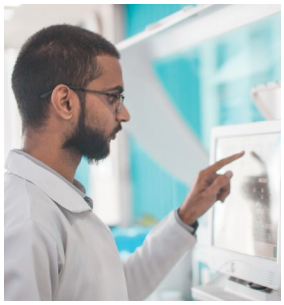

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Using Evidence-Informed Deliberative Processes to Design Pakistan's Essential Package of Health Services

Sameen Siddiqi, Raza Zaidi, Maryam Huda, Ina Gudumac, and Ala Alwan

ABSTRACT

Pakistan developed its first evidence-informed essential package of health services using evidence from the third edition of *Disease Control Priorities* (Jamison et al. 2018) as a key component of universal health coverage reforms. The final package focuses on primary health care and comprises 88 publicly financed and 12 population-level interventions. The design followed an evidence-informed deliberative process to develop affordable services that represent good value for money and address a major part of the country's disease burden. This chapter describes Pakistan's experience in developing the package, focusing on the processes used to prioritize services, the policy decisions adopted, and the gaps and lessons learned in designing the package.

INTRODUCTION

As part of the United Nations (UN) Sustainable Development Goals (SDGs), Pakistan along with other Member States committed in 2015 to achieve universal health coverage (UHC) by 2030 (Tangcharoensathien, Mills, and Palu 2015). Global commitment to UHC was reinforced, in 2019, in a special high-level meeting of the UN General Assembly on UHC when heads of state and government pledged to scale up efforts in improving access to essential health services (Rodi et al. 2022; UN General Assembly 2019). Despite that commitment, significant challenges remain. For instance, the global UHC service coverage index of 68 reported in 2023 means that one-third of the world's population lacks access to essential health

services (WHO and World Bank 2023). In addition, at least 1.4 billion people face impoverishing health spending (WHO and World Bank 2021). The situation in Pakistan is no different: almost half of the population lacks access to essential services, and over 13 percent of households incurred catastrophic health expenditure in 2018–19 (Bashir, Kishwar, and Salman 2021).

A key step in the road map to UHC is for countries to develop an essential package of health services (EPHS) that is evidence informed, feasible, of high impact, and accessible to all. The first chapter of this volume describes the principles of UHC, its three fundamental dimensions, and the strategic directions adopted by Pakistan for designing the EPHS. Despite several past efforts to develop an EPHS for Pakistan, none applied the UHC principles and strategic directions. For instance, the package of services offered in the provinces by the Sehat Sahulat Program, a social health insurance initiative, is for inpatients only, and there are concerns about whether it is evidence informed (Khan, Cresswell, and Sheikh 2022).

The initiative published by the World Bank in its third edition of *Disease Control Priorities* (DCP3) provides an up-to-date review of priority health interventions for low- and lower-middle-income countries through a systematic appraisal of evidence, new economic analyses, and expert judgment across 21 health areas, with the goal of influencing resource allocation at the country level (Jamison 2018). DCP3 proposes two generic packages: an essential UHC (EUHC) package for lower-middle-income countries that has 218 interventions, and a highest-priority package that includes 108 interventions to serve the immediate needs of low-income countries with severely constrained fiscal space (Jamison 2018).

In 2018, a DCP3 Country Translation Project was established to support pilot countries in using the DCP3 evidence to guide the development of their national UHC benefit package (EPHS and intersectoral policy actions). Pakistan was among the first countries to adopt the DCP3 evidence and approach in its effort to accelerate progress toward UHC and develop a national EPHS. Its experience has been extensively documented in an editorial and five papers published in a special supplement on Pakistan by the *International Journal of Health Policy and Management* in 2023–24 (Alwan, Jamison, et al. 2024; Alwan, Siddiqi, et al. 2024; Baltussen et al. 2023; Huda et al. 2023; Raza et al. 2024; Torres-Rueda et al. 2024). Chapters 1 and 15 of this volume review specific aspects of the Pakistan experience published in that supplement.

This chapter provides a bird's-eye view of Pakistan's health care system; the process of developing the EPHS, including the methodological aspects; the final package endorsed by the government; and the challenges encountered. It concludes by presenting the lessons learned for the benefit of other low- and lower-middle-income countries. The special supplement provides a more elaborate review of the experience and an overview of the lessons learned.[1]

PAKISTAN'S HEALTH CARE SYSTEM: CONTEXT AND CHALLENGES

Pakistan is the world's fifth most populous country, with a projected population of over 250 million people in 2024—including the regions of Azad Jammu and Kashmir, and Gilgit Baltistan. Pakistan's population is predominantly young, with 40 percent under the age of 15 and 19 percent ages 15–25 years. Relatedly, 56 percent of the total population falls in the productive age group (15–65 years), and only 4.2 percent is 65 years and above.[2] In addition, Pakistan has been hosting more than 1.4 million registered Afghan refugees for over four decades.[3]

Pakistan, a lower-middle income country, had a gross domestic product of US$383 billion in 2021–22, which translates to per capita income of US$1,798 (Pakistan, Ministry of Finance 2021). According to a 2019 government report, nearly 37 percent of Pakistanis live in multidimensional poverty (Planning Commission of Pakistan and UNDP 2019). Urban areas have a poverty rate of 32.1 percent and rural areas of 39.3 percent.

