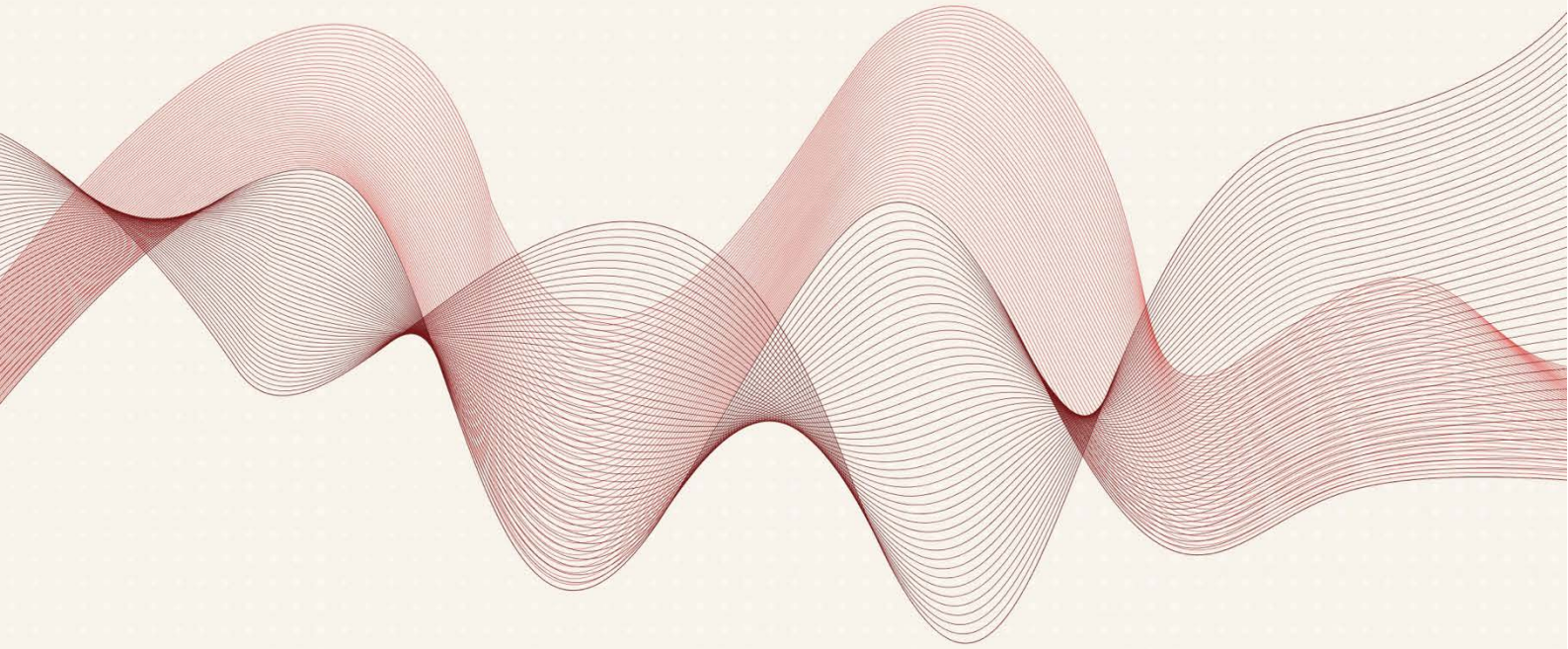

Disease Control Priorities, Fourth Edition
Volume 1, Disease Control Priorities in Practice

The Use of Evidence-Informed Deliberative Processes for Designing the Essential Package of Health Services in Pakistan

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Title: **The Use of Evidence-Informed Deliberative Processes for Designing the Essential Package of Health Services in Pakistan**

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Preface

Since the early 1990s, researchers involved in the Disease Control Priorities (DCP) effort have been evaluating options to decrease disease burden in low- and middle-income countries. This working paper was developed to support the Fourth Edition of this effort. It is posted to solicit comments and feedback, and ultimately will be revised and published as part of the DCP4 series.

