ensuring data privacy and confidentiality. Data identifiers were removed to anonymize the data and to protect respondent identities.

Table 1 Pakistan: Key informant interviews

Type of Respondent	Total	Gender
Planning & Development	1	Male
Health Ministry & Provincial Health Departments	4	2 female, 2 male
Federal & Provincial Disease Programs (Immunization, Malaria, TB)	5	Male
Non-Governmental Organisations (NGOs)/Civil Society Organisations (CSOs)	2	Male
Experts	2	Male
Multilaterals/Bilaterals	4	1 female, 3 male
TA agency	1	Female

3. The Pakistan context: planning, governance and health systems

Demographic and epidemiological profile

Pakistan is a country of 231 million people, making it the fifth most populous country in the world. Average life expectancy at birth has increased from 62 in 2000 to 66 years in 2021 but is lower than Bangladesh (72 years) and India (70.2 years) (1). Similarly, the fertility rate has gradually declined from 6.8 births in 1960 to 3.6 births in 2020 but remains relatively high compared to many other countries, including Bangladesh (2.0) and India (2.1) (1). Other demographic and epidemiological indicators of disease burdens and maternal health are listed in table 2 (2-6).

Table 2 Pakistan: Demographic and Epidemiological Profile

Indicator	Value
Human Capital Index	0.41
Total TB incidence (per 100,000 people) (2021)	264
Total malaria incidence (2020)	427,000
Estimated persons living with HIV (2022)	210,000
Prevalence of chronic (viremic) HCV, 2020 21	4.3%
Fully Immunized Children	66%
Modern Contraceptive use (15-49 years)	25%
Maternal mortality ratio	154
Infant mortality rate	62

Source: World Bank 2021 <https://databank.worldbank.org/home.aspx> (1); World TB Report (2), Global Malaria Report 2020 (3), WHO HIV Country Profile (4), National Hepatitis Elimination Profile 2022 (5), Pakistan Demographic Health Survey 2017-18 (6)

Policy and governance architecture: roles of federal and provincial levels

Pakistan operates as a federation with three tiers of government, namely the federal, provincial, and district levels. In a significant political development in 2011, the major responsibilities related to 21 sectors including health were transferred to the Provincial departments, accompanied by an increase in financial resources to facilitate the creation and implementation of solutions that are tailored to specific contexts. The provinces are primary responsible for policymaking, legislation, programming, implementation, budgeting, and monitoring (7-8). However, the Federal Health Ministry still retains responsibility for international agreements and trade, drug regulation, technology regulation, human workforce regulation, research, and inter-provincial coordination on planning, information, and surveillance (Figure 1) (8).

Table 3 Federal-provincial distribution of powers

Functions	Federal	Provincial
Health planning	International agreements and targets	Policies, strategies, plans, legislations
Financing	Co-financing preventive vertical programmes (interim arrangement) Insurance regulation	Financing curative+preventive Financing arrangements
Human resource	Licensing HR production	HR planning, deployment, management
Service delivery	Oversight on international agreements	Services menu, programming, implementation
Drug supply	Licensing, registration pricing	Market surveillance, supply systems
Health information system	Research Surveillance	Monitoring & Evaluation Surveillance
Governance	Standard setting	Strategic purchasing, regulation, accountability

Source: Federal Legislative List Parts I and II.

Public Sector Financing Flows

Public sector spending in decentralized Pakistan depends largely on provincial health allocations. A single line budgetary transfer is made to the provinces from the central tax revenue pool and then proportionate allocation to health by provinces passed by provincial legislative assemblies (8). Per capita spending on health by provinces has risen over the years, driven by a sense in increased ownership and responsibility (9). The federal level has a diminished budgetary allocation because of its new constitutional role of stewardship and coordination rather than direct service delivery.

A Mixed Health System

Pakistan has a Universal Health Coverage (UHC) index of 47% coverage of essential health coverage (10) and a mixed health system combining public and private health facilities. However, both public and private systems run in parallel with little stewardship exerted by the public sector to integrate the private sector towards key Sustainable Development Goals (SDGs) and disease priority targets.

The public sector operates the largest institutional network of facilities inclusive of primary care facilities, secondary and tertiary hospitals (11). The public sector is directly funded from tax revenues and provides free of charge services. Primary Health Care (PHC) facilities are mainly located in rural areas but are often poorly functional. Secondary hospitals are located across both rural and urban areas, where tertiary hospitals are located within major urban centers. Public sector hospitals account for most of the inpatient admissions in the country and are the referral point for several facilities. The public sector only accounts for 27% of total general out-patient health consultations, whereas 70% of general consultations take place in the private sector, and 2% of consultations by homeopathy/ other providers (12). Staff absenteeism, drug stock outs and long distances to health facilities affect the uptake of government PHC services (11). The public sector is the main provider of preventive health services such as free routine immunization, TB DOTS, malaria treatment and contraception. The government also has one of the largest paid community health worker programs globally, known as the Lady Health Worker (LHW) Programme, which provides coverage to approximately 45% of the rural population.

On the other hand, Pakistan has one of the most prolific private health sectors in the region accounting for 40% of hospitals beds, 93% of clinics, 60% of laboratories and the majority of blood banks (13). Private neighborhood clinics are also utilized by the poor and a popular source of care.

