REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

AMERICAN UNIVERSITY OF BEIRUT

unicef
for every child

Optimizing primary healthcare financing for universal health coverage in Lebanon

A COMPREHENSIVE ANALYSIS

K2P POLICY MEMO

OCT 2025

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Problem

Lebanon's primary healthcare (PHC) system is facing mounting pressures due to compounding crises and a chronically constrained financing model. More than half of the population lacks formal health coverage, while out-of-pocket (OOP) payments have risen sharply from 33% in 2018 to over 85% in 2022, limiting access for many households. The PHC system relies extensively on international donors and NGOs, which has contributed to variations in financing, service delivery and standards of care.

This memo provides an analysis of Lebanon's PHC financing structure across six components: benefit package design, cost analysis of the LPSP model, capital and operational expenditures, fiscal space analysis, drug procurement savings, and provider payment mechanisms.

Key Findings

The findings point to critical challenges in financing and service delivery, while also highlighting opportunities for greater efficiency, equity, and sustainability. The analysis identifies cost-saving measures, such as switching to generics, and assesses scenarios for increased fiscal space. Priority areas for improvement include strengthening referral pathways, expanding the PHC package, and improving financing arrangements.

A summary of key findings by component is provided below:

Component 1 – PHC Benefits Package:

- The LPSP provides a strong foundation for PHC reform; however, some services, such as delivery care, rehabilitation, basic emergency services, and palliative care, are not yet covered while others (e.g., cancer screening and laboratory tests) are included within broader service packages.
- Referral and integration between levels of care remain limited, affecting continuity and efficiency.
- Expanding and strengthening the LPSP benefits package is essential for achieving equitable and universal health coverage by 2030.

Component 2 – Cost Analysis of LPSP:

- The LPSP is more cost-efficient than non-standardized PHC models, delivering broader services at approximately $105,000 less per facility annually.
- Main cost drivers include lab tests (34%), medications (29%), and staff (22%).
- Preventive care offers long-term value but remains underutilized.

Component 3 – Cost of PHC Infrastructure:

- Setting up a full PHC center (with lab and X-ray) costs ~$284,000 in capital investment.
- Annual operating costs range from ~$200,000 to ~$440,000 depending on utilization and service scope.
- Upgrading dispensaries to full PHCCs would require substantial additional resources
- Significant geographic disparities in capacity and readiness persist.

Component 4 – Fiscal Space:

- Under status quo, PHC funding falls short by $242M/year.
- Reallocating 35% of MoPH budget to PHC + increased external aid could close the funding gap entirely.
- Current government spending covers just 13.4% of total health spending (vs. 60–70% in middle-income peers).

Component 5 – Generic Drug Savings:

- Switching to cost-effective generics could save the health system ~$52 million/year.
- Acute care drugs showed the highest savings potential (15.6%) due to available alternatives.
- Cancer and chronic disease drugs also offer significant but underutilized savings, though fragmentation in procurement currently limits efficiency.

Component 6 – Provider Payment Mechanisms (PPM):

- PHCCs currently operate under diverse payment systems (salary, fee-for-service, capitation, P4P), with no unified framework.
- This fragmentation leads to inefficiencies and could disincentivize performance and equity.
- A more coherent mixed-model approach with performance-linked elements could improve equity and effectiveness.

Call to Action

Despite reform efforts, Lebanon's PHC system remains fragmented and under-resourced. Lebanon must restructure PHC financing to ensure equitable, sustainable, and universal health coverage by 2030. Strategic financing reforms, including reprioritizing PHC in national budgets, aligning external support with domestic goals, leveraging fiscal space through reallocation and external aid, transitioning to pooled, performance-linked payments and strengthening monitoring frameworks, are critical to ensuring sustainable progress toward UHC by 2030.

This memo offers a roadmap that outlines five actionable recommendations aimed at enhancing PHC financing over the next six years:

1. Establish PHC as the Pillar of Lebanon's Health System

2. Adopt, Strengthen & Scale Up the PHC Service Package (LPSP)

3. Bridge the Financing Gap to Ensure Sustainable PHC delivery
    - Reallocate government health spending to prioritize PHC.
    - Mobilize external resources to close the PHC financing gap.
    - Reform procurement practices to reduce drug costs.

4. Refine and Expand Strategic Provider Payment Mechanisms
    - Build on current arrangements to develop a more coherent mixed-model approach with performance-linked elements.

5. Enhance PHC Governance and Accountability, including Monitoring & Evaluation (M&E)

THE PROBLEM

At a Glance

CHALLENGE	FACT
High Uninsured Rate	Over 50% of the population lacks health coverage.
Catastrophic Out-of-Pocket (OOP) Spending	OOP spending rose from 33.1% (2018) to over 85% (2022), largely driven by the economic crisis and the sharp reduction in third-party coverage, which shifted costs directly onto households.
PHC Severely Underfunded	PHC receives less than 10% of health spending, while over 64% goes to hospitals and medications.
Heavy Donor Dependence	The LPSP and many PHC services are entirely donor-funded, making them vulnerable to external funding shifts. External and INGO support accounts for over 27% of health expenditure.
Medicine Inaccessibility	Medicines remain one of the largest contributors to catastrophic health spending, representing 57% of total health expenditures in 2020. Over half of families report difficulties in obtaining needed medications, further straining population health and deepening the ongoing crisis.
Health Workforce Exodus	Since 2019, 40% of doctors and 30% of nurses have emigrated, leaving 70% of public hospitals understaffed.
Unequal Geographic Distribution of PHCCs	PHCCs are unevenly distributed across governorates, leading to gaps in coverage and overburdened centers in underserved areas.
Fragmented Financing System	Multiple payment schemes, funding pools, and supervising entities lead to inefficiencies and poor coordination.
Overlapping National Crises	Economic collapse, COVID-19, the Beirut port explosion, and regional conflicts have eroded healthcare infrastructure and household purchasing power.

IF PHC FINANCING IS NOT REFORMED NOW:

- The uninsured population will grow
- Out-of-pocket costs will push more into extreme poverty
- Donor fatigue could collapse critical services
- Skilled health workers will continue to leave
- UHC by 2030 will be out of reach

FINANCING REFORM IS THE FOUNDATION FOR:

- Sustainable service delivery
- Equitable access to essential care
- Retaining health workers
- Realizing Lebanon's health strategy and UHC commitments

Background

Universal Health Coverage (UHC) has become a global priority, aiming to ensure that all individuals and communities can access essential health services without facing financial hardship (WHO, 2023a). This is emphasized in global policies such as Sustainable Development Goal (SDG) Target 3.8, which calls for financial risk protection, access to quality healthcare services, and affordable medicines and vaccines for all. The importance of UHC is further reinforced in key commitments like the 2019 UN High-Level Meeting on UHC, highlighting its role as a cornerstone of global health progress (UN General Assemblies, 2021).

Primary health care (PHC) serves as the backbone of UHC, providing the first point of contact within healthcare systems and ensuring continuous, comprehensive, and affordable care for all individuals. It plays a crucial role in delivering preventive, curative, and rehabilitative services that address the majority of a population's health needs across the lifespan.

To ensure PHC fulfills its potential as the backbone of UHC, sustainable financing is essential. Effective PHC financing provides the necessary resources to deliver comprehensive care across all population groups, preventing the financial burden from falling on individuals.

Despite its central importance, the financing of PHC continues to pose a major challenge. Insufficient investment, coupled with fragmented financial mechanisms and an over-reliance on out-of-pocket payments, limits the ability of PHC systems to provide equitable and comprehensive care (Hanson et al., 2022). This shortfall is particularly pronounced in low- and middle-income countries, where systemic barriers often prevent effective service delivery, making the case for coordinated policy reforms and increased financial support (Alegre et al., 2024; Moosa, 2022).

Lebanon's PHC Network

Lebanon's primary healthcare system is a critical component of the country's healthcare infrastructure, serving approximately 2.1 million Lebanese citizens, 1.5 million displaced Syrians, 211,400 Palestinian refugees, and around 176,504 migrants (UNICEF, 2023; UNHCR,2024; IOM, 2024) The system is characterized by a blend of public and private providers, with the Ministry of Public Health Primary Healthcare Unit (MoPH/PHC) overseeing a network of 311 primary healthcare centers (PHCCs) (Figure 1).

These PHCCs offer a wide range of services, including consultations, vaccinations, medication for acute and chronic illnesses, child and noncommunicable disease care, sexual and reproductive health, malnutrition management, mental health support, disability services, dental care, health promotion, and referrals (WHO, 2022).

Figure 2 illustrates the distribution of these PHCCs across Lebanon's governorates, highlighting regional imbalances that may contribute to service gaps. According to ownership distribution data (Figure 3), 12% of PHCCs are operated by government entities (MoPH/PHC and the Ministry of Social Affairs [MOSA]), 20% are managed by municipalities, and the majority—67%—are run by non-governmental organizations (NGOs), demonstrating the prominent role of the private sector (WHO, 2024; Hamadeh et al., 2020).

In 2021, the Ministry of Public Health redesigned its PHC package of services, now called the long-term primary health care subsidized protocol (LPSP), which entirely depends on donor funding.
K2P Policy Memo: Optimizing primary healthcare financing for universal health coverage in Lebanon.
The LPSP offers the most vulnerable population groups a package of services for general wellness and prevention, antenatal care, NCD and mental health care, disability care, and communicable disease care (WHO, 2023b).

Over the past decade, Lebanon has seen significant growth in its PHCC network, expanding from 138 in 2010 to 311 in 2023 (Figure 4). This growth reflects efforts to improve access to primary healthcare across the country (MoPH, 2023).

However, governance and financing challenges persist. The absence of a centralized regulatory framework leads to inefficiencies in service coordination, resource allocation, and financial sustainability. Lebanon's PHC system relies heavily on inconsistent government funding, international donors, and NGO contributions, resulting in service gaps, resource shortages, and long-term sustainability concerns. Additionally, private PHCCs are primarily financed through out-of-pocket (OOP) payments, which make up a significant proportion of total health expenditure (Aoun & Tajvar, 2024). This financial model creates substantial barriers to care for many individuals, further exacerbating health inequities and access disparities.

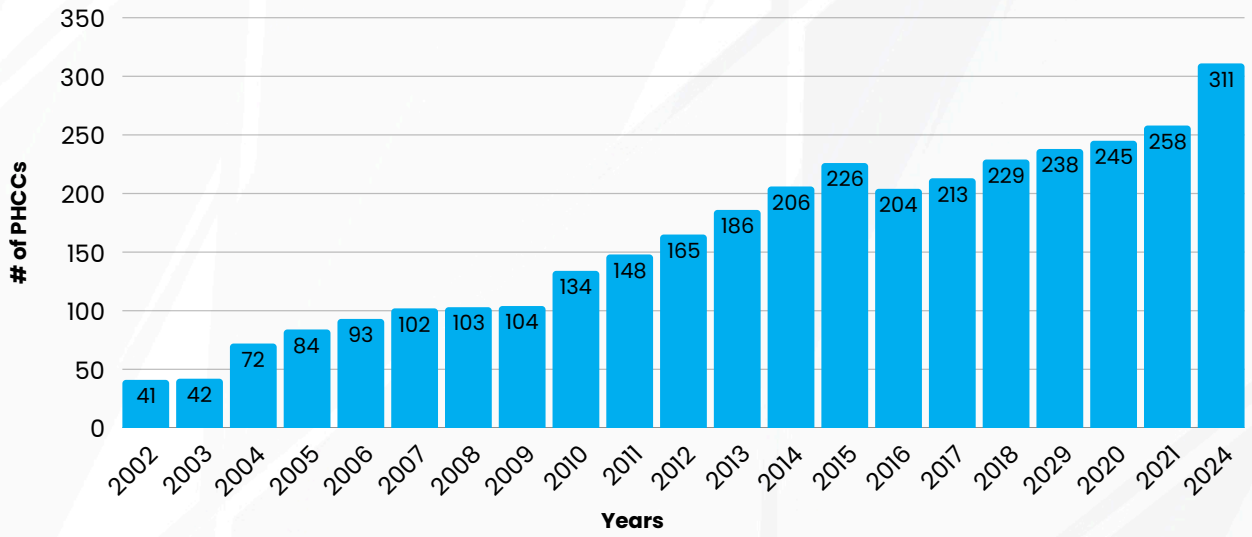


Figure 1: Overview of PHC Centers in Lebanon (2002–2024).
Source: (MoPH/PHC, 2021 ;MoPH/PHC, 2024)

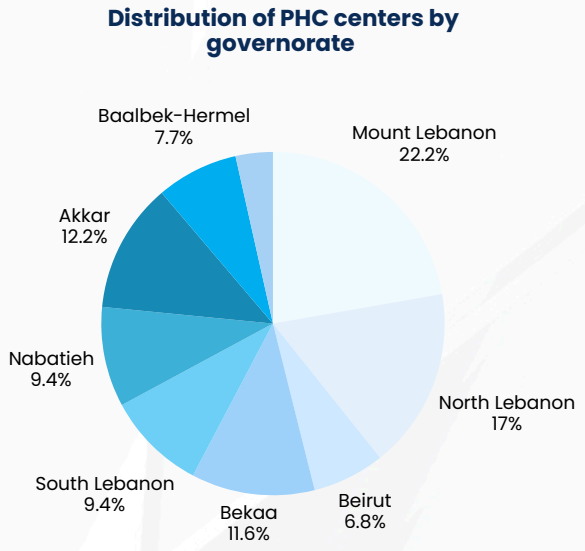


Figure 2: Distribution of PHCCs across governorates (2024).
Source: (MoPH/PHC, 2024)

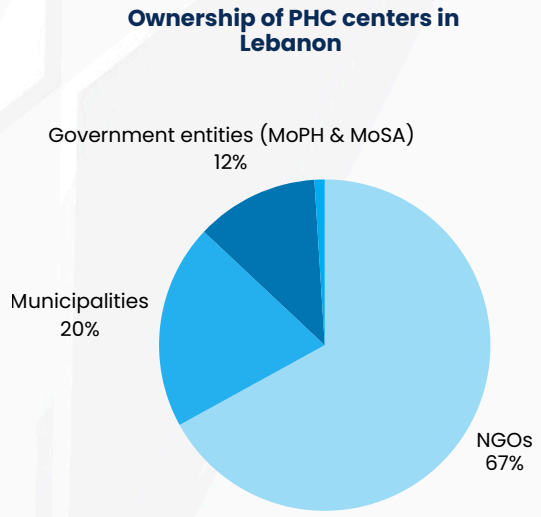


Figure 3: Distribution of PHCC ownership.
Source: (Hamadeh et al., 2020)