DCP4 will be published by the World Bank. The overall DCP4 effort is being led by Series Lead Editor Ole F. Norheim, Director of the Bergen Centre for Ethics and Priority Setting in Health, University of Bergen. Core funding is provided by the Norwegian Agency for Development Cooperation (Norad) and the Norwegian Research Council.

More information on the project is available at: https://www.uib.no/en/bceps/156731/fourth-edition-disease-control-priorities-dcp-4.

The Use of Evidence-Informed Deliberative Processes for Designing the Essential Package of Health Services in Pakistan

Abstract

Pakistan developed its first evidence-informed essential package of health services based on the DCP3 evidence 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 represents good value for money and addresses a major part of the country's disease burden. This chapter describes Pakistan's experience in developing the package, focusing on the processes adopted to prioritize services, the policy decisions adopted as well as the gaps and lessons learned in package design.

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1.0 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; United Nations General Assembly 2019). Despite this commitment, significant challenges remain, as one third of the global population lacks access to essential health services (UHC Service Coverage Index of 68 in 2021) (World Health Organization and World Bank 2023), and at least 1.4 billion people face impoverishing health spending from having to pay for health (World Health Organization and World Bank 2021). The situation in Pakistan is no different, as almost half of the population lacks access to essential services and over 13% of households incurred catastrophic health expenditure in 2018-19 (Bashir, Kishwar, and Salman 2021).

A key step in the roadmap 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 (Alwan and Norheim 2024) describes the UHC principles, its three fundamental dimensions and the strategic directions adopted by Pakistan for designing the EPHS. While there have been several efforts in the past to develop an EPHS for Pakistan, none were based on the UHC principles and strategic directions. For instance, the package of services being offered by the Sehat Sahulat Program, a social health insurance initiative, in the provinces is only an inpatients level package, and there are concerns about it being evidence informed (Khan, Cresswell, and Sheikh 2022).

The Disease Control Priorities (DCP) initiative published by the World Bank in its third edition (DCP3) has provided an up-to-date review of priority health interventions for low- and lower-middle income countries (LLMICs) through a systematic appraisal of evidence, new economic analyses, and expert judgment across 21 health areas, with the goal of influencing resource allocation at country level (Jamison 2018). DCP3 proposes two generic packages: an essential UHC package (EUHC) for lower middle-income countries that has 218 interventions, and a highest priority package (HPP) that includes 108 interventions to serve the immediate needs of low-income countries where the fiscal space is severely constrained (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 inter-sectoral policy actions). Pakistan is among the first countries to adopt the DCP3 evidence and approach in its effort to accelerate progress towards UHC and develop a national EPHS. The country experience has been extensively documented in an editorial and five papers published by the International Journal of Health Policy and Management in 2023-2024 (Alwan et al. 2024; Alwan, Siddiqi, Malik, et al. 2023; Baltussen et al. 2023; Huda et al. 2023; Raza et

al. 2024; Torres-Rueda et al. 2024). Specific aspects of the Pakistan experience published in the supplement are reviewed in chapters 1 and 15 in this volume.
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 that was endorsed by the government, and the challenges encountered. It concludes by presenting the lessons learned for the benefit of other LLMICs. The IJHPM supplement provides a more elaborate review of the experience and an overview of the lessons learned (International Journal of Health Policy and Management 2024).

2.0 Pakistan's Health Care System: Context and Challenges

Pakistan is the fifth most populous country in the world, with a projected population of 240 million people in 2023 - including Azad Jammu & Kashmir (AJK) and Gilgit Baltistan (GB). Pakistan's population is predominantly young, with 40 percent being under the age of 15 and 19 percent aged 15-25 years. Relatedly, 56 percent of the total population is in the productive age group (15-65 years), and 4.2 percent is 65 years and above (Pakistan Bureau of Statistics 2017b). In addition, Pakistan has been hosting more than 1.4 million registered Afghan refugees for over four decades (United Nations High Commissioner for Refugees 2022).