Governance of disease control

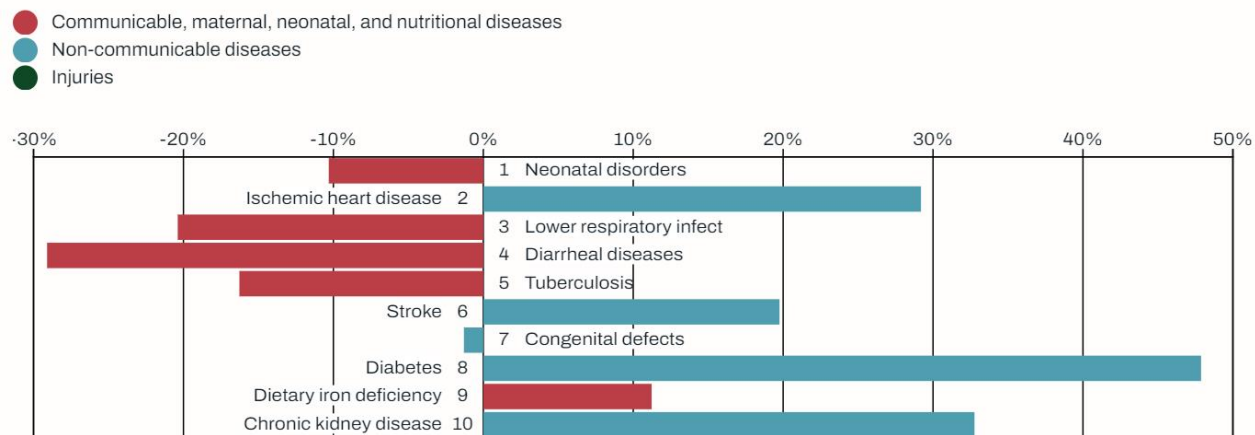
In the 2000s, there were 11 vertical programs in Pakistan creating a siloed approach to PHC delivery and duplicative efforts for reporting, communication, supply chains and outreach programs. These have since been reduced and in 2023 there are eight programmes: Expanded Program of Immunization (EPI), Malaria Control, National TB Control Program (NTP), HIV AIDS Control, Hepatitis B and C control, Nutrition Support Program, Blindness Control and Avian Flu. Each program has a separate cadre of management staff and some programs have dedicated frontline staff such as vaccinators for immunization, malaria supervisors and polio workers, amongst others. Other staff such as PHC level medical officers, paramedics, and community-based LHWs are shared, but many are funded by project and have not transitioned over time to recurrent budgets (8).

4. National burden of disease

Top causes of death and disability

Despite becoming a middle-income country, Pakistan faces unresolved challenges of high maternal and neonatal mortality, high fertility and unmet reproductive health needs. It also has a high burden of communicable disease and polio cases are yet to be fully eradicated. Respiratory tract infections, diarrhea, TB, and birth diseases are among the leading causes of loss of healthy life, as they are in other parts of the developing world. At the same time, Pakistan faces a silent onslaught of diabetes and hypertension, leading to expensive hospitalization and premature adult mortality (14).

Figure 2 Pakistan: Top causes of death and disability combined and percent change, 2009-2019, all ages combined



Source: Institute for Health Metrics and Evaluation. <https://www.healthdata.org/pakistan>

Priority communicable disease

Existing alignments are not in line with this communicable disease burden.

Hepatitis B and C: Pakistan ranks second globally in terms of Hepatitis B and C infections (5). Hepatitis B immunization is now incorporated into Pakistan's routine vaccinations and is delivered free of cost through the EPI with Gavi support. Hepatitis has not been incorporated into GFATM priorities for action.

Tuberculosis: Pakistan has the fifth largest burden of TB globally (15) and there is concern for the spread of multi-drug resistant TB (16) due to high levels of antimicrobial resistance in the country. Although treatment success rate is high, TB case detection has not risen as anticipated. From 62% in 2018, case notifications fell to 55% in 2021 in the aftermath of COVID-19 (17)(3). Unofficial country results indicate some recovery in 2022.

Malaria: Pakistan has a lower burden of malaria compared to hepatitis and TB, being one of the seven high endemic countries in the EMR (18). 78% of annual confirmed cases were reported from flood affected populations in 2022, illustrating how the burden of malaria fluctuates with seasonal events (19).

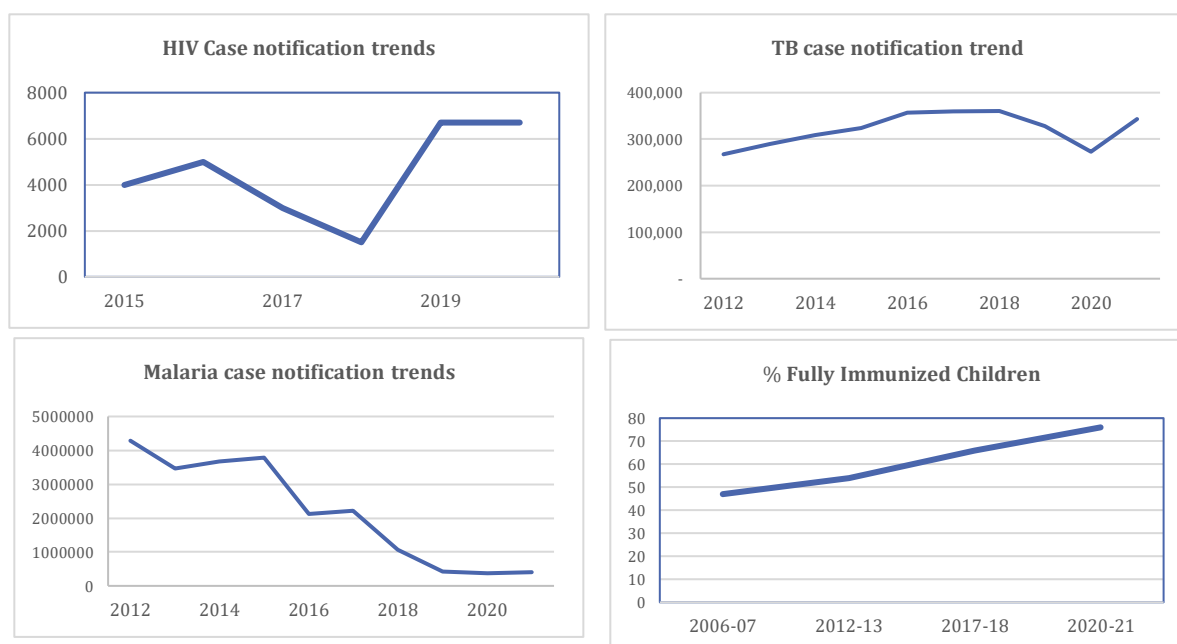
HIV: Pakistan has low levels of HIV prevalence (<0.1%) mainly confined to infections within high-risk groups (20) but there have been recent instances of HIV transmission in the local population spread from the use of injectables. The rising HIV infection rate (a 57% increase between 2010 and 2018) could result in greater prevalence in the general population if not addressed (21). (Table 3).