According to National Health Accounts data, Pakistan has low total per capita health expenditure from all sources, at US$52 (Pakistan Bureau of Statistics 2017). By comparison, such spending averages US$135 in other lower-middle-income countries, US$477 in upper-middle-income countries, and US$3,135 in high-income countries.[4] Pakistan's low health spending can be attributed to the relatively small share of total government spending on health, a level that cannot adequately support universal coverage with essential quality health services. Pakistan's 2020–21 public expenditure on health—PRe 657 billion, equivalent to US$4.1 billion (Pakistan, Ministry of Finance 2021)—represented less than 6 percent of total government spending, compared to an average of 10 percent in developing countries and 15 percent in high-income countries.

Pakistan's low government spending could also reflect the limited capacity to mobilize revenues. Government efforts to raise taxes consistently fall short at 9.4 percent of gross domestic product (base year 2016) in 2021,[5] compared to a minimum threshold of 15 percent identified by the International Monetary Fund as critical to engender sustained, inclusive growth (World Bank 2019). Low levels of domestic government financing mean that a substantial gap currently exists between available resources and the costs of financing an essential package of quality health services for everyone. Filling that gap will require good economic growth, along with political stability and strong commitment for efficient and effective health reforms.

Because of the low levels of government spending, out-of-pocket payments constitute a large share of health spending in Pakistan—51.9 percent of the total health expenditure (Pakistan Bureau of Statistics 2017). By comparison, the global average for out-of-pocket spending is about 15 percent. Such payments prevent some people from using needed essential health services, and push others into poverty.

Pakistan's health care delivery system consists of a mix of public and private sector providers. According to Pakistan's Constitution, provision of health is mainly the responsibility of provincial governments, but with some federal health function mentioned in Federal Legislative Lists I and II (National Assembly of Pakistan 1973). The public sector provides health care at multiple levels, including community health workers, primary health care (PHC) centers, first-level hospitals, and tertiary hospitals (MoNHSR&C 2018b). In addition, vaccinators and environmental and infectious diseases field staff provide outreach services. However, the core of the PHC system in the public sector consists of Health Houses (community-based Lady Health Workers), Basic Health Units, Community Health Centres (or 24/7 Basic Health Units), and Rural Health Centres. Referral services are supposed to be provided for acute, ambulatory, and inpatient care through the Tehsil/Taluka Headquarter Hospitals and District Headquarter Hospitals supported by tertiary care and teaching hospitals (table 3.1). Promotive and preventive services are augmented through public health programs (moving gradually toward horizontal integration) and through population-level interventions.

Table 3.1 Number of Public Sector Health Care Facilities in Pakistan, by Type

Type of facility	Number
Hospitals (secondary and tertiary)	1,276
Rural Health Centres	736
Basic Health Units	5,558
Dispensaries	5,802
Maternal and Child Health Centres	780
Tuberculosis Centres	416
Health Houses (Lady Health Workers)	89,240

Source: Pakistan, Ministry of Finance 2021.

The private sector is also active at all five levels of the health care delivery system, with community-based organizations and workers at the community level, clinics of general practitioners and nursing homes at the PHC center level, first-level hospitals with more and fewer than 50 beds, tertiary or specialized hospitals, and population-level interventions.

By the end of 2021, Pakistan had an estimated 120,334 hospital beds in the public sector and 112,841 in the private sector, for a total of 233,175 beds. Overall, the hospital bed density (both public and private) was only 10 hospital beds per 10,000 people, against the desired minimum threshold of 18 beds (MoNHSR&C, DCP3, and WHO 2022).

According to the National Health Vision (NHV) 2016–25, workforce constraints represent the most critical factor in the provision of quality preventive, promotive, and curative services (MoNHSR&C 2016). The health sector faces an imbalance

in the number, skill mix, and deployment of human resources for health as well as inadequate resource allocation across the different levels of health care. Other pressing issues include maldistribution of human resources, retention issues, and low workplace satisfaction levels, which result in significant brain drain across all levels. Adequate quantity, quality, and performance of health workers are crucial for the effective functioning of health systems. Considering its production capacity, Pakistan can achieve the target of an adequate number of physicians by 2030. Achieving the required numbers of nurses, Lady Health Workers, and Community Midwives by 2030, however, continues to present a major challenge (table 3.2).