Pakistan is a lower-middle income country with the gross domestic product (GDP) US$ 383 billion i.e., per capita income of US$1,798 in 2021-22 (Ministry of Finance 2021). According to a 2019 government report , nearly 37 percent of Pakistanis live in multidimensional poverty (Planning Commission and United Nations Development Programme 2019). Poverty in urban areas is 32.1 percent, while rural areas display 39.3 percent of poverty levels.

According to the National Health Accounts data, the total per capita health expenditure from all sources is very low in Pakistan, at US$52 (Pakistan Bureau of Statistics 2017a), compared to US$135 in lower middle-income countries (LMICs), US$477 in upper middle-income countries (UMICs) and US$3,135 in high-income countries (HICs) (World Bank, n.d.). The low health spending in Pakistan can be attributed to the relatively small share of the total government spending on health – a level that is inadequate to support universal coverage with essential quality health services. Pakistan's public expenditure on health (PKR 657 billion/ US$ 4.1 billion in 2020-2021 (Ministry of Finance 2021) was less than 6 percent of the total government expenditure, compared to an average of 10 percent in developing countries and 15 percent in HICs (World Bank, n.d.).

Part of low government spending is also attributed to the limited capacity to mobilize revenues. In Pakistan, government efforts to raise taxes consistently fall short at 9.4 percent of GDP (base year 2016) in 2021 (World Bank, n.d.), compared to a minimum of 15 percent as a threshold that the International Monetary Fund (IMF) has identified as critical to engender sustained,

inclusive growth (World Bank Group 2019). Low levels of domestic government financing mean that there is currently a substantial gap between the costs of financing an essential package of quality health services for everyone and available resources. Good economic growth is critical to fill the gap, along with political stability and strong commitment for efficient and effective health reforms.

As a result of low levels of government spending, out-of-pocket payments (OOP) constitute a large share of health expenditures in Pakistan - 51.9 percent of the total health expenditure (Pakistan Bureau of Statistics 2017a) - as opposed to the global average of about 15 percent. These payments prevent some people from using needed essential health services, and push others into the poverty trap.

Pakistan's healthcare delivery system consists of a mix of public and private sector. As per Pakistan's constitution, provision of health is mainly the responsibility of provincial governments, other than some federal health function mentioned in the federal legislative lists I & II (*Pakistan Constitution*, n.d.). The public sector provides health care at multiple levels, which include community health workers, primary health care (PHC) centres, first level hospitals and tertiary hospitals (Ministry of National Health Services Regulations & Coordination 2019). In addition, outreach services are provided through vaccinators, and environmental and infectious diseases field staff. However, the core of the PHC system in the public sector are Health Houses (community-based Lady Health Workers (LHWs)), Basic Health Units (BHUs), Community Health Centres (CHCs/ or 24/7 BHUs) and Rural Health Centres (RHCs). Referral services are supposed to be provided for acute, ambulatory and inpatient care through the Tehsil/Taluka Headquarter Hospitals (THQs), and District Headquarter Hospitals (DHQs) supported by tertiary care and teaching hospitals (Table 1). Promotive and preventive services are augmented through public health programs (moving gradually towards horizontal integration) and through population level interventions.

Table 1: Public Sector Healthcare Facilities (MoF, 2021-22)

Type of Health Infrastructure	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

The private sector is also active at all five platforms of the healthcare delivery system i.e., community-based organizations (CBOs) and workers at the community level, clinics of general practitioners and nursing homes at the PHC centre level, < 50 bedded and >50 bedded hospitals as first level hospitals, tertiary or specialized hospitals, and population level interventions.

By the end of 2021, the total availability of hospital beds was estimated at 120,334 in the public sector and 112,841 in the private sector, which amounts to a total of 233,175. Overall, the hospital bed density (both public and private) was only 10 hospital beds per 10,000 population, against the desired minimum threshold of 18 hospital beds per 10,000 population (Ministry of National Health Services Regulations & Coordination, Disease Control Priorities 3 Country Translation Project, and World Health Organization 2022).