Routine immunization: Pakistan and Afghanistan are the only two countries worldwide where polio has not been eradicated. Pakistan has been able to decrease polio cases with support of Gavi and other partners. Occasional cases seen in the province of Khyber Pakhtunkhwa, which have the potential to spread to large cities such as Karachi (22, 23). Low vaccination rates are responsible for the emergence of polio cases, and Pakistan struggles with high numbers of missed birth doses of incomplete vaccinations. Routine vaccination has improved, with the proportion of fully immunized children increasing from 54% to 76% over the last decade. However, further support from Gavi and its government counterparts is still required (6, 24) (Figure 3).

Table 3 Pakistan: Financing Indicators for Tuberculosis, HIV/AIDS and Malaria

Indicator	Numbers
Tuberculosis	
GFATM investment for 2021-2023	244.4 million \$ US
DAH spending as % of total health spending (2021)	92%
HIV/AIDS	
GFATM commitments for 2021-2023	69.5 million \$US
DAH spending as % of total health spending (2017)	59.6%
Malaria	
GFATM commitments for 2021-2023	81.9 million \$US
DAH spending as % of total health spending (2017)	45.35%

Source: Source: World TB Report (2), Global Malaria Report 2020 (3), WHO HIV Country Profile (4)

Figure 3 Pakistan: Case Notification Trends of HIV, TB, Malaria, and Immunization Coverage

Source: World TB Report (2), Global Malaria Report 2020 (3), WHO HIV Country Profile (4), National Hepatitis Elimination Profile 2022 (5), Pakistan Demographic Health Survey 2017-18 (6) TPVICS (24)

Maternal-child health, reproductive health, nutrition

Gradual progress is seen in the utilization of institutional delivery and pre-natal care services, but this has not translated into improved outcomes for maternal care. Neonatal, infant and under-5 mortality have seen a very slow reduction over the years (6, 25). Pakistan has struggled to increase the use of modern contraceptive methods despite a high unmet need. The prevalence of malnourished children under five years of age in Pakistan is high and improvement in stunting of children and maternal anemia has not been seen (26-28) (Table 4).

Table 4 Pakistan: Key Maternal and Child Health Indicators

Indicators	PDHS		
	2006-07	2012-13	2017-18
Under 5 mortality	94	89	74
Antenatal checkup (> 3 visits)	61	37	51
Institutional deliveries	34	48	66
Postnatal check up	39	61	62
Modern contraceptive use	22	26	25
Unmet need	94	20	17
Indicators	National Nutrition Surveys		
	2001	2011	2018
Stunting (Children under 5)	37	44	40
Underweight (Children under 5)	38	32	29
Underweight (women of reproductive age (15–49 years))	13	15	15
Anemia in Pregnant women (reproductive age)	na	51	35

5. HEALTH FINANCING TRENDS AND ALIGNMENT WITH BURDEN OF DISEASE

Health financing landscape

Pakistan spends 3.1% of its GDP on health and per capita national spending is one of the lowest in the region, at US\$45 per capita as against WHO's recommended US\$86 per capita (29). The two main sources of health expenditure are: (i) the public sector using tax revenues to fund free healthcare through public sector facilities and recently through private sector hospitals; and (ii) household spending through out-of-pocket (OOP) payments (OOP). OOP accounts for over 50% of total health expenditure. Donor financing has typically been below 2% (9). Priority communicable disease services are jointly resourced by the government and GHIs (Table 5)

Table 5 Pakistan: Distribution of Roles in Priority Communicable Disease Services

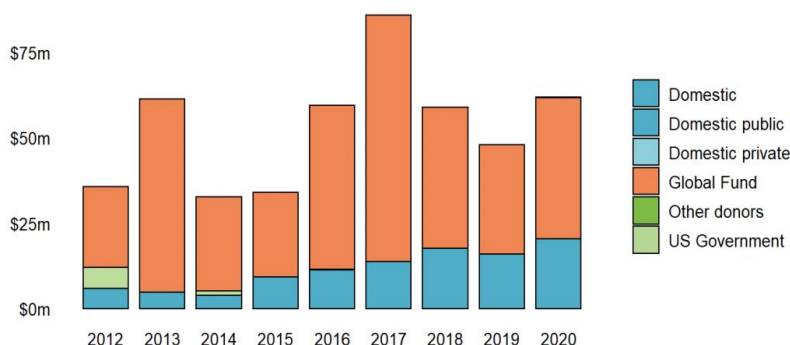
Communicable diseases	Government	GHIs and other actors
Routine immunization	Vaccines co-financing on upward scale Staff for facility & community outreach vaccinations Fuel for outreach visits Supervision, management	Gavi: Vaccine financing UN agencies/NGOs to supplement service provisions, community outreach Advocacy Digital monitoring, evaluations
Tuberculosis	Staff at government clinics for screening, treatment Diagnostic services at government facilities TB DOTS supplies	GFATM: High support Diagnostic capacity building of private/ public laboratories Private provider integrations for TB DOTS via intermediary NGOs Health information systems, warehousing support, Awareness
Malaria	Antimalarial drugs Staff at public sector facilities Diagnostic services Information system	GFATM: small scale support Bed nets support, antimalarials Communication, awareness Surveillance/information systems Warehousing support
HIV	HIV diagnostic screening of blood products Regulation of public & private sector blood banks, SoPs Monitoring systems	GFATM: small scale support HIV Preventive activities in high-risk groups through NGOs Reporting, monitoring Awareness

6. Stakeholder role and contribution

6.1 TB, Malaria and HIV

GFATM support: From 2003 to 2020, the Global Fund invested US\$697 million in Pakistan with a focus mainly on TB. In the current grant cycle (2021-23), the total investments for TB, HIV and malaria equal US\$395 million (See table 10) (30). Donor funding represents a significant proportion of all investments in TB in Pakistan and domestic resource mobilization has been weak particularly for supplies, supply chain management, community outreach and monitoring (See figure 4). The government resources program management and service delivery, which constitute an increasing portion of the investment.