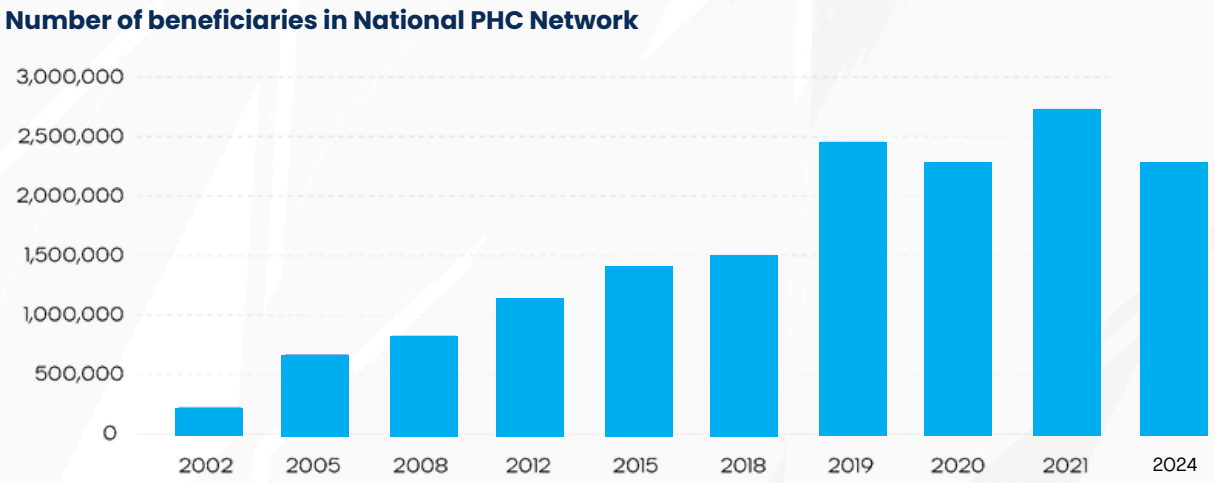


Figure 4: Number of beneficiaries in national PHC network across the years.
Source: (El-Jardali et al., 2022); (MoPH/PHC, 2025)

Lebanon's Overlapping Crises & Policy Efforts towards UHC

Since 2019, Lebanon has been grappling with overlapping crises, including economic collapse, the COVID-19 pandemic, the Beirut blast, and the recent war with Israel. The Lebanese lira lost 98% of its value by July 2023, and inflation soared to 172%, worsening financial hardships. The World Bank ranks Lebanon's economic crisis among the top 10 most severe global crises since the mid-19th century, underscoring the gravity of the situation and its profound impact on people's lives.

The multiple crises in Lebanon have had a profoundly negative impact on the population:

- **82% of the population** is living in multidimensional poverty, with health expenditures alone contributing to **30% of this hardship**, highlighting the severe financial burden placed on households.
- **Lack of insurance and high out-of-pocket costs** have led to catastrophic health expenditures, significantly reducing access to healthcare for families and children. Over 50% of the population lacks healthcare coverage. The National Social Security Fund (NSSF) covers only 10% of health services, forcing beneficiaries to pay the remaining 90% out-of-pocket or seek private insurance. Out-of-pocket healthcare spending rose from 33.1% in 2018 to more than 85% in 2022 (El-Jardali et al., 2023).
- **Approximately one-third of the population** is deprived of healthcare, leaving millions without essential services.
- **Medicines are the single largest driver of catastrophic health spending,** accounting for **57% of total health expenditures in 2020**. Over half of families report being unable to obtain necessary medications, exacerbating the health crisis (ESCWA, 2021).
- Approximately **40% of Lebanon's doctors and 30% of nurses have emigrated** since 2019, leaving **70% of public hospitals understaffed** and forcing the closure of critical units (Washington Post, 2021).

Despite these significant challenges, Lebanon has made a commitment to achieving UHC by 2030, with a focus on equitable access to healthcare services and financial protection, particularly for the most vulnerable populations. This commitment is underpinned by national policies, including the Lebanon Primary Health Care Road Map 2023–2027 and the Lebanon National Health Strategy Vision 2030, which emphasizes the pillar "Out of the Crisis and Towards Better Health for All."

The government is currently drafting a legal framework to introduce UHC, aimed at enabling critical reforms to ensure access to healthcare for all by pooling the population's health risks into a financially sustainable health system. This initiative aligns with recommendations outlined in the World Bank Health, Nutrition, and Population Policy Note: Health Financing in Lebanon—Key Issues and Policy Options (2024), which underscores the urgent need for a restructured and sustainable approach to health financing.

Lebanon is committed to improving the health of the population and increasing the efficiency of health service delivery through strengthening PHC. As part of this commitment, the MoPH/PHC has developed a roadmap for the phased implementation of PHC reforms to improve access to and the responsiveness of PHC services. These efforts are aligned with the Lebanon National Health Strategy—Vision 2030, which emphasizes building a resilient, equitable, and efficient healthcare system to ensure better health outcomes for all.

However, effective and efficient implementation of the revised PHC model requires a multitude of efforts and increased public investments in PHC, and therefore, there is a need to rethink the financing model of healthcare, especially at the PHC level, which has been underfunded relative to curative care.

Health Financing in Lebanon

Health financing is a critical component in building a robust healthcare system, providing financial risk protection (FRP). However, Lebanon's PHC financing is fragmented, underfunded, and unsustainable.

The overlapping crises in Lebanon have caused a severe decline in health service delivery, pushing the healthcare system to the brink of collapse. Since 2019, the economy has contracted by over 38%, with an estimated 6.6% decline in 2024 alone, severely impacting all sectors, including health (World Bank, 2024). Political instability, economic downturn, and deteriorating working conditions have promoted an exodus of healthcare workers with approximately 40% of doctors and 30% of nurses emigrating since 2019 (The Washington Post, 2021). This has left over 70% of public hospitals understaffed, forcing the closure of critical units like intensive care and oncology services. In addition, financial barriers, an energy and fuel crisis, and the lifting of subsidies have significantly stretched the healthcare system to its limits, jeopardizing its ability to meet the population's needs.

While government's spending to health has increased, rising from 3.36% of the budget in 2020 to 13.4% in 2024, the share of total health spending allocated by the government has declined. This is due to the growing reliance on private and out-of-pocket spending, as shown in the table below.

Health Financing Overview

Table 1: Overview of health financing in Lebanon (2005-2021).

Indicator	2005	2010	2015	2020	2021
Health Spending US$ per capita (CHE)	350	572	579	994	118
Government Health Spending % Health Spending (GGHE-D%CHE)	38.4	40.3	44.8	33.1	12.8
Out-of-Pocket (OOP) spending % of Health Spending (OOPS % CHE)	47.3	43.6	32.7	44.2	28.34
Other private spending including INGOs % of Health Spending	13.81	15.32	18.38	21.87	48.1
% total public sector expenditure on PHC	/	/	<10%	5.0%	/
Public spending on health out of total government spending	/	/	/	5.8%	3.0%
Out-of-Pocket (OOP) spending per capita ($)	165.4	249.5	189.2	439.6	33
Other private per capita spending including INGOs ($)	48.3	87.6	106.4	217.4	56.8

Source: (World Bank, 2020; WHO, 2017; World Bank, 2023)

As shown in Figure 5, Lebanon has lagged behind both regional and global benchmarks in two key indicators: General Government Health Expenditure as a percentage of total health expenditure (GGHE % of THE) and Out-of-Pocket spending as a percentage of total health expenditure (OOP % of THE).

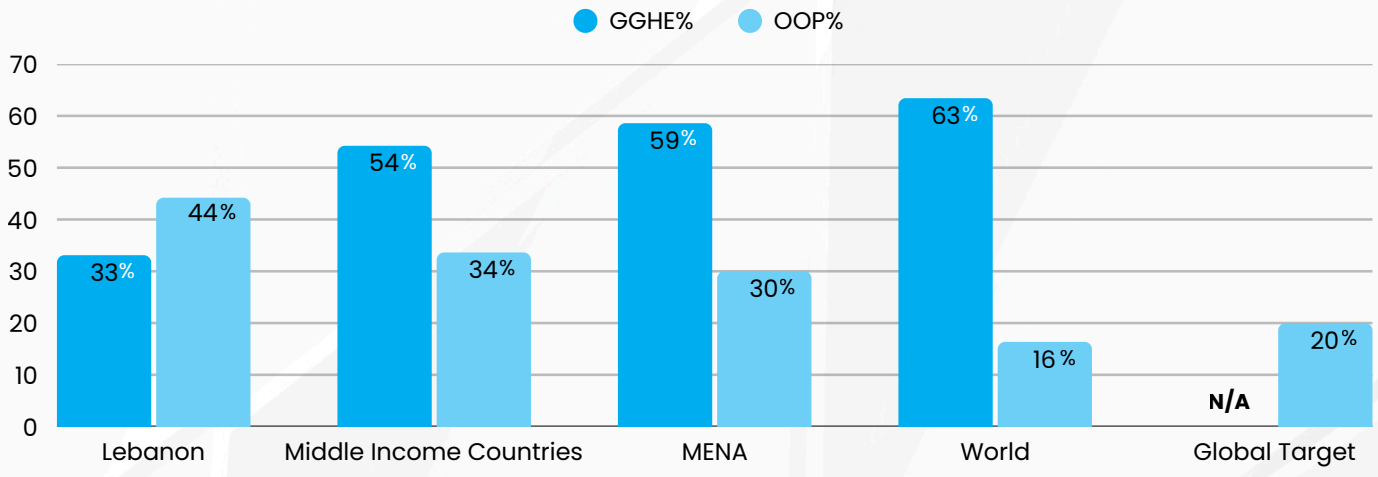


Figure 5: Out-of-Pocket Spending and General Government Health Expenditure as a Percentage of Total Health Expenditure (GGHE % of THE and OOP % of THE) – Lebanon and Benchmark Regions. Source: (World Bank, 2024); (WHO, 2023c)

In Lebanon, the government's spending on health – compared to total health spending – is low compared to selected countries in the MENA region and with the middle-income-country and the global average (See figure 6).

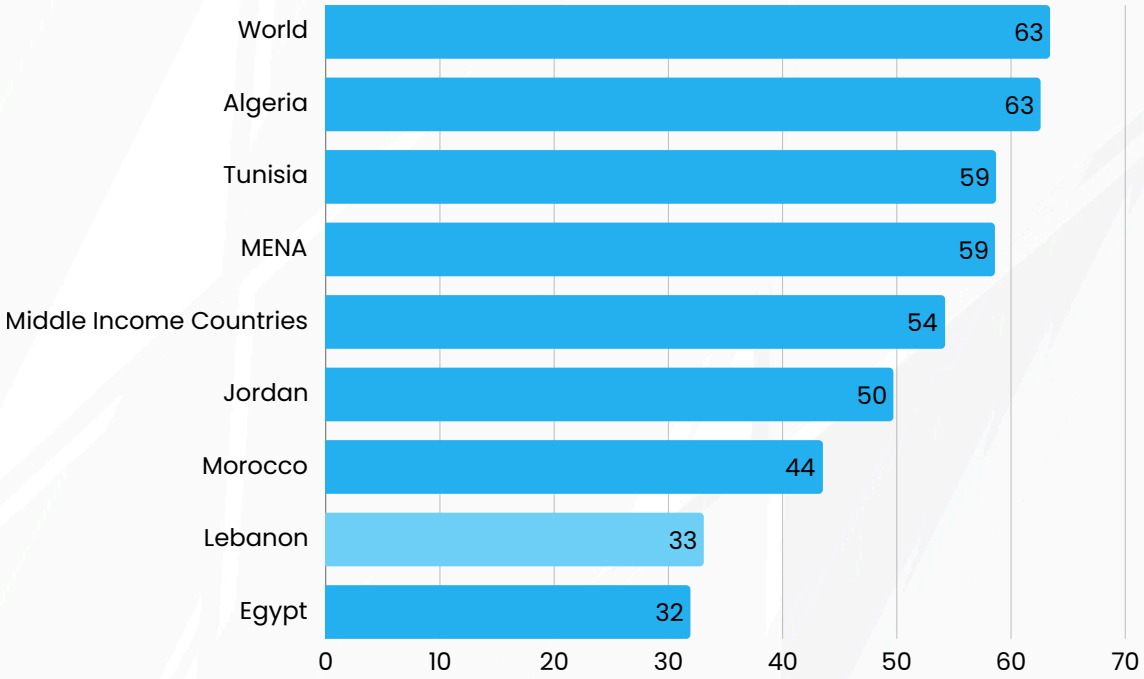


Figure 6: Total Government expenditure as a proportion to Total Spending (GGHE % THE 2020)

When comparing the government's health budget allocation to that of other sectors, such as education, defense, and debt servicing, it is evident that the health sector has been relatively underfunded over the years (Figure 7).

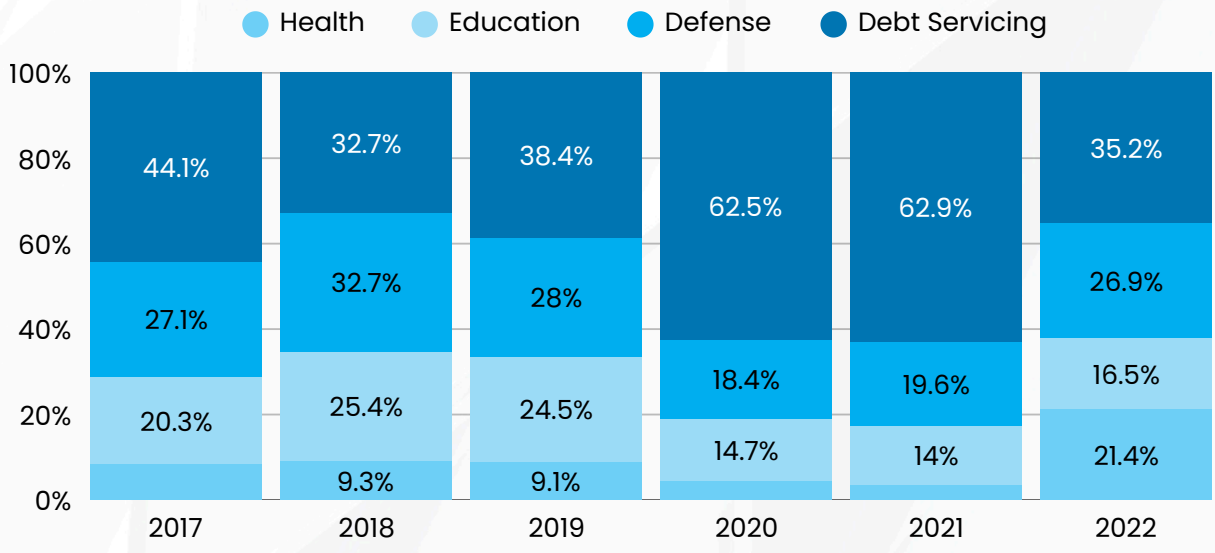


Figure 7: Actual Government Budgetary Allocation to Selected Sectors
Source: http://www.institutdesfinances.gov.lb/data/lebanon-citizen-budget/various issues

Additionally, Lebanon lags behind in minimizing external health expenditure as a proportion of current health expenditure compared to both the MENA region and global standards (see figure 8).