Table 3.2 Pakistan's Essential Health Workforce, 2030 Target and Current Status

Type of worker	2030 target	Current status (registered as of end-2021)
Number of physicians	314,170	270,168
Number of nurses, Lady Health Workers, and Community Midwives	942,511	138,107

Source: MoNHSR&C 2022.

In 2016, the Ministry of National Health Services Regulations and Coordination (MoNHSR&C) and provincial authorities agreed on the NHV 2016–25. The NHV strives to provide a unified direction to overcome the key health challenges by "providing universal access to affordable, quality, essential health services which are delivered through a resilient and responsive health system, capable of attaining the Sustainable Development Goals and fulfilling its other global health responsibilities" (MoNHSR&C 2016).

The NHV and its eight thematic pillars have the support of all provincial governments, and the next generation of health strategies for provinces/federating areas align with the NHV. Localization of health-related SDGs in Pakistan offered a monitoring framework for the NHV, setting the UHC service coverage index (SCI) as one of the main outcome indicators (SDG indicator 3.8.1) along with reduction in catastrophic health expenditures (SDG indicator 3.8.2). The baseline value for the UHC SCI was estimated at 40 percent in 2015 for Pakistan, lower than the corresponding value of 42 percent for Sub-Saharan Africa for the same year (WHO and World Bank 2017).

Accordingly, MoNHSR&C and the Provincial Health Departments started several UHC-related reforms to improve coverage, along with improvements in data quality for measuring progress. MoNHSR&C regularly collates and analyzes UHC-related data not only at the national and provincial levels but also at the district level (MoNHSR&C 2022). Table 3.3 provides a summary of Pakistan's progress on the UHC SCI. Despite a positive trajectory, Pakistan has made very slow progress and seems unlikely to achieve the national target of 65 percent by 2030 set for the UHC SCI. Figure 3.1 illustrates the trends in catastrophic health expenditures.

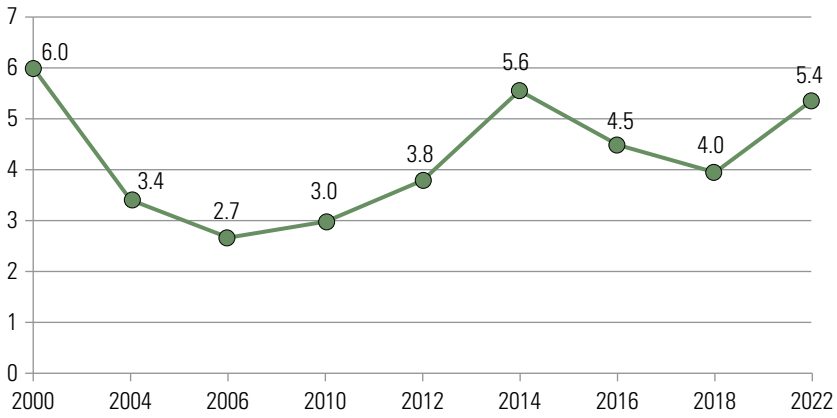
Table 3.3 Trends in Pakistan's UHC SCI, National and by Province and Area, 2015–21

	UHC service coverage index (0–100)							
Province/Area	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**% change**
Islamabad	44.7	47.7	48.9	48.5	51.3	56.0	56.3	+25.9
Punjab	40.6	42.8	45.6	47.3	48.2	52.0	53.8	+32.5
Azad Jammu and Kashmir	39.0	40.7	43.6	46.2	47.9	49.8	50.2	+28.8
Khyber Pakhtunkhwa	36.2	40.7	45.8	47.3	47.6	50.3	49.8	+37.5
Sindh	37.6	40.6	43.9	45.0	46.7	48.6	48.0	+27.6
Balochistan	27.1	29.3	32.3	33.5	35.0	35.2	35.7	+31.7
Pakistan	**39.7**	**42.1**	**45.3**	**46.3**	**47.1**	**49.9**	**52.0**	**+30.9**

Source: MoNHSR&C 2022.

Note: SCI = service coverage index; UHC = universal health coverage.

Figure 3.1 Trends in Catastrophic Health Expenditure in Pakistan, 2000–18



Source: Pakistan Bureau of Statistics data, 2000–22. https://www.pbs.gov.pk/publication/national-health-accounts-pakistan-2021-22

Note: Catastrophic health expenditure represents the share of households spending more than 10 percent of their income on health. HH = household.