Figure 4 TB financing in Pakistan (2012-2020)



Source: The Global Fund, February 2023

GFATM engagement modality: Following devolution in 2011 there has been attempt to adapt implementation arrangements to the devolved structure of the country, but more work needs to be done. Three grants are managed by the federal disease programs with provinces as sub-recipients reporting to the central level. Authority for approval of procurements for on-the-ground delivery remains centralized with the federal level, which does not align with the decentralized service delivery mandate. It also leads to the creation of verticalized projects co-financed with development funds rather than shift to recurrent financing at the provincial level. The remaining four grants are managed by three NGOs as primary recipients and run in parallel to the work of the provincial health departments, which would require significant integration into provincial and federal disease-PHC plans.

Country structures for GFATM financing

The program managers for HIV/AIDS, TB and malaria programs, known as Deputy National Coordinators, are housed in the Global Fund's Common Management Unit (CMU) within the Ministry of Health. The head of this unit, the National Coordinator, unusually reports directly to the Minister of Health. The CMU's attention is focused on specific grants and their management rather than a stewardship role for a national disease control strategy and integration with ongoing PHC and health security initiatives (31). Partners are also part of the CMU structure and provide technical feedback on country grant planning submissions.

6.2 Immunization

Gavi support: From 2001 to 2023, Gavi committed a total of US\$ 1486.6 million in Pakistan. The vaccines like BCG, Oral Poliovirus Vaccine (OPV) and TB are procured through Government of Pakistan funds and the vaccines like Measles Rubella (MR), Pentavalent, Pneumococcal Conjugate Vaccine (PCV), Inactivated Polio Vaccine (IPV), Typhoid Conjugate Vaccine (TCV) and Rotavirus vaccines are procured with country co-financing. Gavi also provides off-budgetary support which is not well consolidated and documented within the country. (See Table 6).

Gavi engagement modality: Gavi's country engagement has adapted to the post devolution governance architecture while bringing coordination across national-provincial levels. Gavi coordinates with the Federal EPI Directorate and the Polio Emergency Operations Centre (EOC) led by the Prime Minister and civil administration at federal level and similarly with provincial EPI programs, provincial EOC and Chief Ministers, as well as the similar district level structures. The Federal EPI is the principal coordination point for planning, country commitments and procurement and oversight platform is the National Immunization Coordination Committee (NICC) bringing all federal, provincial government, partners and experts together. Gavi provides political stewardship for the immunization and polio agenda, data and analytics, vaccine co-financing and off budget support channelled mainly through the UN agencies and smaller assistance through CSOs/NGOs. United Nations (UN) partners engage with both federal and provincial governments providing technical support on immunization campaigns, but also delivery of campaigns, delivery of immunization services and community mobilization substituting for the government role. The larger CSOs/NGOs are directly contracted by Gavi and smaller CSOs are contracted by UN agencies for community mobilization, advocacy and service delivery.

6.3 Maternal-child-adolescent health

Polio emergency coordination: National Emergency Operations Centres (NEOCs) and Provincial Emergency Operations Centres (PEOCs) are headed respectively by senior civil officers. Partner agencies (WHO, UNICEF, BMGF, NSTOP, Rotary International) assist the EOCs at national and provincial levels. District Emergency Operations Centres (DEOCs) are management bodies housed under district commissioners for polio eradication activities. A National Task Force for Polio Eradication (NTF) headed by the Prime Minister with the participation of the Chief Ministers/Chief Secretaries from all provinces provides oversight with similar counterparts in the provinces with health ministers and district commissioners. These bodies review progress made against Polio eradication activities.

Table 6 Pakistan: GHI Investments

GHI	Investment
GFATM	Current investments (2021-2023) <ul style="list-style-type: none"> • Tuberculosis: US\$ 244.4 million • HIV: US\$ 69.5 million • Malaria: US\$ 81.9 million Past Disbursement (2018-2020) <ul style="list-style-type: none"> • Tuberculosis: US\$ 100.3 million • HIV: US\$ 35.2 million • Malaria: US\$ 36.1 million
Gavi	<ul style="list-style-type: none"> • \$1,389,204,613 (Approvals 2001-2023 (US\$)) • \$1,486,597,613 (Commitments 2001-2023 (US\$)) • \$1,316,193,881 (Disbursements 2000-2019 (US\$)) • 85% (% Disbursed as of 2019)
GFF	<ul style="list-style-type: none"> • Recently started with World Bank support: \$82 million in pooled funds
Unitaid	<ul style="list-style-type: none"> • \$4.3M-Completed projects • \$6.8M-Current projects
FIND	<ul style="list-style-type: none"> • <u>FIND and Unitaid invest US\$2 million to support advocacy for COVID-19 test-and-treat approaches in low- and middle-income countries</u> → Shifa Foundation (Pakistan) • <u>Self-testing for Hepatitis C RCT (Karachi)</u>
CEPI	<ul style="list-style-type: none"> • <u>CEPI to provide \$11.7million for COVID-19 vaccines trial in Pakistan (2021).</u> an international consortium comprising of the National Institute of Health in Pakistan, University of Oxford, the International Vaccine Institute, Harvard Medical School and Aga Khan University

7. Local health systems initiatives and disease control efforts

Pakistan has seen instances of local health systems initiatives incorporating disease control. Some reforms have worked better than others and provide important lessons for the future transition of GHI-supported disease control priorities into sustainable, coherent health systems.