Note: The data presented was for 2020 at the start of the crisis period and it does not include private not-for-profit organizations like INGOs.

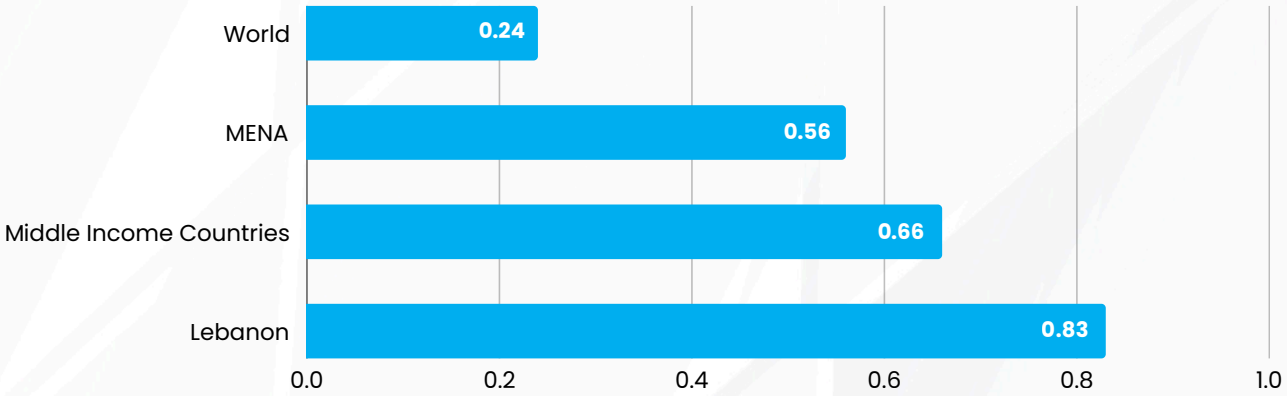


Figure 8: External Health Expenditure (% of Current Health Expenditure) Lebanon and Rest of the World.
Source: https://data.worldbank.org/indicator/SH.XPD.EHEX.CH.ZS?locations=LB

PHC Financing Issues

The government's funding for primary health care has been inadequate, hindering universal and equitable access to services. Lebanon's healthcare system faces fiscal inefficiencies, characterized by an imbalance in the allocation of resources. In 2018, only 5% of the MoPH's budget was allocated to PHC services, with 86% spent on hospital bills (64%) and medications (22%). This allocation reflects an overreliance on hospital-based curative care, rather than a comprehensive approach that emphasizes primary care and health equity. This imbalance has contributed to gaps in health equity and expanding PHC services, which are critical for sustainable healthcare systems.

Fragmented purchasing of PHC services in Lebanon imposes additional challenges to effective and efficient PHC financing. Already, there are many pools in the country creating coordination challenges and fragmentation. Currently, the PHCCs are either supported (funding through support from INGOs for the payment of agreed services for beneficiaries) or non-supported (without any financial support, relying on user fees for the running of the centers and these fees are different across the PHCCs). The presence of vertical health programs like the National TB and HIV programs adds to the fragmentation.

Different Provider Payment Mechanisms (PPM), whereby providers across Lebanon are paid through a range of modalities, including salaries, fee for service, capitation, and pay for performance, further complicate the financing system.

Historical Context of PHC Financing Models

Over the past decade, Lebanon's PHC financing has evolved in response to compounding political, economic, and humanitarian crises. Each phase introduced new financing models, gradually shifting from fragmented, donor-driven mechanisms toward more structured and performance-oriented approaches.

The 2011 Syrian refugee crisis prompted INGOs to adopt fee-for-service models to rapidly scale access for displaced populations. In 2015, the World Bank-supported Emergency Primary Healthcare Restoration Project (EPHRP) introduced capitation payments, aiming to enhance efficiency in PHC delivery.

Building on this momentum, the MoPH/PHC launched the Reaya Program in 2024 to expand support for uninsured Lebanese, while the UNICEF-backed Aasalameh Program (2024) piloted pay-for-performance mechanisms that linked funding to service quality indicators. Most recently, the LPSP was introduced to provide a more comprehensive and standardized PHC package for the most vulnerable populations. These reforms reflect a transition toward more institutionalized financing structures, though challenges such as underfunding, fragmentation, and donor dependence persist.

Timeline for PHC financing models:

Year	Program/ Model	Trigger/ Context	Target Population	Key Features
2011	INGO Fee-for-Service	Syrian refugee crisis	All PHC beneficiaries	Many INGOs introduced a subsidized fee-for-service (FFS) model across selected PHCCs. Patients paid nominal fees, with the majority of costs covered by donors. This approach improved access but led to fragmented financing and heavy reliance on external support (UNICEF, 2024).
2015 (terminated in 2019)	EPHRP	Health system pressure from protracted crisis	Vulnerable Lebanese (poorest, via NPTP) and Syrians	Supported by the World Bank, this initiative introduced a capitation model in 75 PHCCs to serve 150,000 vulnerable Lebanese. By assigning a fixed payment per patient, it aimed to promote preventive care and reduce unnecessary treatments. While it enhanced cost control, its evaluation in 2019 revealed significant weaknesses. The services primarily focused on prevention and were found to be inadequate in addressing patient needs, the model faced challenges with risks related to adverse selection (i.e., providers avoiding high-risk patients) and burdensome administrative tracking (Hallit et al., 2020).

Timeline for PHC financing models (cont'd):

Year	Program /Model	Trigger/ Context	Target Population	Key Features
2017 (effective Nov 2018, ongoing restructuring)	World Bank Lebanon Health Resilience Project (LHRP)	Growing demand for health services met with gaps in coverage and quality of care for impoverished Lebanese and displace Syrians in Lebanon. (seeks to strengthen the entire Lebanese health system)	Poor Lebanese + displaced Syrians	Initiated by the Lebanese MoPH and supported by the World Bank, this program built on the EHCP to meet the growing demand for health services. It expanded the PHC Universal Health Coverage initiative by increasing the number of beneficiaries from 150,000 to 340,000 poor Lebanese as well as strengthening the capacities of all 204 PHCCs in the National PHC Network to deliver the basic benefit package and extends outpatient healthcare coverage for vulnerable Lebanese and displaced Syrians in public hospitals, while enhancing hospitals' technical and organizational capacities to ensure quality care (World Bank, 2024).
2024 (pilot stage, not fully scaled yet)	Reaya Program (a subset of LHRP component 1)	Gaps in coverage for uninsured Lebanese	Selected vulnerable households; first phase prioritized beneficiaries from the Emergency Social Safety Net ("Aman") list at selected PHC centers.	To secure coverage for uninsured vulnerable Lebanese, the MoPH/PHC launched the Reaya program, which provided essential PHC services, including chronic disease management, vaccinations, and mental health support, to over 210,000 beneficiaries across selected phc centers. While the program represented a significant step toward universal health coverage, it remained heavily donor-dependent (L'Orient Today, 2024; National News Agency, 2024).

Timeline for PHC financing models (cont'd):

Year	Program /Model	Trigger/ Context	Target Population	Key Features
2021	LPSP	Overlapping economic, health, and humanitarian crises (post-2019 economic collapse, Beirut Blast, COVID-19); an operational financing protocol to keep PHC affordable during Lebanon's post 2019 poly-crises	Vulnerable Lebanese and refugees (uninsured)	The LPSP represents the latest and most comprehensive attempt to standardize PHC delivery in Lebanon, . building on and scales lessons from EPHRP. Designed to respond to overlapping crises, the LPSP offers a unified benefits package targeting vulnerable populations, expanding the scope of services by integrating both preventive and curative care. Though entirely donor-funded, it provides a platform for more sustainable and equitable PHC reform, pending the development of critical packages (e.g., disability, mental health).
2024 (reviewed in 2025)	Aasalameh Program	Need for improved quality and accountability in PHC	All patients through improved quality and continuity, with special focus on mothers, children, adolescents.	Aasalameh Program seeks to strengthen continuum of care and PHC quality using life-course lens (not a financing reform). It introduces a life-cycle approach to strengthen primary healthcare, ensuring continuous, person-centered care from pregnancy, infancy, childhood and adolescence through to adulthood. However, it required intensive data systems and carried the risk of incentivizing narrow metrics at the expense of non-incentivized but essential services (UNICEF, 2024).

Despite these efforts, PHC financing in Lebanon remains fragmented, underfunded, and unsustainable.

Currently, Lebanon's health financing comes from four major sources:(i) private financing, including out-of-pocket (OOP) expenditure, which accounted for approximately 28.34% of total health expenditure in 2021; (ii) government expenditure, which made up around14.85%; (iii) external support from bilateral and development partners, contributing 26.89%; and (iv) private for-profit and not-for-profit sources, including UN agencies and international non-governmental organizations (INGOs) which account for the remaining 29.92% (MoPH/PHC, 2021).

Primary healthcare financing landscape is characterized on one hand by a mixture of funding sources involving the Treasury and household out-of-pocket expenditure; and on the other, by a multiplicity of financing intermediaries including financing from not-for-profit organizations, the MoPH/PHC, and external partners. This financing fragmentation is further marked by the diversity of supervising authorities, making regulation and coordination very complicated.

In summary, several factors contribute to the current unsustainable state of PHC financing in Lebanon, including:

- Limited government funding overall and especially for PHC services, with only 5% of health financing allocated to PCH in 2018;
- High OOP health expenditure, which places a significant financial burden on the population and creates barriers to accessing care;
- Fragmented financing and governance systems; and
- An increase in external and not-for-profit private financing, which, while essential, further complicates coordination.

CALL TO ACTION ON PHC FINANCING

Given the urgency of Lebanon's health system challenges, there is a critical need to invest in primary healthcare financing to ensure the country moves toward Universal Health Coverage (UHC). Without concerted action, Lebanon risks deepening inequities and falling further behind on health access and outcomes.

Indeed, Lebanon's health sector reform plans, including UHC and the 2023–2027 PHC Roadmap, will remain aspirational without immediate structural investment in PHC financing.

Overall Purpose

The purpose of this policy memo is to assess and optimize PHC financing in Lebanon as a foundational step towards achieving UHC. By examining key components of PHC financing, including benefit package design, sustainable funding sources (cost analysis, fiscal space, efficiency measures), and provider payment mechanisms, this report aims to offer actionable insights and recommendations that align with Lebanon's post-COVID-19 commitment to UHC. The report also seeks to provide a comprehensive framework for strengthening PHC financing, emphasizing its vital role in sustainable health outcomes and equitable access to essential services.

A multi-component approach, encompassing benefits package design, diversified funding sources, and adaptive payment mechanisms, enables health systems to efficiently allocate resources, maintain service quality, and expand coverage (Figure 9). The following framework underscores the importance of health financing arrangements—revenue raising, purchasing, and benefit design—in achieving UHC goals, as these elements are foundational to building a health system that can sustainably meet demand, reduce financial barriers, and ensure equitable access to quality care.

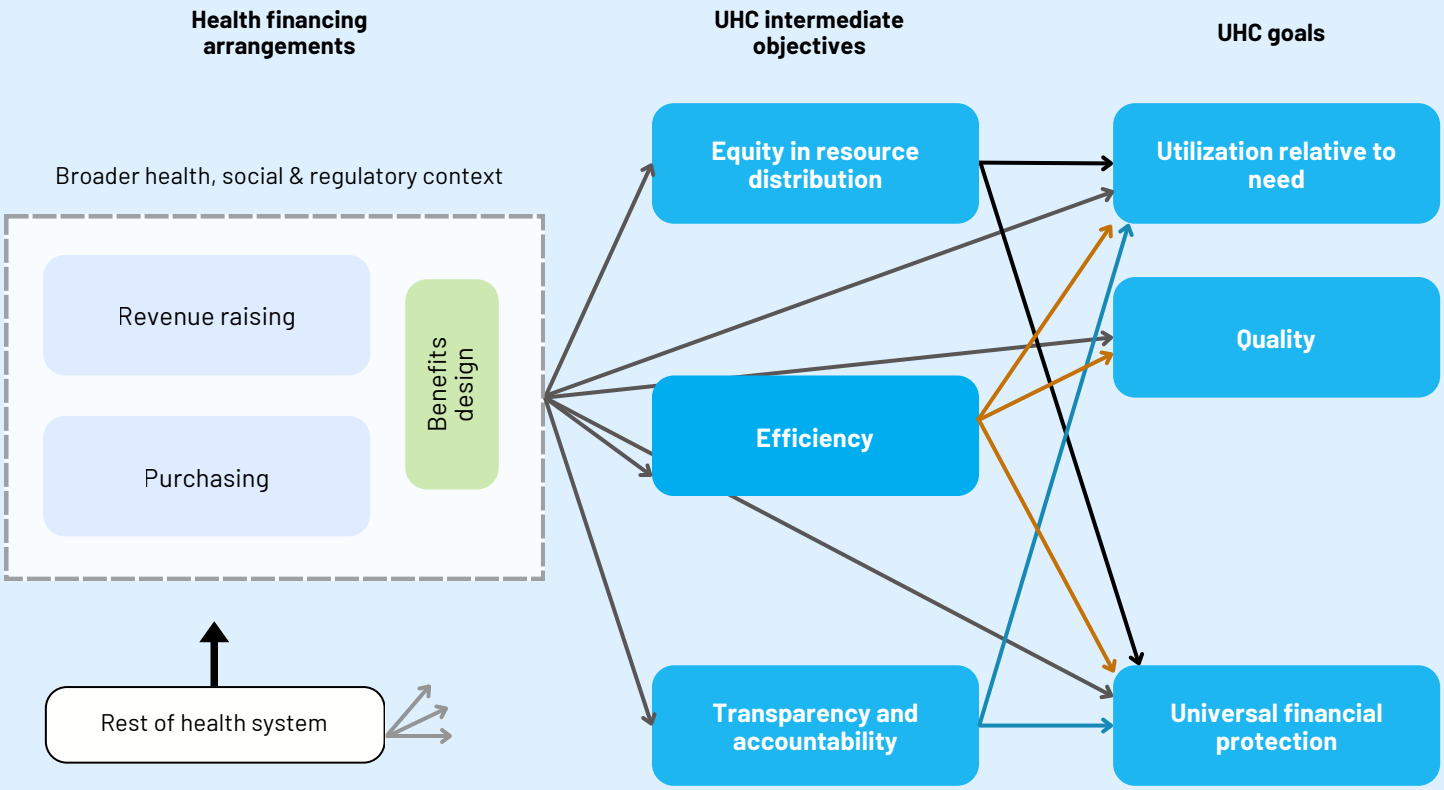


Figure 9: Health financing policy and UHC pathways (Kutzin et al., 2017).