According to the National Health Vision 2016-2025, workforce constraints are the most critical factor in the provision of quality preventive, promotive and curative services (Ministry of National Health Services Regulations & Coordination 2016). The health sector faces an imbalance in the number, skill mix and deployment of human resources for health and 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. This results in significant brain drain across all levels. Adequate quantity, quality and well-performing health workers are crucial for an effective functioning of health systems. While Pakistan can achieve the target of an adequate number of physicians by 2030 considering its production capacity, achieving the required numbers of nurses, LHWs and midwives by 2030 continues to be a major challenge (Table 2).

Table 2: Essential Health Workforce - 2030 target and current status (M/o NHSR&C, 2022)

Type of Health Infrastructure	Target 2030	Current Status (Registered by the end of 2021)
Physicians	314,170	270,168
Nurses, Lady Health Visitors and Midwives	942,511	138,107

In 2016, the Ministry of National Health Services, Regulations & Coordination (M/oNHSR&C) and the provincial authorities agreed on a National Health Vision (NHV) 2016-2025 (Ministry of National Health Services Regulations & Coordination 2016). The Vision 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."*

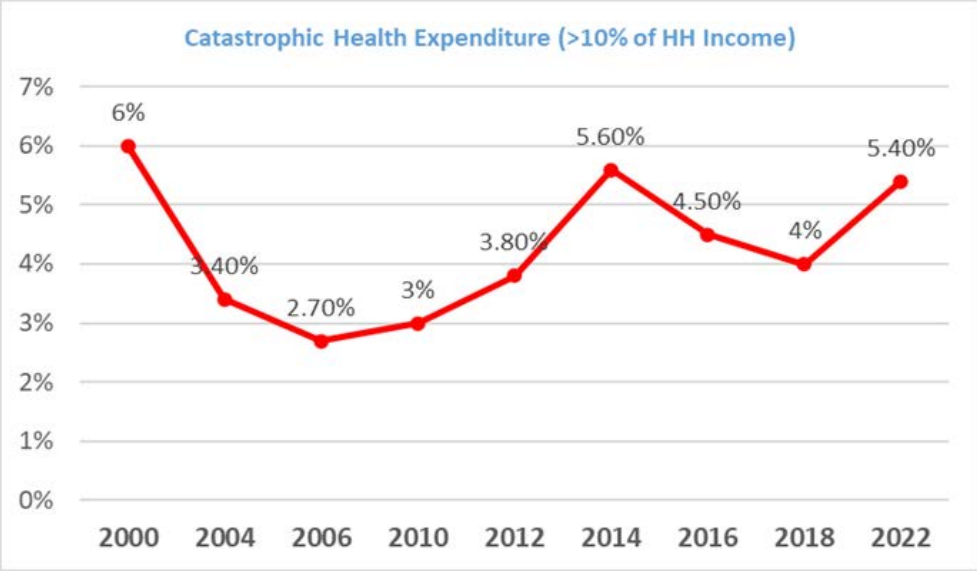
The NHV and its eight thematic pillars have the consensus among all provincial governments and the next generation of provincial/federating areas health strategies are aligned with the NHV. Localization of health-related SDGs in Pakistan offered a monitoring framework for the NHV, setting the UHC service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

Accordingly, the M/oNHSR&C and Provincial Health Departments started a number of UHC-related reforms to improve coverage, along with improvements in data quality for measuring progress. UHC-related data is regularly collated and analyzed by the Ministry not only at the national and provincial levels but also at the district level (Ministry of National Health Services Regulations & Coordination 2022). Table 3 provides a summary of the progress on UHC SCI at national and provincial levels and Figure 1 illustrates the trends in catastrophic health expenditures. Although the trajectory of the UHC SCI is positive, progress is very slow and it seems challenging that the country can achieve even the national target of 65% by 2030 set for the UHC SCI.