Shift to recurrent financing of vertical disease programs

Verticalized disease programs initiated in 1980s and 1990s run as a project-based model supported by government development funds, and have continued beyond the average 4-5 years of project life. This results in weak financial sustainability, as well as interrupted funding due to delays approval and releases (32). After the rapid shrinking of federal fiscal space after devolution, the provincial governments were faced with the responsibility of funding disease control projects (33). A common success story is increasing co-financing from provincial recurrent budgets to vaccine procurement through Gavi, however, at the same time Gavi has been increasing the introduction of new vaccines requiring an increased financial space. The two more resourceful provinces (Punjab, Sindh) have also shifted EPI and other disease programs to partial recurrent financing, whereas lesser-resourced provinces (KP, Baluchistan) rely on more extensively on development projects for funding.

The National Immunization Support Project

Deliverable-based pooled funding support of \$50 million was provided to the federal and provincial EPI programs by the World Bank over 2016 to 2021. There are conflicting versions of success and the internal project assessment report has not been made publicly available by the World Bank. While it addressed some of the challenges such as shifting of vaccinators from Gavi and UN-supported contractual positions to permanent staff positions, the provinces found it difficult to interpret and implement some of the Disbursement Linked Indicators (DLIs). Assessment focus was only on third party verification of coverage, but a process assessment has not been undertaken and would be valuable for feeding into the design and operationalization of the upcoming EHSP.

Vertical disease program integration into PHC service delivery

As a single line budgetary spending was prioritized within post-devolution provincial strategies over 2012-2014 but could not be effectively implemented. Provincial governments receiving UK Foreign, Commonwealth and Development Office (FCDO) technical assistance developed Essential Health Service Packages to integrate vertical programs into a single costed package. Ineffective implementation was due to internal resistance from disease control managers and frequent leadership changes (Sindh, Baluchistan)(34) as well as federal revival of verticalized projects from GHI and other adhoc funding (7)(8).

Integration of private sector for disease control

Attempts to integrate the private sector disease control have been made by two provincial health departments but require greater stewardship support. In Sindh, more recently the EPI program has launched a large-scale urban pilot to integrate private local clinics for free immunization through intermediary providers, with logistics, training provided by EPI and reporting by private provider into Sindh's immunization e-registry (35). GFATM-supported TB programme had included private clinics for TB-DOTs, the engagement is run and resourced by principal recipient NGOs and remains to be fully integrated with the government.

COVID-19 response

Pakistan's successful response has been claimed by local stakeholders as a leadership reform, shifting from fragmented federal-provincial leadership to a collaborative leadership. A key feature was joint planning but use of multiple financing lines available to national level and provincial governments for coordinated implementation. The avoidance of a single pooled fund controlled by federal government helped avoid turfing over resources. Speedy, digitized reporting across all provinces on COVID tests, bed capacities and logistics available helped drive evidence-based quick but coordinated disease containment actions across federal-

provincial levels and across relevant sectors. The collaborative leadership model of COVID-19 has been well received across civil society, government, experts as a laudable model but there have been no attempts to institutionalize the efforts for future pandemics and disease outbreaks.

New initiative with GHI on-budget support

Partner alignment and pooling of on-budget support has been initiated as part of the National Health Service Program (NHSP) led by the World Bank. The World Bank is the largest provider of assistance primarily financed through a loan, followed by GFF support, Gates Foundation and smaller level of contributions from the Gavi and the GFATM. NHSP provides catalytic recurrent financing support to provincial government for implementation of a refreshed costed essential health service package for UHC (32) but primarily comprises of a world bank loan. Gavi and GFATM will shift some of the recurrent activities currently routed through UN partners to the NHSP pool. However, GFATM and Gavi will continue spending major portion of resources through off-budget support. It is unclear what are the priorities for off-budget support of GFATM and Gavi, and the process to be followed for setting these. GFF funding will entirely flow through on-budget support through NHSP. The NHSP only funds independent verification of disease outputs to release the funds, hence FCDO is separately investing in a process evaluation whereas USAID is aligning with coordination for family planning-reproductive health.

8. Effectiveness and challenges within the GHI ecosystem

8.1 Programmatic and health systems

Disease stewardship

Country stakeholders stress the value of political championing necessary to overcome federal-provincial discoordination, frequent change of administrative leaderships and counter government traction towards high-end inpatient care and hospitalizations. Gavi is appreciated for adapting to post-devolution governance architecture and pulling in-country political leadership and higher bureaucracy to address chronically low immunization coverage and Polio outbreaks across federal-provincial levels. GFATM support is considered important to focus attention on TB, Malaria, HIV, supplies and programmatic support. However, the modality of support creates low ownership at sub-national levels. Post devolution, there has been a move to include provincial governments as subrecipients, but programmatic approvals are federally centralized and there is demand for more flexible engagements to pivot provincial health departments and districts to a leadership role.

Cross-programmatic inefficiencies

Stakeholders value GHI resourcing for priority communicable disease, supplies provision, ability to quickly mobilize international supplies during crises such as COVID-19 vaccines, and technical assistance for disease-focused planning, monitoring, and evaluation. There is however a strong perception that often duplicative GHI-supported work creates, for example, parallel disease information systems, warehousing support, testing, communication and community. This produces inefficiencies in terms of managerial positions, programmatic staffing, supply chains, procurement etc as well as competition for already constrained resources engagement, at the same time there are considerable opportunities for convergence. Capacity needs are yet to be effectively institutionalized within the government with a shift in terms of heavy reliance on consultants and temporary staff to core positions. NGO recipients of GFATM funding despite some promising innovations are yet to transition into provincial and district governments planning, requiring further efforts required for coordinated planning with CSOs

Local priorities and solutions

Country stakeholders do not feel sufficiently involved in setting priorities, framing solutions and identifying technical assistance needs within GHI country assistance to Pakistan, with disenfranchisement higher in provinces resulting in low ownership. Global recipes for disease control strategies are usually applied by GHIs to Pakistan rather than local health systems-based solutions, and a hence connect with sub-national contexts is

required. Part of the problem is that GHI staff is based in Geneva away from local realities, there is low government capacity to articulate priorities to GHI and coordinate donor aid, insufficient national planning as well GHI tendency to fund UN agencies and NGOs/ CSOs to deliver in place of weak government systems. Role of commercial private health providers is considered an important and has not featured in immunization strategies of Gavi whereas GFATM support for private provider integration into TB-DoTs by NGOs is yet to be integrated with the government.