Specific Objectives

Component 1
Evolution, scope and content of PHC benefits packages in Lebanon

→ To assess the scope and comprehensiveness of LPSP as part of efforts to inform the design and implementation of essential health benefit package for the national PHC network in Lebanon, tailored to the country's healthcare priorities and resource limitations.

Component 2
Cost analysis of LPSP package- Latest PHC package in Lebanon

→ To perform a comprehensive cost analysis exercise of the LPSP package at the PHC level in Lebanon and to inform government's decision in the implementation of the LPSP program in Lebanon.
Note: The analysis was based on a convenience sample of 22 centers; thus, the findings may not be generalizable to all 330 PHCCs.

Component 3
Cost of establishing a PHC facility in public sector

→ To determine the financial investment needed to establish and maintain a PHC facility in the public sector in Lebanon.

Component 4
Fiscal space for PHC

→ To present the fiscal space analysis for PHC in Lebanon and use this analysis to support the government of Lebanon in informing decisions for scaling up PHC spending without compromising fiscal sustainability to achieve health system goals.

Component 5
Efficiencies: Potential savings associated with switching to generic medications & adoption of efficient procurement strategies

→ To estimate the potential savings associated with adoption of efficient drug procurement strategies focusing on the switch to the most cost effective and of quality generic medications (which form the basis of the package) and identify which generics offer the best value for money.

Component 6
Provider payment mechanisms

→ To review existing provider payment mechanisms for PHC services and propose a mechanism tailored to Lebanon's context.

By focusing on benefit package design, LPSP cost analysis, fiscal space, and savings from generics, this memo targets the most pressing UHC objectives: equity and efficiency. Prioritizing these elements is essential for building a resilient primary care system that aligns resources with population needs, enhances service quality, and ensures financial protection. Addressing these priorities lays a strong foundation for universal access to essential health services in Lebanon.

METHODOLOGY

AIM: To provide a comprehensive overview of Lebanon's PHC structures to efficiently align resources towards achieving UHC.

	Data Sources*	Data Analysis
COMPONENT 1 Benefit Package	• Review of existing PHC essential benefits packages in 25 countries • Analysis of World Bank's DCP3, specifically the subset of interventions termed the HPP designed for PHC in low resource settings • Review of MoPH statistics, international organizational websites (WHO, World Bank) and local research • Stakeholder meeting (MoPH/PHC, PHC directors, NGOs, UN agencies, funders, health practitioners, insurance companies)	• Comparative Content Analysis: Benchmarked Lebanon's LPSP against packages from the 25 reviewed countries and the World Bank HPP. • Thematic Analysis: Identified strengths and gaps in the LPSP relative to best practices, adapted to Lebanon's context. • Stakeholder Roundtable: Held a roundtable with 8-10 key stakeholders, including MoPH/PHC, to validate findings, contextualize the analysis, and align with Lebanon's specific healthcare priorities.
COMPONENT 2 LPSP Cost Analysis	• Primary Data: Gathered from 22 PHCCs jointly selected by the health economist and the MoPH/PHC program to ensure geographic representation (2 per governorate) using semi-structured interviews and checklists, covering operational costs, labor, medical supplies, service delivery, and beneficiary demographics and utilization. • Secondary Data: Sourced from STPs, national health databases, and international guidelines on disease incidence, treatment costs, and protocols. An essential services list was aligned with the LPSP and STP for Lebanon prior to data collection.	• Cost Approaches: Used actual costs from sampled PHCCs and normative costs based on STPs and targeted utilization. • CORE Plus Tool: Applied CORE Plus for flexible cost modeling, as used in Mexico, South Africa, and Thailand. • Cost Comparisons: Compared LPSP actual costs with normative costs for MoPH/PHC standard services. • Reporting: Costs in LL and USD at 30,000 LL/USD; data collected from March 28–April 28, 2023, for 2022.
COMPONENT 3 Cost of PHC	• Extensive desk review of relevant documents • Key informant interviews with central-level stakeholders (e.g., MoPH/PHC, UNICEF, WHO, YMCA, and other health organizations), • Group discussions at the PHC provider level, and • On-site PHCC visits to collect data on the costs of setting up and operating facilities, as well as immunization activities	• Activity-Based Costing: Estimated CAPEX and OPEX for three PHC center types: basic, with lab, and with lab and X-ray. • CAPEX: Calculated per MoPH and international standards, using current Lebanese prices. • OPEX: Estimated for human resources, medical supplies, general expenses, and equipment amortization. • Utilization Scenarios: Modeled OPEX at 30%, 50%, and 80% utilization to reflect demand-based cost variations.
COMPONENT 4 Fiscal space for PHC	• Sourced from international databases (IMF, World Bank, WHO) and government documents • Real GDP Growth Rate (%): (IMF and World Bank; Year: 2000-2020) • GDP per Capita (US$): (MF and World Bank; Year: 2000-2020) • Health Spending per Capita (US$): World Bank & WHO; Year: 2000-2020 • Health Expenditure as % of GDP: World Bank & WHO; Year: 2000-2020 • Government Health Expenditure as % of CHE and GGE: World Bank & WHO; Year: 2000-2020 • Out-of-Pocket Spending as % of CHE and per capita: World Bank and WHO; Year: 2000-2020	• Fiscal Space Analysis: Performed using WHO's MacroHealth tool (version 1.1) to evaluate Lebanon's fiscal space for health within its macroeconomic and public finance context. • Five Pillars: Assessed across conducive macroeconomic conditions, health reprioritization, sector-specific resources, foreign aid, and improved spending efficiency. ***Scenarios used to estimate fiscal space:*** **Status Quo:** PHC spending remains at 5% of GGHE over the projection period. **Scenario 1:** Reallocate MoPH funds from hospital to PHC management, increasing PHC spending to 35% of GGHE. **Scenario 2:** Raise PHC spending to 3% of GDP by 2029. **Scenario 3:** Increase external health resources to 5% of Total Health Expenditure (THE) by the end of the projection period.
COMPONENT 5 Drug Procurement	• Compiled a list of active drug components and annual purchase quantities from the MoPH. The MoPH list included approximately 5,589 registered drugs as of October 2022, many with generic alternatives. • Conducted consultations with stakeholders involved in public sector drug procurement. ***Focused on five programs:*** • Essential Drug Program (EDP) for chronic and acute drugs • Cancer and other serious disease drugs • National AIDS Program (NAP) • National Tuberculosis Program (NTBP) • Expanded Program on Immunization (EPI)	• Cost Minimization Exercise: Utilized to compare costs between originator and generic drugs across five health programs. - Compiled a unified list of 296 drugs (199 analyzed, 166 eligible APIs) and gathered quantity estimates from procuring entities. - Standardized prices to CIF USD for non-subsidized public pricing and calculated unit costs, adjusting for import, local manufacture, and serum status. - Selected lowest unit price per product group as "best value" option. • Total Cost and Savings Calculation: Multiplied best value unit prices by required quantities, converted to LBP at 1 USD = 39,500 LBP. Calculated baseline costs (current procurements) and potential savings by switching to best value generics, summarized by program and total.
COMPONENT 6 PPM for PHC	• Literature review • Stakeholder input	• Narrative synthesis of findings

***Source: UNICEF PHC projects, 2023-2024. . The technical support, follow-up, and leadership role of the PHC department at the MoPH are gratefully acknowledged.**

Component 1:
Design of PHC benefits packages in Lebanon

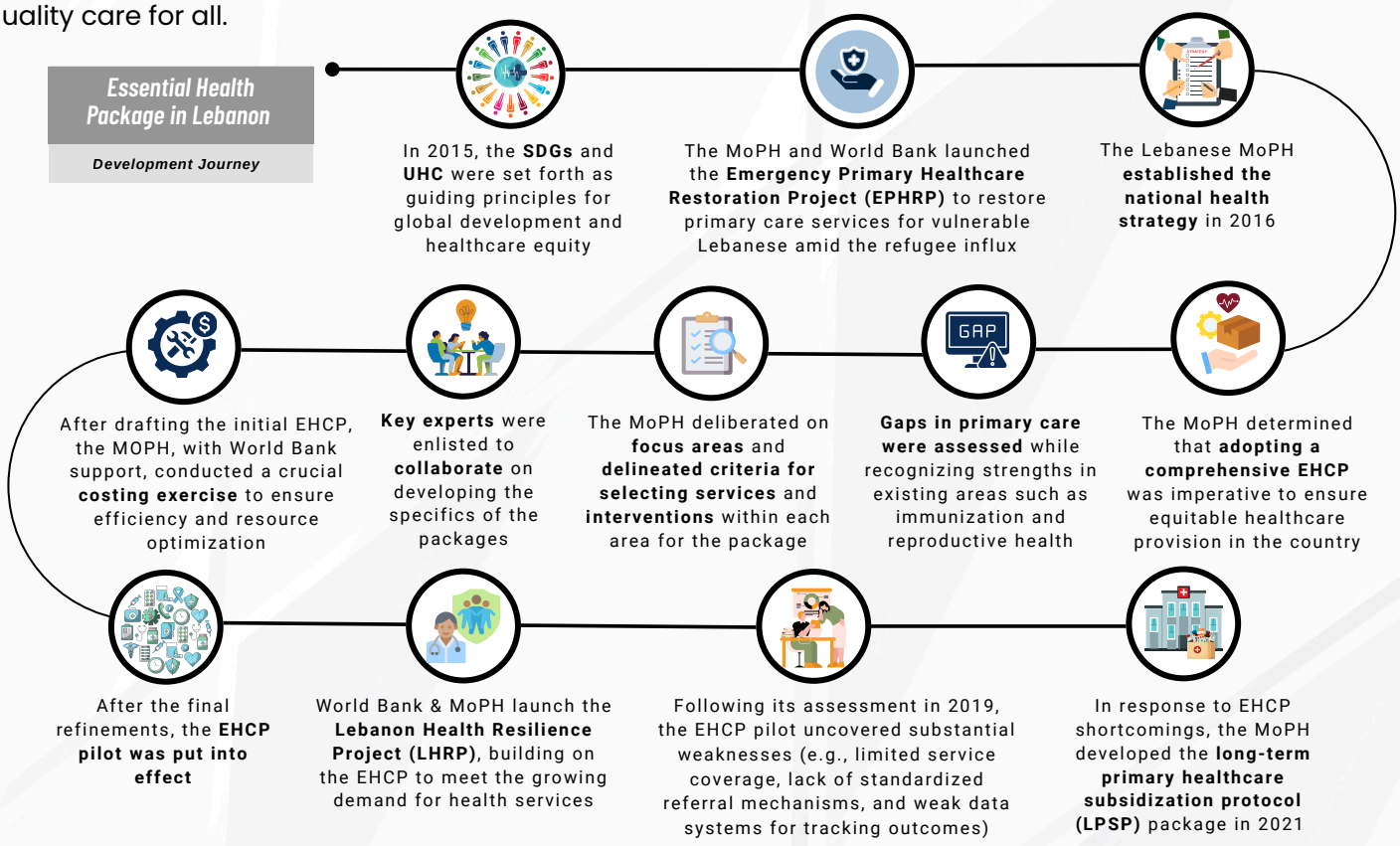
This component examined the evolution, content and scope of the LPSP package, identifying deficiencies and areas for improvement to inform future revisions in the package.

KEY FINDINGS:

- Lebanon's LPSP package provides a solid starting point for primary healthcare reform, covering key areas such as maternal and child health, non-communicable diseases, mental health, and wellness services. Its framework aligns with global priorities for UHC.
- Despite its strengths, the LPSP falls short compared to packages in 25 other countries and the World Bank's High-Priority Package (HPP), with gaps in services like basic emergency care, cancer care, rehabilitation, palliative care, and delivery services.
- The absence of referral systems and weak integration across primary, secondary, and tertiary care limit the package's effectiveness, emphasizing the need for improved care coordination.
- Lebanon's primary healthcare network faces several barriers to implementing an expanded health benefit package, including regional disparities; shortages of family physicians, nurses, and midwives in the PHCC sector; minimal funding; weak governance structures; brain drain and high staff turnover; and political instability with shifting national priorities.

Evolution of PHC Benefits Packages in Lebanon

The evolution of PHC benefits packages in Lebanon highlights the country's continuous efforts to enhance primary healthcare amidst complex financial, health, and socio-political challenges. Over the years, Lebanon has introduced diverse packages to improve healthcare access, with each iteration reflecting the changing needs of the population and the health system's capacity. The latest package, the LPSP, was specifically developed in response to the severe multi-faceted crisis that has heavily impacted the country's healthcare sector. Targeted primarily at vulnerable populations, including low-income households, uninsured individuals, displaced communities, and those affected by chronic diseases, the LPSP represents a crucial intervention in maintaining essential health services. However, to align with Lebanon's broader objective of achieving UHC, the package must be further expanded, integrated into a sustainable health financing framework, and reinforced with mechanisms that ensure equitable access to quality care for all.



Socio-Demographic Factors

Lebanon's healthcare system is shaped by a complex socio-demographic landscape, characterized by an aging population, a high burden of non-communicable diseases (NCDs), and persistent challenges in healthcare access. These factors underscore the need for an optimized PHC benefit package that is responsive to the country's evolving health needs.

Mortality and Disease Burden

The top causes of death in Lebanon highlight the predominance of NCDs, with ischemic heart disease, stroke, kidney diseases, diabetes, and lung cancer ranking among the leading contributors to mortality (see Figure 11). While COVID-19 emerged as the leading cause of death in 2021, chronic conditions remain the primary long-term health challenge. The high mortality rate from Alzheimer's disease and chronic respiratory illnesses further signals the need for PHC services that address geriatric care and respiratory health. The share of deaths by broad cause also reflects this trend, with 53% of deaths attributed to NCDs, compared to 34% from communicable, maternal, perinatal, and nutritional conditions (see Figure 12). This distribution underscores the urgency of strengthening PHC services focused on chronic disease prevention, early detection, and management.

In addition to major NCDs, oral health remains an overlooked but critical component of Lebanon's disease burden. Despite a high density of dentists, 44% of children under nine and 35% of individuals with permanent teeth suffer from untreated caries, largely due to the absence of public dental coverage and preventive programs (Daou et al., 2024). With oral healthcare relying almost entirely on the private sector, financial barriers limit access, contributing to long-term health and economic consequences. Integrating essential oral health services into PHC could help mitigate these gaps and improve overall health outcomes.