EPHS/UHC BENEFIT PACKAGE DEVELOPMENT PROCESS AND THE METHODOLOGY ADOPTED

The government of Pakistan has committed to UHC and to achieving equitable access to essential health care as clearly stated in the NHV 2016–25. The 12th Five-Year Plan (health chapter) and National Action Plan 2019–23 also underscore the provision of essential health services (MoNHSR&C 2018a, 2018b). To translate the government's commitment into action, MoNHSR&C established a collaboration with the DCP3 Country Translation Project and the World Health Organization (WHO) to develop an EPHS based on localized evidence and considering the interventions recommended by DCP3.

The effort was launched in 2018 during an international workshop held in Islamabad and organized by the government of Pakistan, DCP3, and WHO. Participants from countries of the Eastern Mediterranean were sensitized to the concept and the evidence on cost-effective interventions for low- and lower-middle-income countries described in the nine DCP3 volumes and model packages (Jamison et al. 2018). The workshop recommended that Pakistan develop an evidence-informed EPHS and an intersectoral action plan based on the DCP3 global recommendations. The Inter-Ministerial Health and Population Council subsequently endorsed that recommendation. A formal request was then submitted to the DCP3 secretariat to provide technical assistance for adapting the DCP3 evidence to develop the EPHS/UHC benefit package for Pakistan.

A road map for the development of Pakistan's EPHS/UHC benefit package was developed following a joint DCP3 and WHO mission in January 2019. Around the same time, MoNHSR&C initiated a process to map Pakistan's existing essential health services. The assessment revealed that only 135 (or 62 percent) of the 218 DCP3 EUHC interventions were being implemented in facilities (not withstanding service quality). Of those interventions, 42 (31 percent) were generally available and 93 (69 percent) had limited availability. As shown in table 3.4, only 16 of the 45 (35 percent) EUHC interventions were available in the noncommunicable diseases (NCDs) and injuries cluster (MoNHSR&C, WHO, and DCP3 2019).

Table 3.4 Mapping of Pakistan's Available DCP3 EUHC Health Interventions, by Cluster

Cluster[a]	No. of EUHC interventions	No. of available interventions	General availability	Limited availability
RMNCAH	67	50	22 (44%)	28 (56%)
Communicable diseases	52	32	10 (31%)	22 (69%)
NCDs and injuries	45	16	6 (37.5%)	10 (62.5%)
Health services	54	37	4 (11%)	33 (89%)
Total	**218**	**135**	**42 (31%)**	**93 (69%)**

Source: Alwan, Siddiqi, et al. 2024.

Note: DCP3 = *Disease Control Priorities*, third edition; EUHC = essential universal health coverage; NCDs = noncommunicable diseases; RMNCAH = reproductive, maternal, newborn, child, and adolescent health.

a. Clusters matching definitions from DCP3.

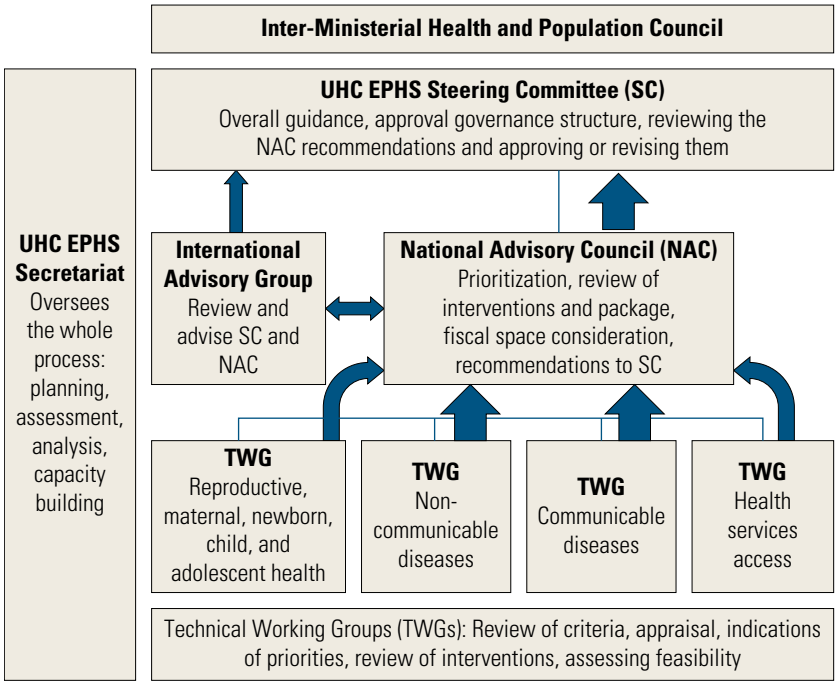
The mapping exercise demonstrated major gaps in accessing essential services across all four clusters proposed by the DCP3 model package. Following that exercise, an initial list of 193 out of the 218 EUHC interventions was recommended for formal assessment and prioritization. Concurrently, four National Technical Working Groups (TWGs)—one for each cluster—were established, and workshops were organized covering communicable diseases; NCDs and injuries; reproductive, maternal, newborn, child, and adolescent health; and health system services.