Lack of framing within local HSS reforms

Stakeholders perceive that GHIs have not really attempted to integrate disease control priorities within local health systems strengthening (HSS) reforms. Each political government comes up with its own set of health systems strengthening reforms - such as contracting-out for PHC services, health insurance, health service regulation etc - and will continue doing so in the future, however communicable disease programs largely continue as siloed projects de-linked from the reforms. Hence priority diseases do not get the necessary systems support nor continued sustainable financing.

8.2 Financing

Underfunding to disease control

Stakeholders recognize that PHC is generally hugely underfunded in Pakistan with the traction of policymakers towards hospital spending and specialty services. Disease control efforts within the larger ambit of PHC remain under-funded with focus mainly on vaccine co-financing, staff salaries, some level of cold chain support (immunization) drugs and supplies (TB, malaria, HIV) fuel support for outreach visits and supervision, investment in digital data systems, communication, transportation, and storage of supplies are key areas that remain chronically under-funded. GHIs are valuable in providing supplies and support to communicable diseases, which would otherwise be neglected. However, health systems and technical assistance support need to be contextualized and channelled more directly to provincial departments and districts.

Planning and financing disconnect for disease control

Stakeholders emphasize that larger overall health strategies and visions are present but there is little translation in terms of operational planning and budgetary spending. Importantly, for disease control there is an absence of consolidated medium-term planning at both federal and provincial levels. There is no financing strategy available within the government at any level. Hence there is lack of link of planning with budgetary and off-budgetary resources required. Governments, particularly disease managers, perceive GHI and other donor funding as ad hoc opportunities. Government leaders even at higher levels of authority within health departments and the ministry, do not make a connection between GHI supported opportunities and what is budgeted by the government and lack planning to bring these together. Provinces have uneven capacity for planning and financing with the lesser resourced provinces contributing very little to communicable disease control and particularly weak in budgetary planning and monitoring.

Short-lived projects

There is concern that disease control, when resourced from development funds, results in procedural delays and underutilization of funds. This impacts programmatic delivery and blunts target achievement. Initiatives relying on recurrent funding have speedier processes and fewer chances of under. Moreover, funding applications to GFATM are considered to be time intensive, involve grant multiple cycles, considerable time to meet accounting requirements and are limited to certain districts rather than across all districts (e.g., immunization). Federal programmes are perceived to use GHI funding opportunity to exercise authority and micro-manage service delivery, and this creates issues of legitimacy as well as a push towards project-based non-sustainable development funding. According to stakeholder interviewed, a lobby in Islamabad has been blocking any reforms in the past two years, with the objective only to secure funding. Federal government also has legitimate needs for funds for exerting its stewardship role which it is not well resourced and the skill sets for coordination and stewardship has not been effectively built.

8.3 Performance indicators and accountability mechanisms

Target setting

There is a positive perception that data analytics provided by the GHIs help focus decision makers and higher leadership on disease control priorities that would otherwise be neglected due to other priority areas. However, targets are perceived to be unrealistic and overambitious, ignoring local health systems realities, resources available opportunities within existing reforms etc. This is partly because of a power imbalance between GHIs and the government and government's inability to define priorities. As a result, targets are seen as donor-driven rather than based on consideration of local health systems strengthening needs.

Uneven capacity for target priority setting

GHI engagement is usually at the level of disease managers who know the disease context but are not involved with cross-cutting HSS initiatives and are unable to mitigate the HSS challenges to disease control. HSS initiatives and reforms are handled by health secretaries drawn from civil bureaucracy versed in handling administrative reform but with little technical know-how of disease control priorities. This results in uneven capacities for articulating realistic disease targets and priorities to GHIs for country assistance and ensuring cohesion across funding streams. Decision-making also needs to shift upwards from disease managers to higher horizontal leadership of health departments and health ministries to avoid unrealistic priorities, and duplicative and non-sustainable solutions.

Weak capacity for performance accountability

Weak accountability systems are described as a major problem in delivering targets and in turn results. There is less investment by GHIs in skills development required for performance accountability. Data engagement capacity to some extent has been built up with investment in digital data systems, verifications and frequent sharing of information – this is largely due to the high level of accountability and resourcing of Polio. The federal government also requires skill sets for national stewardship coordination, and national monitoring in line with its post devolution role.

Weak aid coordination and Public Finance Management capacity

A key challenge highlighted by all stakeholders is the absence of public finance management (PFM) capacity, tools and staff across the management chain of health departments, the national ministry, the planning commission and counterpart planning & development departments. Government planners do not have a centrally accessible repository of funding support from GHIs and other partners and computerized systems and dedicated staff are lacking. The federal government finds it onerous to hold provinces accountable and similar provinces find it difficult to hold disease programs accountable. This makes it very difficult for motivated planners within the government to provide a direction to GHI support and effectively utilize support.