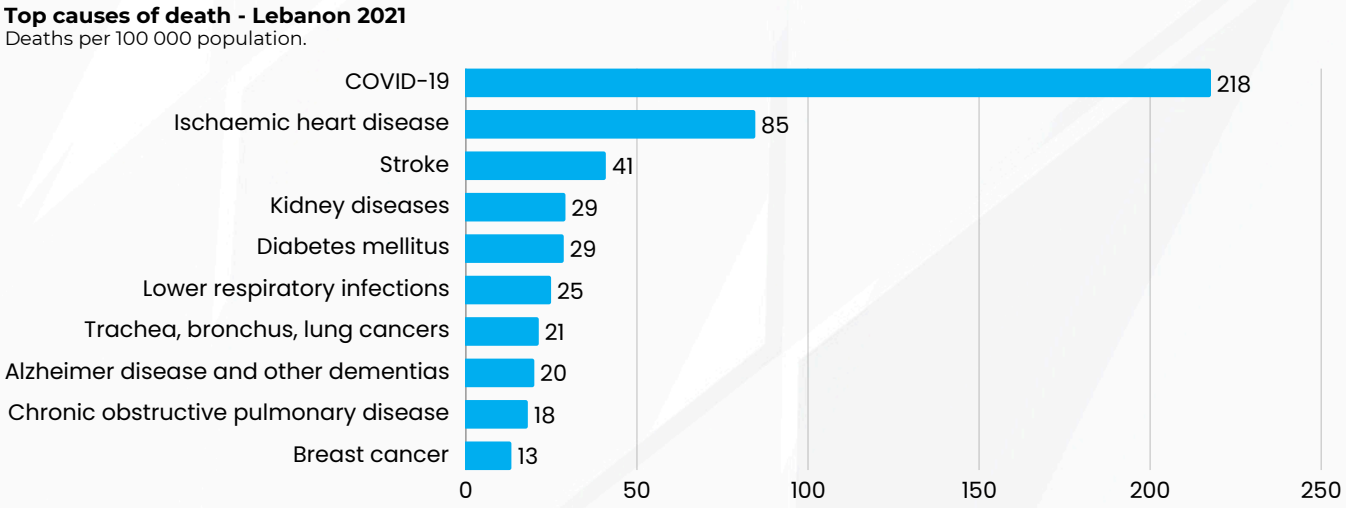


Figure 11. Top causes of mortality in Lebanon (WHO, 2023d).

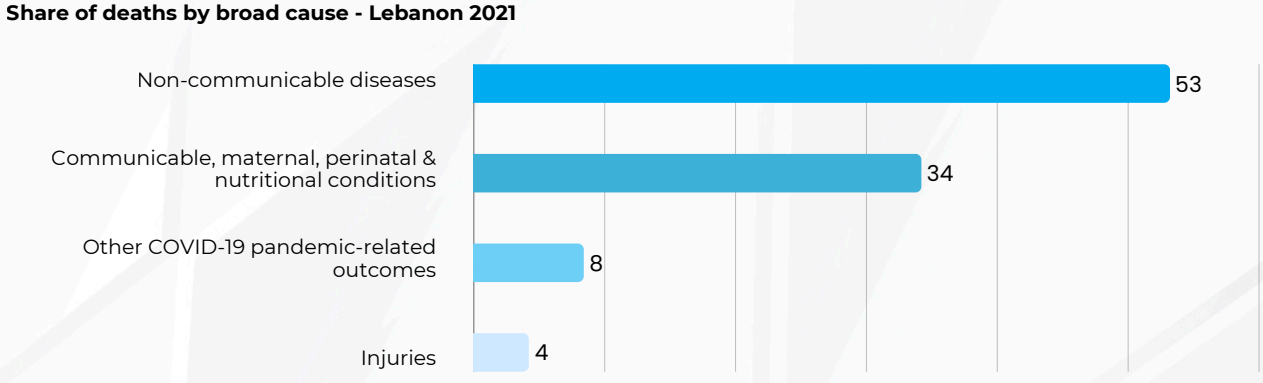


Figure 12. Distribution of Deaths by Cause in Lebanon (WHO, 2023d).

Disability-Adjusted Life Years (DALYs) and Healthcare Burden

The leading causes of DALYs, a measure of the overall disease burden, reveal significant challenges in Lebanon's health system. As of 2021, COVID-19, ischemic heart disease, diabetes mellitus, and back and neck pain are the primary contributors to DALYs, highlighting both acute and chronic health conditions that impact quality of life (see Figure 13). Moreover, the presence of depressive and anxiety disorders in the top 10 causes of DALYs underscores the growing burden of mental health conditions, necessitating their integration into PHC services.

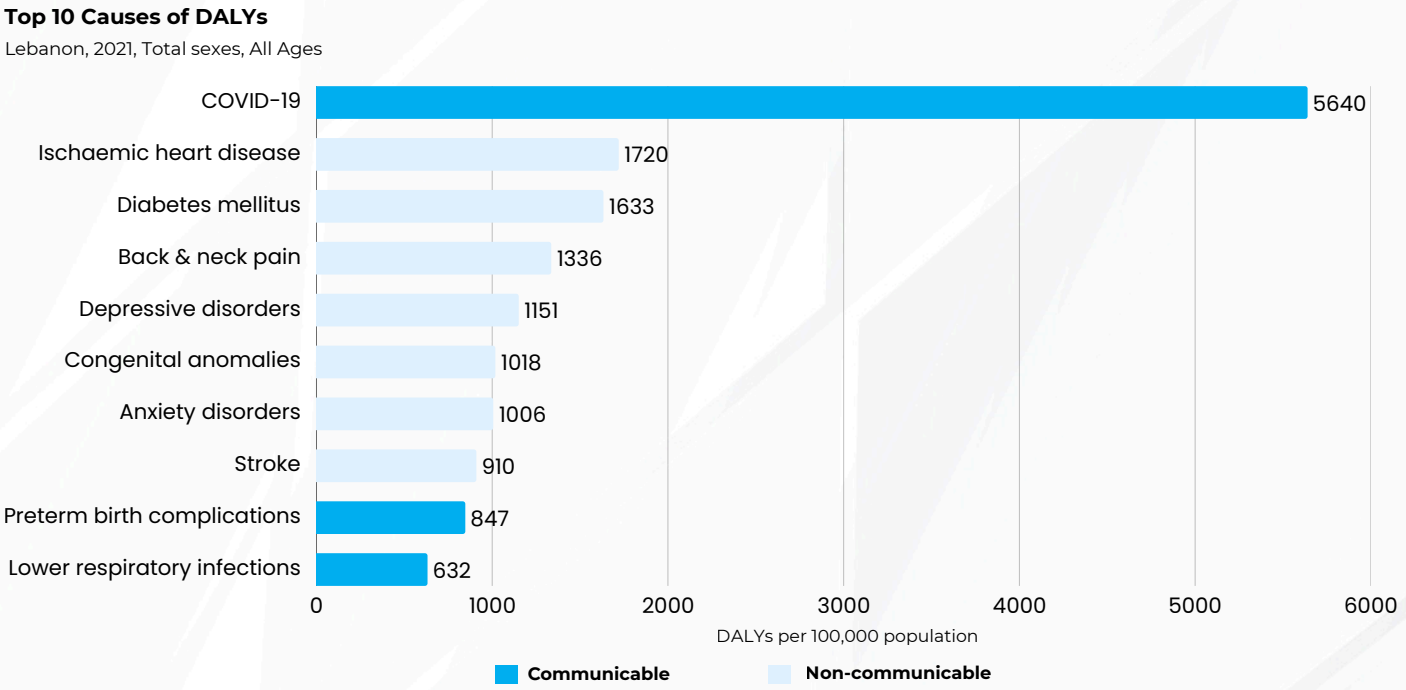


Figure 13. Top causes of Disability-Adjusted Life Years (WHO, 2021).

Aging Population and Future Health Needs

Lebanon's population structure further informs the need for PHC reform. The proportion of individuals aged 65 and older stands at 11%, making Lebanon the fastest-aging nation in the Arab region (see Figure 14) (MOSA, 2021). This percentage is projected to rise to 14% by 2030 and 23.3% by 2050, signaling a demographic shift where, by 2040, Lebanon will have more older people than children. As a result, age dependency will increasingly shift from supporting children to providing care for the elderly. This demographic transition underscores the need for PHC services tailored to aging populations, including chronic disease management, geriatric care, long-term support, and preventive health screenings.

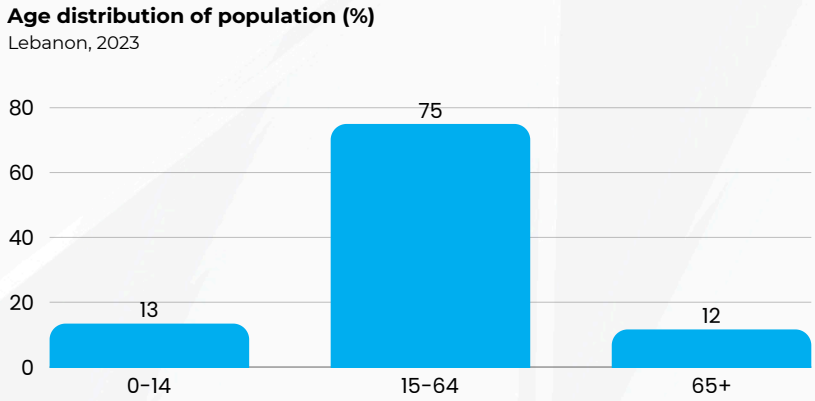


Figure 14. Age distribution of Lebanon's population in 2023 (WHO, 2023d).

Comparative content analysis for benefits package

Lebanon's LPSP package provides a foundational framework for primary healthcare, covering essential services and laying a strong foundation for broader health reform. It addresses key healthcare needs through packages encompassing prenatal and maternal health, non-communicable diseases, child health, and wellness services across various population groups. A standalone mental health package is currently under development by the National Mental Health Program, reflecting progress in this area. This makes the LPSP a strong starting point for expanding access to primary care in Lebanon. Designing a Health Benefits Package (HBP) requires a structured approach to determining which services, interventions, and treatments are included or excluded, guided by evidence, equity, and sustainability. In developing the LPSP, factors such as population needs and disease burden, health system goals, access, and availability of services were carefully considered. These inputs informed the subsequent comparison with essential health benefit packages from 25 countries and the World Bank's High-Priority Package (HPP) (Table 2). By grounding this analysis in a comprehensive understanding of local context and evidence-based principles, the LPSP can identify areas for enhancement to improve its scope and efficiency (Glassman et al., 2015).

Table 2: Overview of essential health benefit package categories across context.

Lebanon's LPSP Package	Packages included in World Bank's HPP	Packages included the 25 reviewed countries
• Maternal Health Package (includes obstetrics and midwives' consultations, laboratory and diagnostic test, counseling, medications, and family planning) • Non-communicable diseases - Diabetes - Hypertension - Coronary artery disease - COPD • Child and Adolescent Wellness Benefit Package (birth to 18 years) (includes pediatrician and family medicine consultations, laboratory test, counseling, medications, immunization) • Wellness Benefit Health Package - Adult Males (19 - 64 years) (includes family medicine consultations, laboratory test, counseling, medications, immunization) • Wellness Benefit Health Package - Adult Female (19 - 64 years) (includes family medicine consultations, laboratory and diagnostic test, counseling, medications, family planning, immunization) • Wellness Elderly Package (65 years and older) (includes family medicine consultations, laboratory and diagnostic test, counseling, medications, immunization) • Other common medical conditions package (covers medical conditions that are commonly seen in primary care for adult and pediatric populations as well as women-related complaints and diagnosis) • Mental Health Package* • Disability Package*	Age-related cluster • Maternal and newborn health • Child health • School-age health and • development • Reproductive health • Contraception Non-communicable diseases • Cardiovascular, respiratory, and related disorders • Cancer • Mental, neurological, and substance use disorders • Congenital and genetic disorders Infectious diseases cluster • HIV and sexually transmitted infections • Tuberculosis • Malaria and adult febrile illness • Neglected tropical diseases Health services cluster • Surgery • Palliative care and pain control	**Level 1 (covered by > 50% of countries)** • Maternal, Newborn, and Reproductive Health - Antenatal Care - Delivery Care - Postpartum care - Newborn Care - Family planning • Child health and Immunization • School and Adolescent Health • Non-communicable diseases - Diabetes mellitus - Cancer - Cardiovascular diseases - COPD - Other chronic diseases • Communicable diseases - HIV and other sexually diseases - Tuberculosis - Typhoid - Neglected tropical diseases • Nutrition • Oral Health • Mental Health Neurological, and • Substance Use disorders (15/25) • Emergency Care • Laboratory services **Level 2 (covered by 20-50% of countries)** • Physical therapy & rehabilitation • ENT & Audiology services • Ophthalmology • Elderly care **Level 3 (covered by < 20% of countries)** • Surgical Services • Dermatology • Radiotherapy services • Occupational Health • Food Safety and Environmental health • Control and Management of Diseases with Epidemic Potential

**Note: The benefits package for Persons with Disabilities (PwD) is currently under development and will be included in future updates of the LPSP. For this reason, it was not included in the current analysis. Similarly, the mental health package was still being finalized during the study period and was excluded from the comparative review.*

Content-wise improvements

While the LPSP provides good coverage in key areas, several essential services are missing or insufficiently present in the current package:

Missing Essential Services:

- Basic emergency care, minor surgeries, physical therapy, and rehabilitation.
- ENT and audiology services, occupational health, palliative care, oral health, and ophthalmology.

Cancer Care:

- Cancer screening services are integrated across the LPSP wellness packages.
- No dedicated cancer package despite Lebanon's high cancer mortality rates (bladder, lymphoma, ovarian, and breast cancers).
- A standalone cancer package spanning primary, secondary, and tertiary care could be considered, leveraging the MoPH's existing coverage of secondary and tertiary cancer services.

Maternal and Newborn Health:

- Antenatal and postnatal services are covered (though not delivery at hospital level).
- Although delivery services are covered under the MoPH's hospitalization schemes, rising maternal mortality and persistent neonatal disorders (leading causes of death and disability (DALYs) in Lebanon) highlight the need for stronger care pathways.

Communicable Disease Management:

- While the wellness packages include screening for HIV and STIs, it does not sufficiently address the management of common infections (bronchitis, influenza, tonsillitis).
- COVID-19 highlighted the need to strengthen communicable disease management in primary care.

Process-wise improvements

Care Coordination & Integration:

- Integration across levels of care remains insufficient.
- Weak linkages between primary, secondary, and tertiary care hinder continuity of care.
- Lack of referral pathways for screenings and diagnostics to higher levels of care.

Follow-up Mechanisms:

- Absence of systematic follow-up processes to monitor patient outcomes post-treatment.

Laboratory & Diagnostic Services:

- Embedded within LPSP packages and categorized by age, disease, and sex, reducing accessibility and efficiency.
- A more distinct focus on standalone laboratory and diagnostic services could streamline workflows and improve delivery.

Estimated cost of the current benefits packages

This component involved a structured cost analysis to evaluate the financial feasibility of the LPSP in Lebanon. This analysis covered the period from January 1, 2022, to December 31, 2022, and utilized both actual and normative costing approaches to provide a comprehensive financial assessment. It is worth noting that the analysis was based on a convenience sample of 22 centers jointly selected by the health economist and the MoPH/PHC program to ensure geographic representation across governorates. Thus, the findings may not be generalizable to all 330 PHCCs.