The DCP3 Country Translation Project for Pakistan was formally established in July 2019 during the joint DCP3 and WHO Mission. The Health Planning, System

Strengthening and Information Analysis Unit of MoNHSR&C; the Department of Community Health Sciences of Aga Khan University; the Health Services Academy; WHO; and the DCP3 Country Translation Project based at the London School of Hygiene & Tropical Medicine agreed on a partnership. MoNHSR&C and DCP3 also signed a formal memorandum of understanding.

The process of developing the package was guided by a set of key principles: transparency and inclusivity, national ownership and execution, a focus on ensuring the affordability of the package and feasibility of its implementation, and engagement of public sector institutions, nongovernmental stakeholders, and development partners. The approach to arrive at the package included robust governance and institutional arrangements, engaging a wide range of stakeholders, and conducting an evidence-based appraisal and prioritization process. The governance structure was put in place by instituting a secretariat within MoNHSR&C, with technical support from the DCP3 Country Translation Project (figure 3.2).

Figure 3.2 Governance Structure for the Development of Pakistan's UHC EPHS



Source: Alwan, Siddiqi, et al. 2024.

Note: Arrows represent the flow of information. Larger arrows represent reporting obligations. EPHS = essential package of health services; UHC = universal health coverage.

The decision-making forums included (1) four TWGs, with membership representing a range of public health, health system, and clinical professions; (2) the National Advisory Committee; (3) the UHC EPHS Steering Committee, chaired by the federal Minister of Health; and (4) the Inter-Ministerial Health and Population Council, which includes the federal and provincial ministers of health

and population. In addition, an International Advisory Group, comprising experts and DCP3 authors, reviewed the process and methodologies and provided extensive input to successive versions of the EPHS.

A survey was conducted among all TWG members to identify criteria that would facilitate the prioritization process. The initially proposed criteria included avoidable burden of disease, cost-effectiveness, financial risk protection, budget impact, equity, feasibility, and socioeconomic impact. The assessment process considered three criteria using quantitative evidence: burden of disease, budget impact, and cost-effectiveness. The TWGs considered and discussed other criteria identified by the survey, but data on those criteria were insufficient to make a quantitative assessment.

For burden of disease, the most recent evidence was obtained from the Institute for Health Metrics and Evaluation's 2017 Global Burden of Disease study (2019 data for provincial/federating areas' EPHS).[6] Evidence on cost-effectiveness, a critical step in the choice of interventions, came primarily from the Tufts Medical Center Global Health Cost-Effectiveness Analysis Registry,[7] which compiles incremental cost-effectiveness ratio data on many interventions. The remaining incremental cost-effectiveness ratio data came from the DCP3 database. Applicability of global cost-effectiveness evidence to the country context was systematically assessed using general and specific knockout criteria.

For evidence on budgetary impact, a context-specific, normative, ingredients-based rapid method was developed to estimate the unit costs of the DCP3 EUHC interventions. Costing, undertaken from a provider's perspective, used a one-year time frame. A bottom-up approach to costing was applied to community, health center, and hospital platforms, whereas a top-down approach was used for population-based interventions. The approach followed the principles set out in the Global Health Costing Consortium reference case, largely considered the gold standard for costing health interventions in lower-middle-income countries (Vassall et al. 2017). Unit costs per beneficiary for each intervention were calculated in 2019 US dollars.

For each of the 170 shortlisted and costed DCP3 EUHC interventions, the evidence on decision criteria was reported to the TWGs and the National Advisory Committee using a combination of intervention descriptions and evidence summary sheets. The intervention descriptions sheets contained details on the delivery platform, process, providers, medicines, supplies, equipment, health information tools, supervision, availability of in-service training curriculum, and reference documents. The evidence summary sheets included information on burden of disease, cost-effectiveness and rank order, quality of cost-effectiveness evidence, and budget impact for each intervention. Total costs, disability-adjusted life years averted, and a bookshelf of interventions were also presented, using a combination of the Health Interventions Prioritization tool (HIPtool) and bespoke analyses.

Prioritization of the shortlisted DCP3 EUHC interventions was initially conducted through meetings held by the TWGs and using the agreed-upon decision criteria. The interventions were initially prioritized and costed for community, health center, first-level hospital, tertiary/referral hospital, and population-level platforms. A district-level package of 117 interventions covering three platforms (community, health center, and first-level hospital) was designed, with an overall per capita cost of US$29.70.