8.4 Governance, coordination and alignment

Fragmented national leadership

There are shared concerns amongst stakeholders on discoordination between federal and provincial governments driven by a lack of trust over authority which becomes a bottleneck to priority setting and implementation. Provinces fear centralization of the federal level over service delivery planning and capture of resources, which is their post-devolution mandate. The federal level feels a loss of relevance post-devolution and government funding has been reduced in line with the new mandate of stewardship, and looks to GHIs to revert to the centralized flow of funds. GHIs, as in the case of Gavi, have been helpful in stewarding across federal-provincial decision-making lines helping to converge on national immunization and Polio commitments. In the case of GFATM, stringent accountability and grant management requirements tilts the administrative control to federal government with ownership issues at provinces as well as programmatic delays.

Institutional memory

Frequent leadership changes of health secretaries and disease managers at both federal and provincial levels of the government makes planning difficult and undermines the continuity of initiatives. This erosion of institutional memory means that any plan can be overlooked or de-prioritized by new individuals in positions

of authority. The immunization project called NHSP led by the World Bank provided lessons on dealing with DLI based funding, but frequent changeover of leadership leads to poor institutionalization of lesson learnt.

Competing narratives

Stakeholders raise concerns of competing narratives between partners and GHIs, and between government and GHIs, resulting at times in duplication of assistance and at times in terms of divergent priorities. GHIs and their country recipients (UN agencies, NGOs) often compete for influence with the government, leading to disincentives for coordination and convergence. This contributes to the government seeing GHI funding as an ad-hoc opportunity for drawing on funds.

Table 7 provides a synthesis, unpacking stakeholder role, alignment of underlying interest and framing within the existing GHI ecosystem and transition towards change.

Table 7 Summary: Existing Architecture and Transitioning Towards Change

Stakeholder role	Alignment	Underlying Interests	Framing	Contextual challenges
GHIs: high influence, less resources	EXISTING: Competing narratives and off budget support	EXISTING: Competition for influence	EXISTING: Application of globally derived solutions	Local priorities and solutions not incorporated Institutional memory erosion, weak stewardship Plans de-linked with financing strategy Weak country capacity for aid coordination Lack of TA for performance accountability Uneven capacity of disease planners and HSS managers
	TRANSITION: Converged planning with diversified off-budget and catalytic on-budget support	TRANSITION: Shrinking aid pot and leverage higher influence with combined funding	TRANSITION: Disease priorities articulated within local PHC-UHC reforms; aid results rather than aid management	
Government: high authority but fragmented leadership	EXISTING: Multiple dis-coherent duplicative initiatives,	EXISTING: Donor funding an adhoc opportunity	EXISTING: Prioritise homegrown reforms, little integration of disease control	
	TRANSITION: Converged planning, building provincial engagement and implementation accountability	TRANSITION: Leveraging funds for UHC focused initiatives	TRANSITION: Local solutions, within local reforms	
UN agencies/ CSOs/NGOs Low influence, role deviation	EXISTING: Role deviation to service delivery suppliers	EXISTING: Diverging agendas	EXISTING: Disease priorities	
	TRANSITION: Diversified role: TA, accountability, advocacy, accountability	TRANSITION: Role alignment	TRANSITION: Relevance to national plans for disease priorities	

9. Recommendations

In the light of our findings, the following recommendations are made:

Programmatic and health system priorities

Disease targets in PHC for UHC plans will need support by GHIs but with federal and provincial coordination in line with post-devolution governance architecture. Decision-making requires an upwards shift from disease managers to 'horizontal HSS managers' such as health secretaries, with capacity support. Private sector integration can act as a driver for provincial governments to exercise stronger stewardship for disease control within health systems solutions.

Financing

GHIs to gradually transition service delivery support from projects mode with NGOs and federal programs to recurrent financing by provinces. Converged planning is fundamental whereas both off-budget and on-budget support lines can be maintained by GHIs. A key priority must be to build sustainable supply line within the country and initiatives such as new vaccines introduction without country-level prioritization must be avoided. Resourcing of federal government in particular must shift from service delivery design to resourcing for stewardship role such as through data analytics and aid coordination capacities.

Performance indicators and accountability mechanisms

GHIs should gradually shift to results-based financing focusing on results achieved rather than how much aid is disbursed to transfer ownership as well the risk of delivery to government. Any results-based financing initiatives must be contextualised to locally acceptable indicators and solutions requiring provincial, and district-led insights. GHIs should provide a new generation of technical assistance that builds capacity for aid coordination, accountability, and stewardship. Binary accountability streams should be resourced with capacity development of both government and third parties within the country for counterfactuals. HSS technical support is required to develop realistic financing plans linked to GHI-supported disease plans.

Governance, coordination, and alignment

Converged planning is required across GHIs and other partners in Pakistan, even if diverse funding lines area maintained. Investment in federal-provincial stewardship is required and legitimacy to provinces role for service delivery planning. GHIs should integrate duplicative technical assistance. Balancing of resourcing to less resourced provinces is also needed.

Cross-cutting

- The local reforms for UHC/PHC can be an entry point to disease control, shifting from short lived projects to recurrent financing of provincial health departments.
- Systems innovations are required on financing models for PHC with strong communicable disease compliance, including private sector integration.
- Converged and coordinated planning with diversified funding lines can be pursued across partners.
- A long leash for aid delivery can be used by GHIs shifting the focus to outputs for aid efficiency rather than how much aid was disbursed and accompanying input based fiduciary controls.
- Developing and cultivating political stewardship at different levels of the health systems is important to over-ride local power turfs.