Definitions:

- **LPSP (Long-Term PHC subsidization protocol):** Proposed national model of care for PHC in Lebanon. It focuses on preventive and promotive care, alongside curative services.
- **MoPH Standard Program:** Current PHC program in Lebanon (not under the LPSP). It primarily focuses on curative services.

KEY FINDINGS:

- The **MoPH standard program** provided **2,008 fewer services** and was approximately **$105,000 more expensive per PHC** than **the LPSP package**.
- **Proper implementation of the LPSP program** could have resulted in **cost savings** of an estimated **$105,000 per PHC.**
- Within the LPSP program, the Primary and Maternal Health **(PMH) package** accounted for the largest share of costs followed by the **Wellness Package (WP)** and **NCD package.**
- The **primary cost driver** in the LPSP program was **laboratory services**, accounting for about **one-third of the total cost**, followed by medicines (28.56%) and staff salaries (21.73%).

The cost analysis revealed notable differences between the LPSP and MoPH standard packages. The MoPH standard program, representing the cost of the most utilized services and thus being entirely demand-driven, was found to be more expensive. Despite its higher cost, the MoPH standard program offers fewer services compared to the LPSP, highlighting the cost-efficiency and broader service coverage of the LPSP.

Key Assumptions used in analysis:

- PHCCs operate 7 hours/day, 6 days/week.
- Population data (field data):
- Catchment population: 25,108
- Children <5 years: 13.07%
- Women of reproductive age: 25.64%
- Pregnant women: Birth rate × Total population × 1.05
- Beneficiaries accessing PHCC: 13,916
- Average stockout days: 96
- Onsite laboratory availability: 62%.

Table 3: LPSP and MoPH Standard PHCCs costs in USD

Indicator	Total Costs in USD	
	MoPH/PHC Standard Program	LPSP
Total cost of all services	4,239,178	4,134,622
Cost per service	20.74	20.03
Cost per capita	168.84	164.67
Total cost of curative services	2,974,238	2,840,139
Average cost of curative services	23.89	22.84
Total cost of preventative services	1,264,940	1,294,484
Average cost of preventative services	15.83	15.84

LPSP Package Cost Breakdown

Within the LPSP program, the Primary and Maternal Health (PMH) package accounted for the largest share of costs at 28%, followed by the Wellness Package (WP) and Non-Communicable Diseases (NCD) package, which contributed 24% and 21% of the total cost, respectively. Together, these three packages made up over 70% of the total LPSP program cost, mainly due to the extensive laboratory services they required.

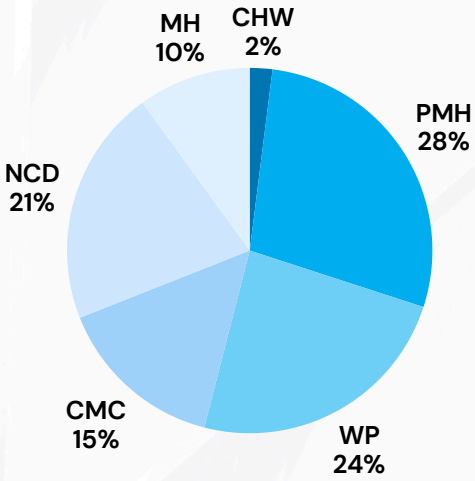


Figure 15: LPSP Cost Breakdown (by service type)

Primary Cost Driver of the LPSP Package

The primary cost drivers in the LPSP program were laboratory services, medicines, and staff salaries, accounting for about 85% of total expenditures in PHCCs. Laboratory tests contributed 33.89%of the total cost, driven by the nine mandatory tests required per beneficiary under key packages such as Wellness, Non-Communicable Diseases, and Prenatal & Maternal Health. Medicines (28.56%) and staff salaries (21.73%) followed. Costing methods were consistent and based on Standard Treatment Protocols (STPs) and targeted utilization rates, as analyzed using the CORE Plus tool. Variations in costs are primarily due to the high volume of tests required for these packages, targeting key health priorities.

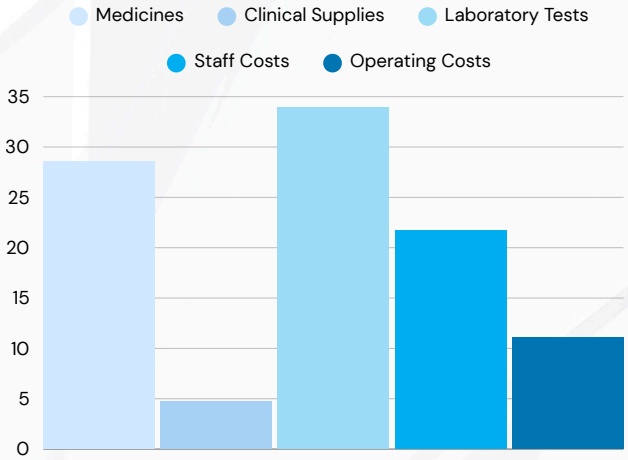


Figure 16: Primary Cost Drivers

Sensitivity Analysis

The sensitivity analysis indicated that reducing the costs of laboratory tests and medicines by 25% and 50% could have lowered the total cost per PHC by $605,000 and $360,000, respectively. Conversely, a 10% increase in staff costs would have raised the total cost by about $90,000. Among all factors, laboratory costs were the most sensitive to changes in the overall cost of a PHC. These estimates were based on adjusting one variable while keeping others constant.

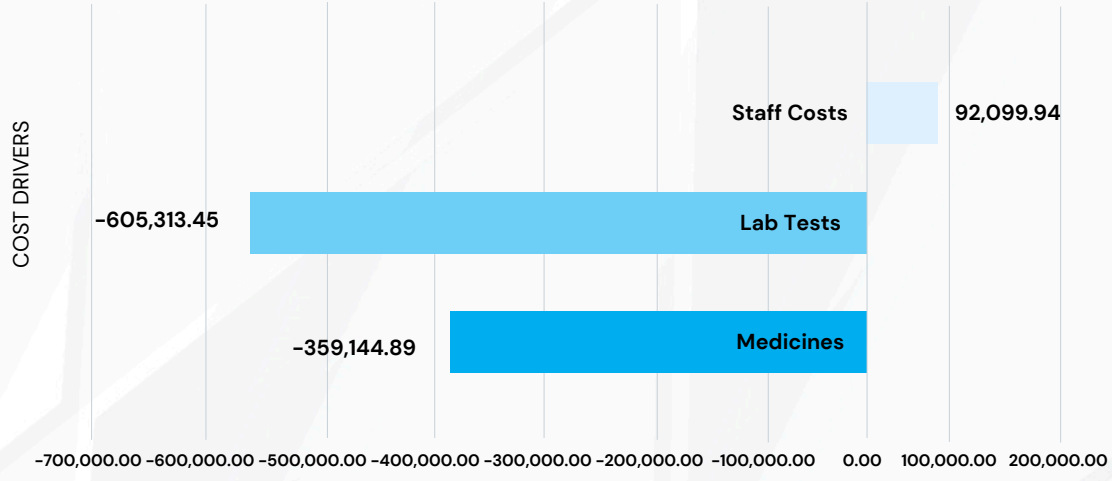


Figure 17: Sensitivity Analysis Results

Component 3:
Estimated cost of establishing a PHC facility in the public sector

This component used activity-based costing to estimate capital (CAPEX) and operating (OPEX) expenses for public sector PHCCs, providing a clear view of the financial resources required for delivering primary healthcare services in Lebanon.

KEY FINDINGS:

- The **required total area for a basic PHC facility** varies depending on the services offered: 233 sqm for a basic PHCC excluding laboratory and general X-ray, 260 sqm including a laboratory (excluding general X-ray), 290 sqm including both laboratory and general X-ray, and 310 sqm if a mammography unit is added.
- The **construction cost** is estimated at **550 USD per square meter**, excluding the cost of land.
- **Operating expenses for a basic PHCC in Lebanon** are estimated to range between **200,376 USD** and **364,446 USD per year**, depending on the level of service utilization.
- The **cost of operating a basic laboratory** is estimated between **28,393 USD** and **58,273 USD** per year, while the **cost of operating a general X-ray** is estimated between **17,755 USD** and **19,155 USD per year**.
- The **total yearly cost of operating a PHC in Lebanon** is estimated to range between **200,376 USD** and **441,873 USD**, depending on the services available and the level of service utilization.

Costs were estimated for three facility types:

- **Basic PHC Center:** Includes essential services such as general consultations, pediatrics, OB/GYN, dentistry, a pharmacy, and basic infrastructure but excludes laboratory or radiology services.
- **Basic PHC Center with Laboratory:** Adds a laboratory capable of performing seven MoPH-authorized routine tests, including CBC, blood sugar, uric acid, C-reactive protein, creatinine, general urine examination, and stool examination.
- **PHC Center with Laboratory and X-ray:** Includes both the laboratory and general X-ray capabilities, expanding diagnostic capacity further.

Additionally, dispensaries are smaller facilities that cater to approximately 500 patients monthly, providing an average of 56 immunization services and 20 ANC visits. A standard dispensary typically operates with 1 part-time GP, 1 part-time cardiologist, 1 part-time gynecologist, 1 part-time pharmacist, 2 nurses, 1 administrative staff member, 1 janitor, and 1 director.

Capital Expenditures

CAPEX covers the setup costs for PHCCs, including the cost of construction, the cost of equipment and furniture, with an uncertainty coefficient of 10%. These are estimated per MoPH standards and International Health Facility Guidelines, based on current Lebanese market prices. The cost of construction per sqm is estimated to be 550 USD excluding the cost of the land that may vary significantly from one region to another. It includes the cost of fixtures. The costs of equipment and furniture were calculated based on prices collected from relevant suppliers

Capital expenses are estimated between 187,037 USD and 284,095 USD depending on services available.

Table 4: Estimated Capital Expenditures

	Cost of Equipment	Cost of Furniture	Cost of Construction	Total Cost
Basic PHCC	$36,443	$9,175	$141,419	$187,037
Basic PHCC with laboratory	$65,043	$9,395	$157,300	$231,738
Full PHCC with laboratory & general X-Ray*	$98,384	$9,505	$176,206	$284,095

**In case there is the desire to develop a mammography unit, it would cost an extra $21,544 ($10,210 for the equipment detailed below in Annex 1 and $11,334 for the construction) which would amount to the full price of $305,639.*

Operating Expenditures

OPEX includes daily operational costs for a PHCC, covering: (1) human resources (salaries, visiting fees, social contributions), (2) drugs and medical supplies, (3) general expenses (utilities, transport, fuel, maintenance), and (4) equipment and infrastructure amortization. Costs were estimated based on the following parameters:

- **Minimum Staffing Norms:** A PHCC requires core medical staff, including a general practitioner, pediatrician, gynecologist, dentist, part-time cardiologist, endocrinologist, nurses, a midwife, a lab technician, and administrative personnel. Staffing ranges from 13.5 to 21.5 FTEs based on utilization. The facility operates five consulting rooms, running 7 hours daily, 5 days a week. Monthly salaries range from $200 to $1,000, with 23.5% allocated for social security.
- **Consultation Duration & Utilization:** Average consultation times are 8-30 minutes, with projected annual consultations at 30%, 50%, and 80% utilization rates (11,000, 19,000, and 30,000 visits).
- **Visiting Fees:** Set at $2 per patient for general practitioners and $3.5 for specialists, based on the LPSP. Radiologist fees are set at 10% of the most common X-ray procedure. These fees are specific to the iNGO-subsidized care models and may not reflect the costs in non-subsidized settings.
- **Operational Costs:** Includes fuel at 1 USD/liter (1,000-2,000 liters/month), maintenance at 10% of equipment cost, and depreciation over 7-10 years.
- **Community Health Workers (CHWs):** A PHCC typically includes two CHWs, each equipped with an electronic tablet ($250), a portable digital blood pressure machine ($40), 10 digital thermometers annually ($7 each), and a leased glucometer.

Given the aforementioned assumptions, the **operating expenses for a basic PHCC in Lebanon** are estimated to range **between 200,376 USD and 364,446 USD per year,** depending on the level of service utilization.

Table 5: OPEX forecast for basic PHCC (without laboratory and X-ray).

Basic PHCC	Utilization Rate		
	30%	**50%**	**80%**
HUMAN RESOURCES			
Visiting fees	3,020	5,033	8,052
Salaries	7,400	8,900	11,150
Social contributions	1,739	2,092	2,620
TOTAL HUMAN RESOURCES	12,159	16,024	21,822
MEDICAL			
Medical supplies	506	797	1,234
Dental supplies	1,188	1,980	3,168
TOTAL MEDICAL	1,694	2,777	4,402
GENERAL			
Electricity	1,000	1,500	2,000
Hygiene, general & office supplies	350	400	450
Maintenance medical equipment	304	304	304
Maintenance general equipment & furniture	76	76	76
Depreciation medical equipment	425	425	425
Depreciation general equipment & furniture	76	76	76
Communication (internet & telephone)	200	200	200
Equipment & printed materials for CHW	64	64	64
Others	350	500	550
TOTAL GENERAL	2,846	3,546	4,146
GRAND TOTAL MONTHLY	16,698	22,347	30,370
GRAND TOTAL YEARLY	**$200,376**	**$268,164**	**$364,446**

The **cost of operating a basic laboratory** is estimated **between 28,393 USD and 58,273 USD per year**, while the **cost of operating a general X-ray** is estimated **between 17,755 USD and 19,155 USD per year** as portrayed in Table 6 and Table 7. It is important to note that not all PHCCs are required to have laboratories or X-ray services. The costing was conducted based on the option of adding these services if needed, in line with MoPH guidance.

Table 6: OPEX forecast associated to the basic laboratory module

Module Basic Laboratory	Utilization Rate		
	30%	**50%**	**80%**
HUMAN RESOURCES			
Salaries	600	600	1,200
Social contributions	141	141	282
MEDICAL			
Reagents & laboratory consumables	1,049	1,749	2,798
GENERAL			
Maintenance medical equipment	238	238	238
Maintenance general equipment & furniture	2	2	2
Depreciation medical equipment	334	334	334
Depreciation general equipment & furniture	76	76	76
GRAND TOTAL MONTHLY	2,366	3,066	4,856
GRAND TOTAL YEARLY	**$28,393**	**$36,788**	**$58,273**

Table 7: OPEX forecast associated to the X-ray Module

Module X-RAY	Utilization Rate		
	30%	**50%**	**80%**
HUMAN RESOURCES			
Radiologist fees	70	117	187
Salaries	600	600	600
Social contributions	141	141	141
GENERAL			
Maintenance medical equipment	278	278	278
Maintenance general equipment & furniture	1	1	1
Depreciation medical equipment	389	389	389
Depreciation general equipment & furniture	1	1	1
GRAND TOTAL MONTHLY	1,480	1,526	1,596
GRAND TOTAL YEARLY	**$17,755**	**$18,315**	**$19,155**

Consequently, the annual operating costs for a PHC in Lebanon range from **200,376 USD** to **441,873 USD**, varying by available services (laboratory and X-ray) and service utilization levels. The parametric approach applied used three levels of service utilization, enabling users to adjust parameters for sensitivity analysis or to accommodate changes in underlying assumptions.