As highlighted earlier, affordability and feasibility of implementation of the EPHS are key principles adopted for the design process. Because the cost of the district package exceeded the fiscal space for public health expenditure, a second prioritization process was necessary (Alwan, Siddiqi, et al. 2024). Estimating that about 60 percent of public health expenditure goes to the district level, MoNHSR&C arrived at a limit of US$13 per capita for a package of interventions for immediate implementation. It aimed to develop an affordable and feasible package for immediate implementation until health allocations increased to match the costs of the full district-level EPHS. The National Advisory Committee decided to recommend a more limited immediate implementation package of district-level interventions, covering the community, health center, and first-level hospital platforms.

The International Advisory Group and MoNHSR&C's various departments and programs subsequently reviewed the immediate implementation package. In October 2020, the UHC-EPHS Steering Committee and the Inter-Ministerial Health and Population Council approved a final package of 88 district-level interventions and 12 population-level interventions.

The Inter-Ministerial Health and Population Council further decided to localize scientific evidence at the province/federating area level and produce EPHS documents specific to the province/federating area. That exercise was done in 2021 by the Health Planning, System Strengthening and Information Analysis Unit using the national description of interventions, incremental cost-effectiveness ratio, and costing of each intervention, except with minor adjustments to salaries using values specific to the province/area. The remaining evidence was specific to the province/federating area, including burden of disease data (2019), targeted population, budget impact, estimates for health system cost, unit cost per intervention and per capita, and disability-adjusted life years averted.

PAKISTAN'S ESSENTIAL PACKAGE OF HEALTH SERVICES

Developed and approved at the national level, the final district-level EPHS comprised a total of 88 health care interventions across three levels of care: community, PHC centers, and first-level hospitals. It reflected evidence gathered on the burden of disease, cost-effectiveness, budget impact, feasibility, financial risk protection, equity, and social context of Pakistan. On initial implementation, that district-level EPHS would cost an estimated US$12.98 per person per year (table 3.5).

Table 3.5 Distribution and Cost of Pakistan's EPHS Interventions, by Cluster and Platform

Platform	Initially prioritized	Finally selected	Distribution by clusters				Unit cost ($)/ person/year
			RMNCAH	Infectious diseases	NCDs and injuries	Health services	
Community	28	19	15	3	1	0	2.92
PHC center	43	37	13	7	9	8	4.40
First-level hospital	46	32	14	2	3	13	5.66
District	117	88	42	12	13	21	12.98

Source: Health Planning, System Strengthening and Information Analysis Unit, Pakistan Ministry of National Health Services Regulations and Coordination.

Note: EPHS = essential package of health services; NCDs = noncommunicable diseases; PHC = primary health care; RMNCAH = reproductive, maternal, newborn, child, and adolescent health.

The EPHS has 19 interventions at the community level, mainly provided through Lady Health Workers and Community Midwives; 37 interventions at the PHC level, to be offered through Basic Health Units, Rural Health Centres, and dispensaries; and 32 interventions at first-level hospitals—that is, Tehsil Headquarter and District Headquarter Hospitals in the respective districts. The reproductive, maternal, newborn, child, and adolescent health cluster accounts for almost half of the interventions (42), with the other half divided among the remaining three clusters: 12 in infectious diseases, 13 in NCDs and injuries, and 21 in health system services (table 3.5).

DEVELOPMENT OF THE EPHS FOR PROVINCES/FEDERATING AREAS

After the development of the generic EPHS for Pakistan, adapting the package was a critical step before rolling it out across the provinces/federating areas. Each province is unique with respect to health system dynamics, prioritized interventions, health service delivery, and barriers to accessible health care. As such, to streamline interventions and maximize impact and population health outcomes, it is crucial that each province consider the local context and evidence in adapting the EPHS. Each province/area carried out a separate exercise and prioritized interventions for its EPHS. The total number of interventions across five platforms varied from 132 to 153 (compared to a range of 90 to 104 for the district-level EPHS), costing US$15.82 and averting almost 15.32 million disability-adjusted life years on average. Like the outcome of the EPHS design process at the national level, the total cost of the district-level package exceeds the available fiscal space in most provinces and a second prioritization process may therefore be required. A comprehensive report published by MoNHSR&C and the DCP3 secretariat provides a more elaborate description of the provincial packages (MoNHSR&C et al. 2023).

MOVING TO EPHS IMPLEMENTATION

The development of DCP3-based packages in Pakistan has made an important contribution to strengthening national capacities in evidence-informed priority setting while ensuring an inclusive consultative process. The DCP3-based packages have also influenced subsector strategies and plans in Pakistan, such as the National NCD and Mental Health Action Framework 2021–30, the Lady Health Workers' Strategic Plan (2022–28), the UHC Investment Case, health system reforms related to polio eradication in 40 high-risk union councils, and the Health-Related Intersectoral Interventions Action Plan 2022–30. MoNHSR&C is considering how to use the scientific evidence and package for future reforms in the Global Fund to Fight AIDS, Tuberculosis and Malaria investments in infectious diseases.