Table 3: Trend in UHC SCI at national, provincial/ area level 2015-21 (M/oNHSR&C, 2022)

	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%
AJK	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%**

Figure 1: Trends in Catastrophic Health Expenditure (PBS, 2000-18)



3.0 EPHS/ UHC Benefit Package Development Process and the Methodology Adopted

The Government of Pakistan (GOP) is committed to UHC and to achieving equitable access to essential health care as clearly stated in the NHV 2016-25. The provision of essential health services is also underscored in the 12th Five-Year Plan (health chapter) (Ministry of National Health Services Regulations & Coordination 2018) and National Action Plan (2019-23) (Ministry of National Health Services Regulations & Coordination 2019). To translate government's commitment into action, the M/oNHSR&C established a collaboration with the DCP3 Country Translation Project and the World Health Organization (WHO) for the development of an essential package of health services based on localized evidence and considering the DCP3 recommended interventions.

The effort was launched during an international workshop, which was jointly organized by the GOP, DCP3 and WHO in Islamabad in 2018. Participants from countries of the Eastern Mediterranean were sensitized to the concept and the evidence on cost-effective interventions for LLMICs described in the nine DCP3 volumes and model packages (Disease Control Priorities 3 2018). The workshop recommended that Pakistan should develop an evidence-informed EPHS and an inter-sectoral action plan (IAP) based on the DCP3 global recommendations. The recommendation was subsequently endorsed by the Inter-Ministerial Health & Population Forum. A formal request was subsequently submitted to the DCP3 Secretariat to provide technical assistance for adapting the DCP3 evidence to develop the EPHS/UHC benefit package for Pakistan.

A roadmap for the development of EPHS/UHC benefit package for Pakistan was developed following a joint DCP3 and WHO mission in January 2019. Around the same time, the M/oNHSR&C initiated a process to map the existing essential health services in Pakistan. The assessment revealed that only 135 (or 62%) of the 218 DCP3 EUHC interventions were being implemented in facilities (not withstanding service quality). Of these, 42 (31%) were generally available and 93 (69%) had limited availability. Only 16 of the 45 (35%) EUHC interventions were available in the non-communicable diseases (NCDs) and injuries cluster (Table 4) (Ministry of National Health Services Regulations & Coordination, World Health Organization, and Disease Control Priorities 3 2019).

Table 4: Mapping of available DCP3 EUHC health interventions by cluster

Cluster[(a)]	EUHC interventions	# Available interventions	General availability	Limited availability
RMNCAH	67	50	22 (44%)	28 (56%)
Communicable diseases	52	32	10 (31%)	22 (69%)
NCDs & Injuries	45	16	6 (37.5%)	10 (62.5%)
Health Services	54	37	4 (11%)	33 (89%)
Total	**218**	**135**	**42 (31%)**	**93 (69%)**

[(a)]Clusters matching definitions from DCP3

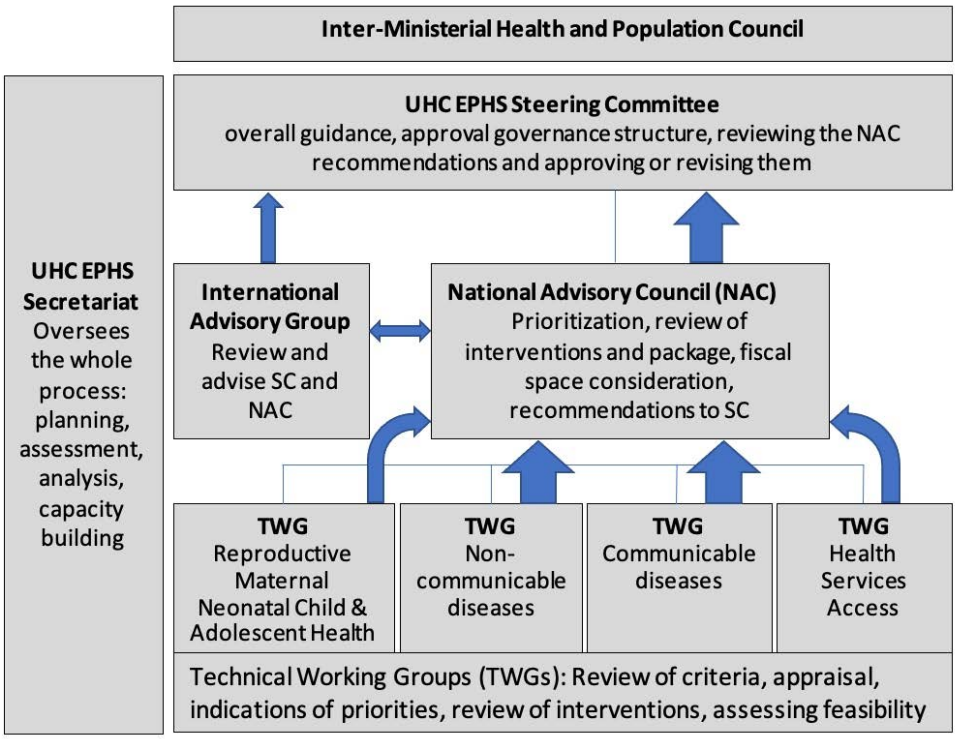
The **mapping exercise** demonstrated major gaps in accessing essential services across all four clusters proposed by the DCP3 model package. Following this, an initial list of 193 out of the 218 EUHC interventions were recommended for formal assessment and prioritization. Concurrently, four National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