References

- 1) World Bank. Pakistan 2021. Available from: <https://data.worldbank.org/country/pakistan>. Accessed 2023
- 2) World Health Organization. Global Tuberculosis Report 2021. Geneva: World Health Organization; 2021
- 3) World Health Organization. Global malaria report 2022. Geneva: World Health Organization; 2022. Available from: <https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2022>. Accessed 2023
- 4) World Health Organization. WHO HIV profile. Available from: <https://cfs.hivci.org/index.html>. Accessed 2023
- 5) Coalition for Global Hepatitis Elimination. 2022. Pakistan National Hepatitis Elimination Profile 2022. Available from: <https://www.globalhep.org/sites/default/files/content/news/files/2022-06/Pakistan%20National%20Hepatitis%20Elimination%20Profile-FINAL.pdf>. Accessed 2023
- 6) Pakistan Demographic and Health Survey 2017–18. National Institute of Population Studies (NIPS) [Pakistan] and ICF. 2019.. Islamabad, Pakistan, and Rockville, Maryland, USA: NIPS and ICF. Available from <http://nips.org.pk/>. Accessed 2023
- 7) Nishtar S. 2011. Health and the 18th Amendment. In: Retaining national functions in devolution: heart file. Available from: http://www.heartfile.org/pdf/Health_18Amendment_draft.pdf. Accessed 2023
- 8) Zaidi SA, Bigdeli M, Langlois EV, et al. Health systems changes after decentralisation: progress, challenges and dynamics in Pakistan. *BMJ Glob Health* 2019;4:e001013. doi:10.1136/bmjgh-2018-001013.
- 9) National Health Accounts-Pakistan 2019-20. Pakistan Bureau of Statistics (PBS), Government of Pakistan.. Available from: https://www.pbs.gov.pk/sites/default/files/national_accounts/national_health_accounts/NHA-Pakistan_2019-20. Accessed 2023
- 10) WHO. Primary Health Care on the Road to Universal Health Coverage- 2019 Monitoring Report. 2019
- 11) World Health Organization & Alliance for Health Policy and Systems Research. 2016. Primary Health Care Systems (PRIMASYS): Comprehensive Case Study from Pakistan. World Health Organization. Available from <https://apps.who.int/iris/handle/10665/341143>. License: CC BY-NC-SA 3.0 IGO. Accessed 2023
- 12) Pakistan Social and Living Standards Measurement Survey PSLM (2014-15). Pakistan Bureau of Statistics, Government of Pakistan Statistics Division. 2016.. Islamabad Pakistan.
- 13) World Health Organization. 2019. Country Private Health Sector Effective Engagement for Service Provision Pakistan, WHO-EMRO, Cairo.
- 14) Vos T, Lim SS, Abbafati C, Abbas KM, et al. Global burden of 369 diseases, injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*. 2020 Oct 17;396(10258):1204-22.
- 15) National Tuberculosis (TB) Control Program. Available from: <https://www.nih.org.pk/national-tb-control-program>. Accessed 2023.

- 16) Aftab A, Afzal S, Qamar Z, Idrees M. 2021. Early detection of MDR Mycobacterium tuberculosis mutations in Pakistan. Sci Rep. 2021 Aug 18;11(1):16736. doi: 10.1038/s41598-021-96116-x. PMID: 34408186; PMCID: PMC8373971.
- 17) World Health Organization. 2023. The Global Health Observatory. Tuberculosis treatment coverage Available from : <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/tuberculosis-treatment-coverage>. Accessed 2023
- 18) WHO-EMRO. Malaria. Available from <https://www.emro.who.int/malaria/countries/>. Accessed 2023
- 19) WHO. Malaria - Pakistan. 2022. <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON413>
- 20) Global AIDS Monitoring. Country progress report – Pakistan. 2020. Available from: https://www.unaids.org/sites/default/files/country/documents/PAK_2020_countryreport.pdf. Accessed 2023
- 21) The Global Fund. Audit Report: Global Fund Grants in the Islamic Republic of Pakistan. Available from: https://www.theglobalfund.org/media/9595/oig_gf-oig-20-012_report_en.pdf. Accessed 2023
- 22) World Health Organization (WHO) WHO EMRO. Polio Eradication Initiative. Available from: <https://www.emro.who.int/pdf/pak/programmes/polio-eradication-initiative.pdf?ua=1>. Accessed 2023
- 23) Geo News. 8TH June 2023. Poliovirus detected in Karachi's environmental sample. Available from: <https://www.geo.tv/latest/491981-poliovirus-detected-in-karachis-environmental-sample>. Accessed 2023
- 24) The Aga Khan University and Biostat Global Consulting. Third-Party verification immunization coverage survey (TPVICS): vaccination coverage quality indicators (VCQI) analyses survey report, 2022. Available from: https://www.dropbox.com/s/q1a36c889fy13kl/TPVICS_2020_VCQI_Report.pdf?dl=0 [Accessed Jul 2022]
- 25) National Institute of Population Studies (NIPS) [Pakistan] and ICF. 2008. Pakistan Demographic and Health Survey 2006–07. Islamabad, Pakistan, and Rockville, Maryland, USA: NIPS and ICF. <http://nips.org.pk/>. Accessed 2023.
- 26) Ministry of National Health, Services, Regulations and Coordination. 2018. National Nutrition Survey 2018. <https://www.unicef.org/pakistan/media/2826/file/National%20Nutrition%20Survey%202018%20Volume%201.pdf>
- 27) Government of Pakistan. National Nutrition Survey 2001.
- 28) Government of Pakistan. National Nutrition Survey 2011.
- 29) World Health Organization. 2023. From universal health coverage to improved data management: Pakistan. https://cdn.who.int/media/docs/default-source/hrp/srhr-stories/pakistan-2023.pdf?sfvrsn=c0d0146a_3
- 30) Global Fund. <https://www.theglobalfund.org/en/>
- 31) WHO, Ministry of National Health Services, Regulations & Coordination. Brief and Talking Points for the meeting with Mission on Cross Programmatic Efficiency Analysis.
- 32) WHO. Cross-programme efficiency analysis (CPEA) in Pakistan, 2023.

- 33) Rehman S, Khan N, Gill S. 2014. Fiscal decentralization in Pakistan: 7th NFC Award as case study public policy and administration research. 4, 2014: 81–7.
- 34) Foreign, Commonwealth & Development Office (FCDO), Mott Macdonald. 2019. Report
- 35) The Aga Khan University News. 2022. Public-private partnership to boost immunization in high-risk UCs. https://www.aku.edu/news/Pages/News_Details.aspx?nid=NEWS-002726