Table 8: Total OPEX depending on the utilization rate. It sums up the costs of the basic PHCC and the costs of the modules.

Total OPEX	Utilization Rate		
	30%	**50%**	**80%**
Basic PHCC	$200,376	$268,164	$364,446
Basic PHCC with Laboratory	$228,769	$304,952	$422,719
Full PHCC with Laboratory and general X-Ray*	**$246,524**	**$323,267**	**$441,873**

**Not all PHCCs require labs and X-rays (costing was based on the option to add services if needed, per MoPH guidance)*

Upgrading a Dispensary

The **resources and costs** required to **operate a dispensary** were estimated based on data from two sampled dispensaries and a UNICEF-conducted PHC provider survey, which included responses from 313 dispensaries detailing staff numbers, operational budgets, and monthly service delivery.

- Estimated operating costs for a standard dispensary (serving 500 patients monthly) are around **120,000 USD per year**, typically **with limited staff and no laboratory or X-ray facilities**.
- Upgrading a dispensary involves **expanding services**, significantly **increasing consultation numbers**, and **hiring additional specialists** (e.g., pediatrician, endocrinologist, dentist) and full-time staff to meet MoPH standards.
- The added annual operating cost for upgrading to a basic PHC center is estimated between **80,000 USD and 245,000 USD**, depending on service utilization (11,000 to 30,000 consultations annually).

Component 4: Fiscal space Analysis for PHC Financing

This component carried out Fiscal Space Analysis using a simulation tool (MacroHealth tool version 1.1) developed by WHO used for assessing the fiscal space available for health, given the macroeconomic and public finance conditions.

The following scenarios were used to estimate and analyze fiscal space for PHC in Lebanon.

- Status Quo – the current situation of PHC expenditure equivalent to 5% of GGHE for the whole projection period.
- Scenario 1 – Repurposing of MoPH allocation from hospital care management to PHC management and the allocation should increase to 35% of GGHE.
- Scenario 2 – PHC expenditure to increase to 3% of GDP by 2029.
- Scenario 3 – External resources for health to equal 5% of THE by end of projection period.

KEY FINDINGS:

- The assessment of the fiscal space for PHC shows that **all the scenarios above** (status quo, scenario 1, scenario 2, and scenario 3) **produces a cumulative additional fiscal space for PHC** in Lebanon by $234.3 million, $1,264.5 million, $119.6 million, and $475.9 million respectively.
- However, none of the scenarios generated enough resources to cover the planned expenditure of the PHC ($1,684.4 million).
- The best scenario under the purview of the Ministry of Public Health is the reprioritization of primary health care in the ministry's budget to 35% of general government health expenditure.
- However, the **recommended** scenario was a **combination** of both the **reprioritization of PHC in the ministry's budgetary allocation** and an **increase in external resources for health to 5% of total health expenditure** that generated a **fiscal space of $1,740.5 million**. The recommended scenario therefore, will generate more revenue than the planned PHC expenditure of over $9.0 million annually between 2024 – 2029.

Part I: Potential for PHC Fiscal Space Enhancement

The analysis was carried out based on the **below fiscal space**:

1. Conducive macroeconomic environment
2. Reprioritizing health
3. Sin Tax on Tobacco
4. Mobilizing external resources (Foreign aid)
5. Efficiency gains

The **objectives** and **key assumptions** of the scenarios used are displayed below:

Conducive Macroeconomic Environment	• Economy grows as predicted by the IMF. • The growth in the economy will propel a growth in total health expenditure.
Reprioritizing Health and PHC in Particular	• PHC allocation will reach maximum of 30% of MOPH allocation between 2024 -2029. • PHC allocation will reach 3% of GDP by 2029.
Sin Tax on Tobacco	• Assuming a tax equivalent to $0.12 of what a smoker spends per week on cigarette. • About 72.3% of the population aged 15+ and 38.2% of them smokes.
Mobilizing Development Partners for Health and INGOs	• External resources meant specifically for PHC will grow to 3% of GDP by end of projection period.

1: Conducive Macroeconomic Environment

Using data on economic growth and other macro-fiscal variables from the recent IMF projection for the country (IMF, 2023), estimates for health expenditure, particularly PHC expenditure were set up in line with GDP growth (IMF, 2023). Based on these projections, At the current and projected economic growth and GDP levels, Lebanon is expected to generate approximately total additional resources for PHC of about $234.27 million in additional resources for PHC between 2024 – and 2029, equivalent to and corresponds to 0.9% of the 2029 GDP, averaging with an average of about $39.05 million per year. while is projected to average 3.4% between 2024 – 2029. Economic growth is projected to average 3.4% over this period.

However, as shown in Table 9, It is evident that the current and projected economic growth will is unlikely to not generate the much-needed fiscal space for health in general and PHC in particular if the GDP share of health expenditure and PHC share of GGHE remains unchanged. While the IMF's 2023 projection estimates a 3.4% average growth rate over the next six years (2024-2029), this comes after a period of negative growth (-7.5% between 2018 and 2023), meaning that recovery will be slow, and the impact may not be substantial. Furthermore, these projections face significant limitations due to rising debt servicing obligations, persistent inflation, and economic instability exacerbated by the ongoing war in Lebanon, all of which could further constrain fiscal space.

Prospects of additional fiscal space for PHC remain relatively low. Key factors for this include projected slow economic growth, and low budgetary allocation for PHC and heightened macroeconomic uncertainty.

Table 9: Fiscal Space for Health under Conducive Macroeconomic Environment (USD)

Indicator	2024	2025	2026	2027	2028	2029
GDP ($Million)	18,200	24,700	26,700	27,900	27,984	28,068
GDP Pc	3,502.4	40.3	5,368.6	33.1	12.8	6,004.2
THE ($Million)	47.3	1,235.0	32.7	1,953.0	2,239.0	2,245.0
GGHE ($Million)	233.2	15.32	18.38	883.7	48.1	1,375.3
PHC Exp. Flat 5% GGHE ($Million)	11.2	19.9	30.7	44.2	59.6	68.8

Source: IMF 2023 Country Report for Lebanon and World Bank Database

2: Reprioritization of Health

Fiscal space for PHC could be expanded significantly by re-prioritizing PHC to increase its share in both the Domestic general government health expenditure (GGHE) and MoPH budgetary allocations. To explore the potential impact of this reprioritization between 2024 and 2029, two sets of assumptions were made – 1) assuming PHC share in MOPH / health budget increases to 35% by 2029, and 2) assuming that PHC share of GDP increases to 3% in 2029 (the target is to reach 5% of GDP in order to achieve UHC) (see table 10).

When If PHC budgetary allocation increases to 35% of the MoPH/Health Sector budget allocation, fiscal space is generated to the tune of $1,264.54 million, equivalent to 4.5% of the projected GDP in 2029. The second scenario, though more ambitious, assumes that PHC expenditure will gradually increase to 3% of GDP by 2029, progressing at a rate of 0.5 percentage points per year. This would generate a cumulative fiscal space of $2,838 million over the period 2024–2029, equivalent to 10.1% of 2029 GDP.

Table 10: Fiscal Space for Health under Reprioritization of PHC ($ Million)

Indicator	2024	2025	2026	2027	2028	2029
GDP ($Million)	18,200	24,700	26,700	27,900	27,984	28,068
THE ($Million)	819	1,235	1,602	1,953	2,239	2,245
GGHE ($Million)	233.2	398.3	612.8	883.7	1,192.1	1,375.3
PHC Exp. Yearly 5% GGHE ($Million)	22.3	59.7	122.6	220.9	357.6	481.4
PHC Exp. 3% GDP ($Million)	91.0	247.0	400.5	558.0	699.6	842.0

Source: IMF 2023 Country Report for Lebanon; World Bank Database and Author's Calculation.

3: Generating Health Sector Specific Resources

The government can generate additional fiscal space for PHC by introducing a sin tax and earmarked tax on tobacco products. Lebanon's current tax structure includes an ad valorem excise tax (based on producer price or the declared imported value), a specific excise tax that applies only to imported tobacco products, import taxes, and VAT. However, the current system does not apply a specific excise tax on locally produced tobacco products and lacks a minimum excise tax, which limits its potential to generate significant additional fiscal revenue for health (WHO, 2020).

By introducing a flat-rate sin tax (equivalent to $0.12 per week of a smoker's expenditure on cigarettes), the government could raise additional funds earmarked specifically for PHC. This analysis assumes a tax equivalent to $0.12 per week of what a smoker spends on cigarettes, amounting to approximately $0.48 per month. Given that 72.3% of the population is aged 15 and older, with 38.2% being smokers, this measure is projected to generate around $85 million over the projection period (2024-2029) (see Table 11). This would be an additional tax on top of the existing excise taxes and would help create new fiscal space for health financing.

Table 11: Revenue from Cigarette Smoking

Indicator	2024	2025	2026	2027	2028	2029
GDP ($Million)	18,200	24,700	26,700	27,900	27,984	28,068
THE ($Million)	819	1,235	1,602	1,953	2,239	2,245
Revenue from Cigarette ($Million)	15	14.6	14.1	14.0	13.6	13.4

Source: IMF 2023 Country Report for Lebanon; World Bank Database and Author's Calculation.

4: Mobilizing external resources (Foreign aid)

Another way to generate fiscal space for PHC is for the government of Lebanon through the MoPH to utilize external resources in the form of aid and grants from international development for health partners. Mobilizing external resources for health to 5% of THE by 2029, will generate a cumulative fiscal space of about $476 million for PHC in Lebanon for the period 2024 – 2029.

Table 12: External Resources for Health

Indicator	2024	2025	2026	2027	2028	2029
GDP ($Million)	18,200	24,700	26,700	27,900	27,984	28,068
THE ($Million)	819	1,235	1,602	1,953	2,239	2,245
External Resources for Health ($Million)	25	49	80	98	11.2	11.2

Source: IMF 2023 Country Report for Lebanon; World Bank Database and Author's Calculation.

5: Efficiency Gains

Improving the efficiency of existing health expenditure can help to realize fiscal space. Within the Lebanon context, fiscal space can be realized from value for money expenditures by repurposing the overall health expenditure of the MoPH. This involves repurposing PHC expenditure from hospitalization coverage.

The health outcomes since the start of the crisis have been poor, yet there is an increasing (over 80%) allocation of the health budget to hospital management of care. However, studies have shown that an increase in health budget allocation to the PHC will help to improve health outcomes. It has been shown numerous times that investment in PHC can improve health outcomes as they focus on preventative care which is key in improving health outcomes. In addition, decentralization of health care administration, financing, and management to local governments has been shown to improve efficiency, especially tied with a pay-for-performance (P4P) provider payment mechanism.

Reforming provider payment mechanisms (PPMs) at the PHC level is key to achieving UHC by aligning financial incentives with service quality, health outcomes, and overall efficiency (Kazungu et al., 2018). The effectiveness of PPMs, however, is highly context-dependent, relying on strong governance and institutional frameworks for proper regulation and enforcement. Most countries use a mix of PPMs to enhance efficiency. In the UK, family doctors are paid primarily through capitation, promoting cost control and preventive care, with performance-based incentives to improve service quality (Marshall et al., 2014). In Ethiopia, fee-for-service models led to inefficiencies by incentivizing unnecessary procedures, while capitation and performance-based financing improved equity and cost-effectiveness (Koricho et al., 2024). A review of outpatient payment models confirmed that adjusting PPMs can reduce inefficiencies and unnecessary interventions (Jia et al., 2021).

Beyond specific models, decentralized financing (where local governments manage funds and healthcare administration) improves efficiency, especially when paired with strategic purchasing, ensuring resources are allocated effectively (Kazungu et al., 2018; Alshreef, 2019). Blended payment models that integrate multiple approaches, such as capitation for preventive care, P4P for quality incentives, and global budgets for financial sustainability, are increasingly recommended to balance efficiency, quality, and cost-effectiveness (Kazungu et al., 2018).

In Lebanon, adapting such payment reforms within the PHC system could lead to more sustainable financing, improved provider accountability, and better health outcomes by ensuring efficient service delivery, cost containment, and equitable access to essential healthcare services.

Part II: Fiscal Space Analysis for PHC – Estimated Cost of PHC

The following scenarios were used to estimate and analyze fiscal space for PHC in Lebanon:

- Status Quo – the current situation of PHC expenditure equivalent to 5% of GGHE for the whole projection period.
- Scenario 1 – Repurposing of MOPH allocation from hospital care management to PHC management and the allocation should increase to 35% of GGHE
- Scenario 2 – PHC expenditure to increase to 3% of GDP by 2029
- Scenario 3 – External resources for health to equal 5% of THE by the end of projection period

Fiscal Space for PHC using different scenarios

The status quo, 3% GDP and 5% THE scenarios, produces a fairly low fiscal space for PHC. The repurposing of the MoPH allocation from hospital care management to PHC management produces a higher PHC fiscal space and more so, it is within the purview of the MoPH.

Recommended Scenario: A combination of both scenario 1 & 3; the former is within the purview of the MoPH and the latter involves dialoguing with development partners for health with concrete and well-designed programs.