The DCP3 Country Translation project for Pakistan was formally established in July 2019 during the joint DCP3 and WHO Mission and a partnership was agreed between the Health Planning, System Strengthening and Information Analysis Unit (HPSIU) of the M/oNHSR&C, the Department of Community Health Sciences of Aga Khan University (AKU), Health Services Academy (HSA), World Health Organization, and the DCP3 Country Translation Project based at the London School of Hygiene & Tropical Medicine (LSHTM). A formal memorandum of understanding between the Ministry and DCP3 was also signed.

The process of developing the package was guided by a set of **key principles** that included: transparency and inclusivity, national ownership and execution, focus on ensuring the affordability of the package and feasibility of its implementation, and engagement of public sector institutions, non-governmental 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 the M/oNHSR&C, with technical support from the DCP3 Country Translation Project (Figure 2).

Figure 2: Governance Structure for the Development of UHC Benefit Package of Pakistan



Note: Arrows represent the flow of information. Reporting obligations are represented by larger arrows

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 (NAC); (3) the UHC EPHS Steering Committee, chaired by the federal Minister of Health; and (4) the Inter-ministerial Health and Population Council (IMHPC), which includes the federal and provincial ministers of health and population. In addition, an International Advisory Group (IAG), comprising experts and DCP3 authors, reviewed the process and methodologies, and provided extensive input to successive versions of the EPHS.

A survey among all **technical working groups**' members was conducted 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 socio-economic impact. The assessment process considered three criteria using quantitative evidence: burden of disease, budget impact, and cost-effectiveness. The other criteria identified by the survey were considered and discussed by the TWGs, but data on these criteria were insufficient to make a quantitative assessment.

For **evidence on burden of disease**, the most recent evidence was obtained from the Institute for Health Metrics and Evaluation (IHME) in the 2017 global burden of disease (2019 data for provincial /federating areas EPHS)(Institute for Health Metrics and Evaluation 2019). Evidence on cost-effectiveness, a critical step in the choice of interventions, was primarily derived from the Tufts Medical School Global Health Cost-Effectiveness Analysis registry (Centre for the Evaluation of Value and Risk in Health 2019), which compiles incremental cost-effectiveness ratio (ICER) data on a large number of interventions. The remaining ICERs came from the DCP3 database. Applicability of global cost-effectiveness evidence to the country context was systematically assessed using general and specific knock-out 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 was undertaken from a provider's perspective, using a one-year time frame. A bottom-up approach to costing was applied to community, health centre and hospital platforms, while 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 as a gold standard for costing health interventions in LMICs (Anna Vassall, Sedona Sweeney, Jim Kahn, Gabriela B. Gomez, Lori Bollinger, Elliot Marseille, Ben Herzel, Willyanne DeCormier Plosky, Lucy Cunnama, Edina Sinanovic 2017). Unit costs per beneficiary for each intervention were calculated in 2019 US$.