Pakistan's EPHS development process was based on sound advocacy and secured commitment from the highest level, including the Cabinet, Inter-Ministerial Health and Population Council, Ministry of Planning, and Provincial Health Departments. That commitment at the design stage is being currently translated into financial commitments not only from the governments at the national and provincial levels but also through additional support from development partners. A National Health Support Programme was established in collaboration with the World Bank to facilitate the pilot implementation of the UHC package. The program has initial funding through a World Bank loan of US$300 million and grants of US$132 million from some development partners (Bill and Melinda Gates Foundation; Global Financing Facility; Global Fund to Fight AIDS, Tuberculosis and Malaria; and Gavi, The Vaccine Alliance).

GAPS AND CHALLENGES

Overall, the DCP3 Country Translation Project in Pakistan is a success story. However, the EPHS design process identified several gaps and challenges that will have implications at the time of implementation. The following paragraphs highlight some of the challenges.

Apart from the unprecedented crisis caused by the COVID-19 pandemic, which coincided with the EPHS development processes, several important challenges arose. One significant constraint involved the scarcity of local data encountered during the health system assessment and prioritization processes. As in most low- and lower-middle-income countries, the reduced capacity to collect, analyze, and generate data, particularly lack of evidence on the cost-effectiveness of interventions, had to be addressed using regionally generated data and global databases despite limitations in the relevance and applicability of such evidence.

Effective monitoring during EPHS implementation will require backup support such as by strengthening health information systems or through periodic surveys that provide progress on measures such as service coverage index, catastrophic health expenditure, economic rate of return, and health outcomes.

Health system assessments and reviews of existing financial schemes are critical components of EPHS development. Although a comprehensive assessment was conducted following package design, it would have been more effective if such a review had been systematically conducted early on as part of the preparatory assessment or at least concurrently with the prioritization process.

A key feature has been the additional cost of health system strengthening and capital investment needed for infrastructure development for EPHS implementation. Although the overall cost of the package factors in the cost of health system strengthening, it does not factor in the cost of infrastructure development. Thus, substantial investment in infrastructure will be needed during package implementation.

The package also needs to provide for greater flexibility and an institutional mechanism for including interventions that address newly emerging diseases (for example, COVID-19) and developing technologies (for example, COVID-19 and malaria vaccines), and mandates such as International Health Regulations within the package.

LESSONS LEARNED IN THE UHC EPHS PROCESS

This section provides a summary of the key lessons learned in Pakistan. The DCP3 Country Translation Project has published a more elaborate review of the experience of six countries, including Pakistan, in developing their own EPHSs (Alwan, Yamey, and Soucat 2023).

The lack of institutional capacity in priority setting and design of the EPHS was an initial challenge but was later effectively addressed by the intensive joint work and partnership with international experts, the DCP3 secretariat, Aga Khan University, and a committed team in MoNHSR&C. Nevertheless, capacity building in those areas and in health financing will still need to be reinforced at the federal and provincial levels. The transition from package design to implementation will also require major efforts in reinforcing capacity in several health system areas (Alwan, Jamison, et al. 2024).

Although donors have shown interest in the implementation of EPHS, there is a need for greater harmonization among donors through better integration across programs for greater value for money. At the same time, enhanced donor coordination will require greater leadership by and synergy among ministries of health, finance, and planning.

Considering the current worsening political and economic situation in Pakistan (such as its high inflation rate), maintaining a high level of government commitment and financial sustainability of the EPHS presents a constant challenge.

The Pakistan experience also highlights important gaps regarding package design. First, it did not involve a robust process of societal dialogue and community engagement. Community engagement would have helped in determining public

perception of the top priority health needs and in gaining public support for the health reforms. Experiences in Thailand and Tunisia provide good practices in participatory governance (Ben Mesmia, Chtioui, and Ben Rejeb 2020; Rajan et al. 2019).

Second, stronger engagement of the planning and finance sectors, which control the public purse, would have resulted in a more rigorous understanding of current and future opportunities and the extent to which domestic financing could be made available to implement the package across the SDG timeline. Early engagement of the Ministry of Finance is also essential for a robust assessment of fiscal space and realistic planning for options of increased health allocation.

Third, as previously mentioned, work on assessing the health system should be undertaken concurrently with package development activities to avoid producing an unrealistic package that is not immediately implementable or does not meet the minimum quality standards. Low-quality care has a demonstrated high cost and can undermine efforts to achieve UHC (Ben Mesmia, Chtioui, and Ben Rejeb 2020). The EPHS can be bolstered by examining geospatial effective coverage cascades to best understand the need, use, and quality of health services across the population.