For each of the 170 shortlisted and costed DCP3 EUHC interventions, the evidence on **decision criteria** was reported to the TWGs and the NAC 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 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, DALYs averted, and a bookshelf of interventions were also presented, using a combination of the HIPTool (University College London 2020) and bespoke analyses.

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

As highlighted before, affordability and feasibility of implementation of the EPHS is one of the key principles adopted for the design process and since the cost of the district package exceeded the fiscal space for public health expenditure, a second prioritization process was necessary (Alwan, Siddiqi, Safi, et al. 2023). Estimating that around 60% of public health expenditure is allocated to the district level, the M/oNHSR&C arrived at a limit of US$13 per

capita for a package of interventions for immediate implementation. The aim was to develop an affordable and feasible package that could immediately be implemented until health allocations increased to match the costs of the full district-level EPHS. The NAC decided to recommend a more limited 'immediate implementation' package (IIP) of district-level interventions, covering the community, health centre, and first-level hospital platforms.

The IIP was subsequently reviewed by the IAG and by the various departments and programmes of the M/o NHSR&C. A final package of 88 district-level interventions and 12 population-level interventions was approved in October 2020 by the UHC-EPHS Steering Committee and the IMHPC.

The IMHPC further decided to localize scientific evidence at provincial/ federating area level and produce province/ area specific EPHS documents. This exercise was done in 2021 by the HPSIU using the national description of interventions, ICER and costing of each intervention, except minor adjustments to salaries using provincial/area specific values. The remaining evidence was specific to the province/federating area, including province/area specific burden of disease data (2019), targeted population, budget impact, estimates for health system cost, unit cost per intervention and per capita, and DALYs averted, among others.

4.0 The Pakistan Essential Package of Health Services

The final EPHS was developed and approved at the national level, which comprised a total of 88 healthcare interventions across three levels of care i.e., community level, PHC level, and first-level hospitals. The evidence was gathered on the burden of disease in Pakistan, cost-effectiveness, budget impact, feasibility, financial risk protection, equity and social context of Pakistan. It was estimated that this district EPHS would cost on initial implementation US$12.98 per person per year (Table 5).

Table 5: Distribution and Cost of EPHS Interventions by Cluster & Platforms

Platform	Initially prioritized	Finally selected	Distribution by clusters				Unit cost ($) /person/year
			RMNCAH	Infectious diseases	NCD & Injury	Health services	
Community Level	28	19	15	3	1	0	2.92
PHC Center Level	43	37	13	7	9	8	4.40
First Hospital Level	46	32	14	2	3	13	5.66
District EPHS	117	88	42	12	13	21	12.98

There are 19 interventions at the community level, which are mainly provided through LHW and Community Midwives (CMW), 37 interventions at the PHC level, to be offered through BHUs, RHCs and dispensaries, and 32 interventions at the first-level hospitals, which are Tehsil Headquarters (THQ) and District Headquarter (DHQ) hospitals in the respective districts. According to the clusters and packages, almost half of the interventions (42) are in the RMNCAH cluster, whereas the other half are in the remaining three clusters with a proportion of 12 in the infectious diseases, 13 in NCDs and 21 in health system services (Table 5).

5.0 Provincial/Federating Areas EPHS Development

After the development of the generic EPHS for Pakistan, provincial adaptation of the package was a critical step before rolling out the EPHS across the provinces/federating areas. This is because each province is unique with respect to health system dynamics, prioritized interventions, health service delivery, and barriers to accessible health care. As such, it is crucial that each province considers the local context and evidence in the adaptation of EPHS, in order to streamline interventions, maximizing impact and population health outcomes. In this regard, each province/area carried out a separate exercise and prioritized interventions in their EPHS. The total number of interventions at five platforms varied from 132 to 153, while for the district EPHS the number of interventions varied from 90 to 104, costing US$15.82 and averting almost 15.32 million DALYs on average. Similar to 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 of the provinces and a second prioritisation process may therefore be required. A more elaborate description of the provincial packages is included in a comprehensive report published by the M/oNHSR&C and the DCP3 Secretariat (Ministry of National Health Services Regulations & Coordination et al. 2023).