Fourth, there is a strong need for institutionalization of the process in Pakistan and for continued capacity building. The DCP3 Country Translation Project, given its timebound nature, placed particular emphasis on building analytical capacity within MoNHSR&C in priority setting, economic evaluation, and setting and revising EPHSs. A positive spinoff was the successful adaptation of the national EPHS to develop provincial packages, primarily done by national staff trained during the development of the national EPHS. Similar successes could be enjoyed in additional areas relevant to universal effective coverage, for example in building capacity in implementation science and quality improvement methodology to gain even greater efficiencies within health service delivery.

Finally, efforts to estimate the fiscal space for health should inevitably be tied to the macroeconomic situation and assessment of the country's prospects for economic growth. Given the current economic forecast and the effects of the COVID-19 pandemic in Pakistan, it was not considered feasible to rely on macroeconomic growth to generate new resources. In such a situation, other options that demanded consideration were to (1) enhance the efficient use of available resources at least partly by implementing an evidence-informed EPHS; (2) generate new health sector-specific resources through earmarked public health taxes on tobacco and unhealthy foods and beverages, and through other innovative means; (3) increase health allocation by reprioritizing the government budget; (4) mobilize additional resources through external financing; and (5) build implementation and improvement capacity to deliver health services with greater efficiency.

Additionally, Pakistan's experience offers important lessons that should be considered in updating the DCP3 model packages. The EUHC model package is a valuable tool and a good starting point to guide country work, but experience

indicates the need for a better-defined and more specific definition of interventions, mainly because some are currently too generic or have multiple components requiring several clinical actions. Although the scope of the proposed interventions covers a wide range of essential services needed in lower-middle-income countries, some critical interventions are missing, notably in the areas of emergency medical services and pandemic preparedness and response. In addition, the review of EPHS design in countries using the DCP3 evidence in recent years has shown that the cost of the DCP3 EUHC interventions is significantly higher than what Pakistan and many other lower-middle-income countries can realistically afford given their limited public health spending (Alwan, Siddiqi, et al. 2024; Gaudin et al. 2023). That challenge is likely to be true even of the more limited DCP3 highest-priority package of 108 interventions. In general, package development is a dynamic exercise that needs to be revisited at regular intervals to respond to changes in disease burden and to emerging health challenges.

CONCLUSION

The development of the EPHS has been at the center of UHC-related health reforms in Pakistan. High-level government commitment and continued support, sustained engagement of national stakeholders and development partners, and highly effective collaboration with the DCP3 Country Translation Project have contributed to a successful outcome. The next challenge, however, is for the government and all stakeholders and partners to move systematically and confidently to ensure an equally promising transition to implementation. The Pakistan experience in designing the UHC EPHS offers important lessons learned for other countries committed to accelerating progress toward UHC. Doing so will require strengthening the health system to the level that allows for effective EPHS implementation, ensuring affordable financing of the EPHS, and reinforcing and institutionalizing technical capacity in priority setting and health reforms within ministries of health.

ACKNOWLEDGMENTS

The contributions made by the following are gratefully acknowledged: Muhammad Khalid; Rob Baltussen; Nichola Kitson; Nuru Saadi, Leon Bijlmakers, Maryam Huda, Maarten Jansen, Wajeeha Raza, Mashal Shah, Sergio Torres-Rueda, Wahaj Zulfiqar, and Anna Vassall.

The development of the Pakistan EPHS was part of the collaboration between the government of Pakistan and the DCP3 Country Translation Project. The engagement of and the input provided by well over 100 national experts from across the country and representatives of development partners is gratefully acknowledged. The support received from the Bill & Melinda Gates Foundation and the WHO in the EPHS process was pivotal to its development.

NOTES

1. For the full list of articles, refer to the *International Journal of Health Policy and Management* web page for the special issue, https://www.ijhpm.com/issue_723_725.html.
2. Pakistan Bureau of Statistics, "7th Population and Housing Census: Detailed Results," https://www.pbs.gov.pk/digital-census/detailed-results.
3. United Nations High Commissioner for Refugees, "Afghan Refugees in Pakistan by Province," https://data.unhcr.org/en/country/pak.
4. World Bank Open Data (database), https://data.worldbank.org/.
5. World Bank Open Data.
6. Institute for Health Metrics and Evaluation, "Global Burden of Disease Study 2017 (GBD 2017) Data Resources," https://ghdx.healthdata.org/gbd-2017; refer also to Institute for Health Metrics and Evaluation, "Global Burden of Disease Study 2019 (GBD 2019) Data Resources, https://ghdx.healthdata.org/gbd-2019.
7. Tufts Medical Center, Center for the Evaluation of Value and Risk in Health, "GH CEA Registry," https://cevr.tuftsmedicalcenter.org/databases/gh-cea-registry.

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