6.0 Moving towards 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 sub-sectoral strategies and plans in Pakistan, such as the National NCD and Mental Health Action Framework 2021-30, Lady Health Workers' Strategic Plan (2022-28), UHC Investment Case, Polio Eradication related health system reforms in 40 high-risk union councils and the Health-related Inter-sectoral

Interventions Action Plan 2022-30. In the future, the Ministry is considering how to use the scientific evidence and package for reforms in the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) investments in infectious diseases.

The process of the DCP3-UHC project was based on sound advocacy and was able to secure commitment from the highest level, including the Cabinet, Inter-Ministerial Health & 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 (NHSP) was established in collaboration with the World Bank to facilitate the pilot implementation of the UHC package. The program is initially funded through a World Bank loan of US$ 300 million and US$ 132 million as grants from some development partners (GFF, BMGF, GAVI and GFATM).

7.0 Gaps and Challenges

Overall, the DCP3 Country Translation Project in Pakistan is a success story thus far. However, during the process of EPHS design several gaps and challenges have been identified that will also have implications later at the time of implementation. Some of the challenges are highlighted below.

Apart from the unprecedented crisis caused by the COVID-19 pandemic, which coincided with the EPHS development processes, several important challenges were encountered. The scarcity of local data encountered during the health system assessment and prioritization processes was a significant constraint that had to be managed. As in most low- and lower middle-income countries, the reduced capacity to collect, analyze and generate data, particularly evidence on the cost-effectiveness of interventions had to be managed by the use of regionally generated data and global databases despite limitations in relevance and applicability of such evidence. Backup support is needed for effective monitoring during EPHS implementation 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. While the former has been factored in the cost of the package, the latter has not. Hence substantial investment in infrastructure will be needed during package implementation.

There is also a need for greater flexibility and an institutional mechanism for the inclusion of interventions that address newly emerging diseases (e.g., COVID-19) and developing technologies (e.g., COVID-19; malaria vaccine); and mandates such as International Health Regulations within the package.

8.0 Lessons Learned in the UHC EPHS Process

In this section, we provide a summary of the key lessons learned in Pakistan. However, a more elaborate review of the experience of six countries, including Pakistan, in developing their own EPHS was published by the DCP3 Country Translation Project (Alwan, Yamey, and Soucat 2023).

The lack of institutional capacity in priority-setting and design of essential packages 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 the M/oNHSR&C. However, capacity building in these 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 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 programmes for greater value for money. At the same time, greater leadership by and synergy among ministries of health, finance, and planning is needed for enhanced donor coordination.

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

The Pakistan experience also highlights important gaps in the area of package design. First, a robust process of societal dialogue and community engagement was not conducted. Community engagement would have helped in determining how the public perceived their 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, a 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 prevent 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, gave particular emphasis to building analytical capacity within the M/oNHSR&C in priority setting, economic evaluation, and setting and revising packages of essential health services. A positive spinoff was the successful adaptation of the national EPHS to develop provincial packages, which were primarily done by the 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. Considering 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: a) enhance the efficient use of available resources at least partly by implementing an evidence-informed EPHS, b) generate new health sector-specific resources through earmarked public health taxes on tobacco, unhealthy foods and beverages, and other innovative means, c) increase health allocation by reprioritizing the government budget, d) mobilize additional resources through external financing, and e) build implementation and improvement capacity to deliver health services with greater efficiency.

Additionally, there are important lessons learned 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 LMICs, 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 LMICs can realistically afford given the limited public health spending (Alwan, Siddiqi, Malik, et al. 2023; Gaudin et al. 2023). This 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 emerging health challenges.

9.0 Conclusion

The development of the EPHS has been at the centre 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. However, the next challenge 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 towards UHC. 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 are key prerequisites.

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