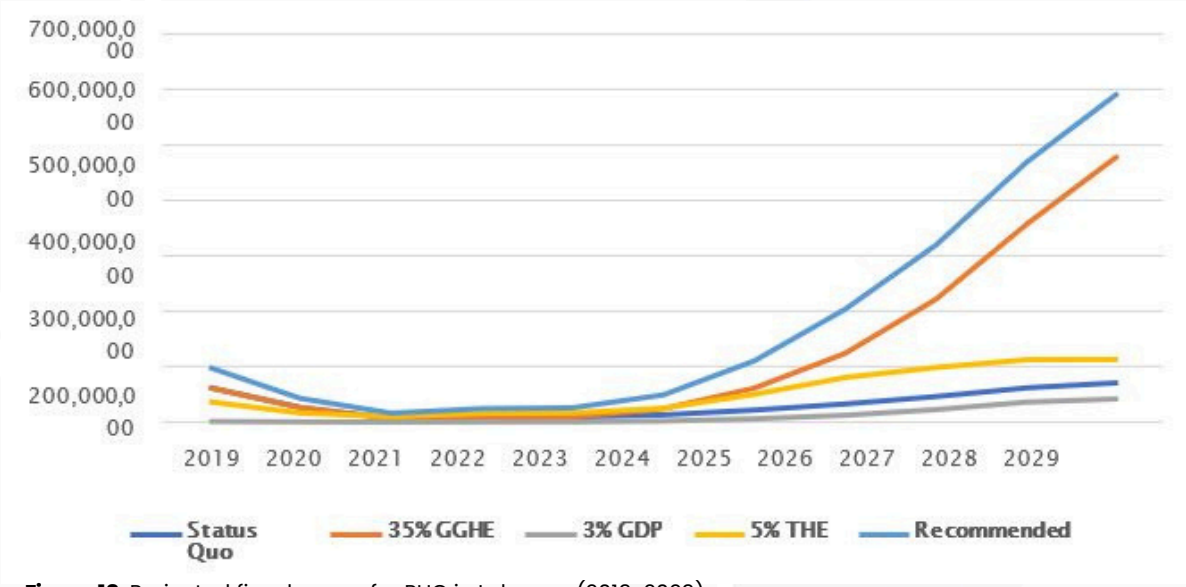


Figure 18: Projected fiscal space for PHC in Lebanon (2019-2029)

PHC Planned Revenue and Expenditure

Expenditure vs. Revenue: Starting in 2027, planned PHC expenditures are projected to exceed revenues due to the assumption of increased coverage.
Target Coverage: By 2029, it is assumed that 4 million people in Lebanon will be enrolled in the PHC program, positioning PHC as the primary gateway to the health system.
Deficit and Surplus Trends:
-Between 2027 and 2029, the program is projected to face deficits.
-However, from 2024 to 2026, surplus revenues are expected to offset these deficits.
Overall Financial Outlook: Over the entire projection period, the PHC program is expected to generate an average surplus of $9.4 million, suggesting financial sustainability if all assumptions hold.

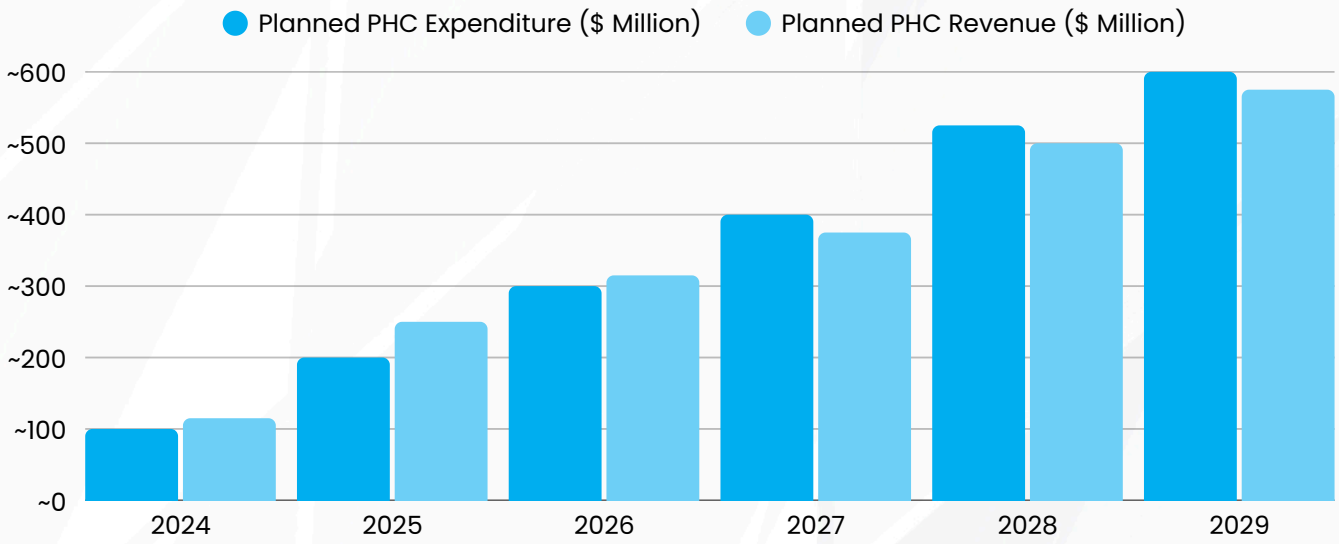


Figure 19: Projections of planned PHC expenditure vs planned PHC revenues from 2024-2029).

PHC Projected Resource Gap Analysis ($ Million)

The result shows that all the scenarios except the recommended scenario over the period have a positive resource gap. The status quo, 35% GGHE, 3% GDP, and 5% THE scenarios show an annual average negative resource gap of $242 million, $70 million, $261 million, and $201 million, respectively. Only scenario 1 is closer to meeting the resource needs of the PHC.

However, **using the recommended scenario (a combination of scenarios 1 & 3), we realized that the fiscal space generated from this scenario was sufficient to cover the cost of financing the PHC expenditure over the projection period.**

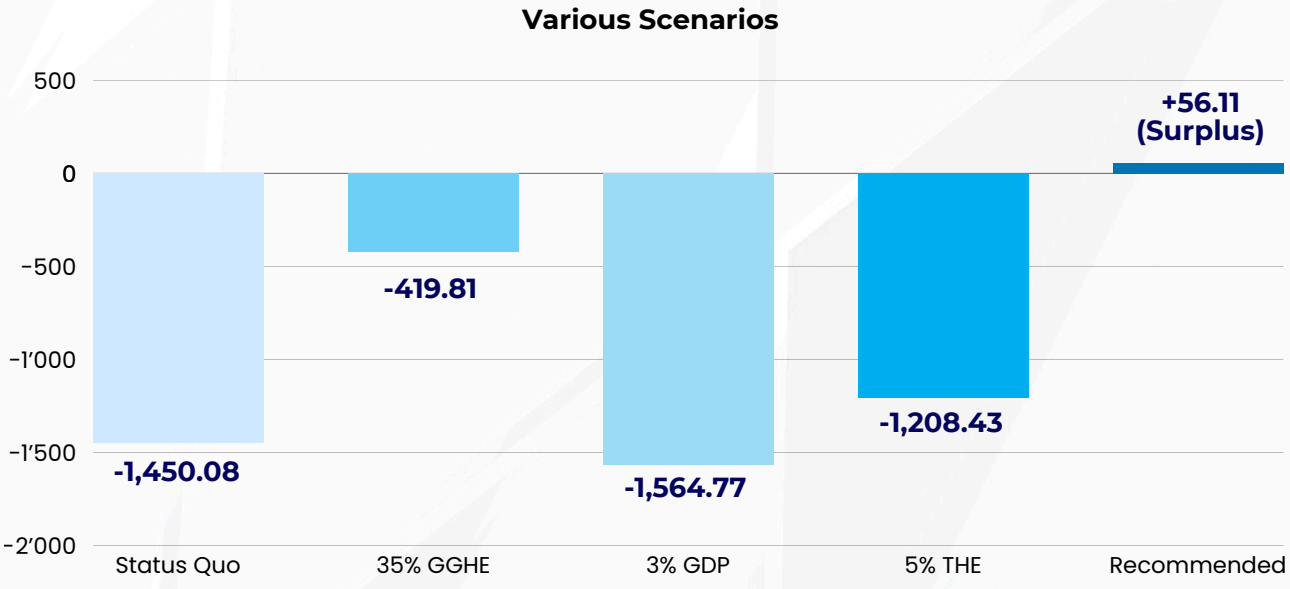


Figure 20: Resource Gap Analysis for PHC Financing Under Various Scenarios
Source: WB & WHO Databases & Author's Calculation

Fiscal Space for PHC in Lebanon at a glance

- All the fiscal space pillars can generate additional revenue for PHC, however, they are far below in generating adequate fiscal space to meet the planned cost of PHC in the country, and the fact that some fiscal space pillars are outside the domain of the MOPH.
- Therefore, the best option for PHC financing is by combining both the reprioritization of PHC in the MOPH budget and increased support for PHC from development partners and INGOs.
- There are, however, other fiscal space for PHC options to be used but requires stronger political will for them to be realized.

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic Conditions	Negative economic growth in the past years have witness slow projected growth as a result of a contracted economy (by 40%), triple digit inflation (over 260% year-on-year increase between May 2022 and May 2023), depreciation of the Lira (about 98% by July 2023), and the central bank has lost two thirds of its foreign exchange (FX) reserves	Poor and outside the domain of the MOPH
Reprioritizing PHC in the government or MoPH budget	A linear increase in the PHC allocation of the MOPH budget to 35% by end of 2029 will raise additional fiscal space for PHC by about $1.3 billion	Very Good and it is within the MoPH arrangement
Health sector – specific resources	The introduction of sin and earmarked taxes will help in this area.	Poor due to the laws in the country
Development assistance for health	This will serve as a main source of funding especially now that the economic status of the country has been downsized. Good lobbying from MoPH with backed up data and analysis will help.	Good
Efficiency gains	Evidence of it generating revenue is there but the unavailability of data will hinder it and also health governance policies will help.	Poor

Component 5:
Potential savings associated with switching to generic medications

This component used cost minimization and total cost-saving exercises to identify the lowest-priced generic options while ensuring quality, ultimately highlighting opportunities for substantial cost reductions across various medication categories.

KEY FINDINGS:

- **Switching to best-value generics** could yield an estimated overall cost reduction of **8.4%**, amounting to approximately **USD 52 million** across various drug procurement programs.
- For **cancer and rare diseases**, there is a potential cost savings of **13.4%** when opting for best-value drugs.
- **Acute medications** achieved the **highest savings** percentage at **15.6%** because multiple generic options are available for each API.
- **For chronic medications, potential savings** are **lower at 3.5%** since many are already procured from a WHO-prequalified list, which limits further opportunities for cost reduction.
- **Fragmentation** in the **procurement process** (especially within the Essential Drug Program, or EDP) has led to **inefficiencies** and **supply gaps**, particularly for chronic medications.
- Despite the identified savings, **actual budget allocations** remain **insufficient relative to demand.**

Cost Minimization in Drug Procurement

The list of registered drugs was cross checked with the list collected from the programs to look at the different brands and generics pertaining to the API to highlight the one with the lowest price while quality has been accounted for.

Table 13. Summary of the results-Lowest price of APIs procured.

Category	Total Number of Molecules	Lowest price of Generic Drugs registered at the MoPH	Missing Molecules
Cancer Drug	45	44	1
Chronic Diseases Medications	50	47	3
Acute Medications	94	67	27
Vaccines	10	11	2

199 total molecules analyzed

169 generic drugs registered at MoPH

33 missing molecules

Main Takeaways

- Most drugs procured were generics, but not always the best value for money. While cost minimization was a goal, the generics chosen did not consistently maximize cost savings, as they were not always the most cost-effective options.
- Potential to save costs by choosing generics with the best value.
- Approximately 21% of the lowest-cost drugs were generic; the rest were brand or biotechnology drugs.

Total Cost Calculation and Saving

The table below details the projected cost savings across various healthcare programs when switching from baseline drug procurement to best-value options. Each program shows a potential percentage of savings, with acute and cancer programs benefiting the most. This analysis provides a clear framework for reallocating saved funds to strengthen drug availability and overall program resilience.

Table 14. Summary of the cost saving when switching to best value drugs

Program	Baseline Cost (USD)	Baseline Cost (LBP)	Best Value Cost (USD)	Best Value Cost (LBP)	Potential Savings (%)
Acute Drugs (EDP)	$ 19,045,286.43	752,288,813,985	$ 16,068,390.52	634,701,425,540	**15.6%**
Chronic Drugs (EDP)	$ 44,212,581.39	1,746,396,964,905	$ 42,841,712.47	1,692,247,642,565	**3.5%**
Cancer & Rare Diseases	$ 351,917,489.06	13,900,740,817,870	$ 304,723,863.57	12,036,592,611,015	**13.4%**
Expanded Program on Immunization (EPI)	$ 5,578,265.99	220,341,506,605	$ 5,145,990.80	203,266,636,600	**1.08%**
Total (All Programs)	$ 420,753,622.87	16,619,768,103,365	$ 368,779,957.36	14,566,808,315,720	**8.4%**

To illustrate the financial impact of opting for best-value drugs, the following chart compares the baseline costs of drug procurement with the potential costs when choosing the most cost-effective options. This analysis highlights significant savings across programs, especially in high-cost areas such as cancer and acute medications, underscoring the opportunity to optimize expenditures for enhanced budget efficiency.

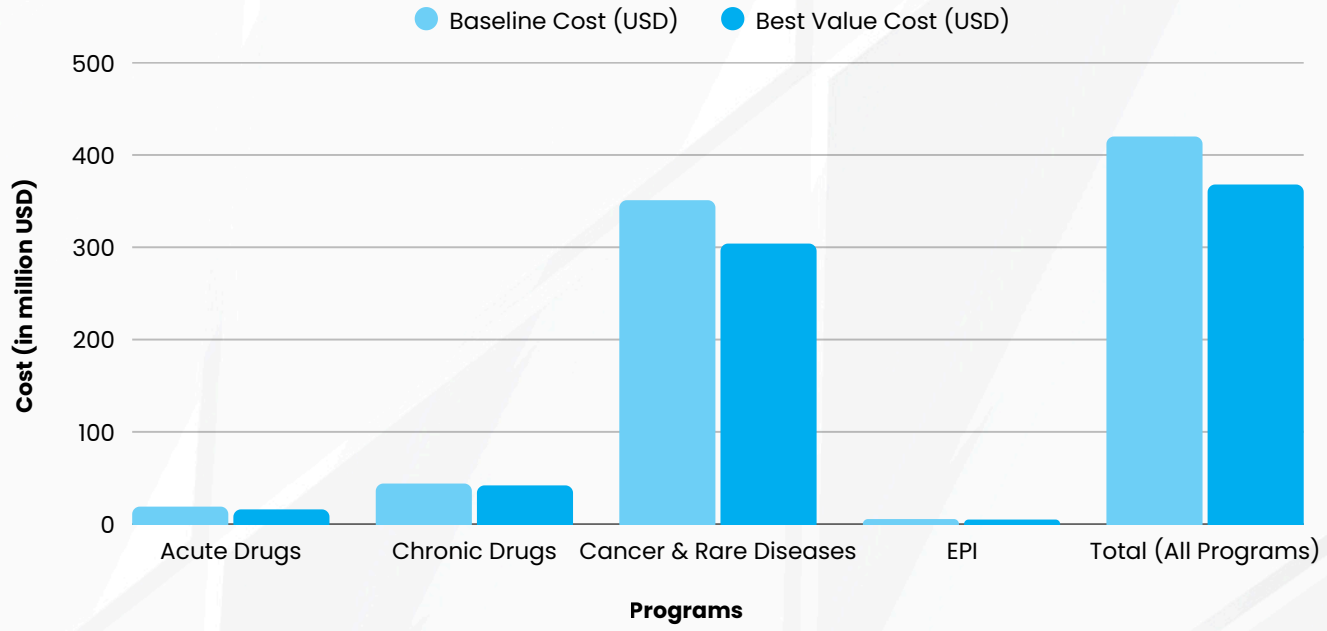


Figure 21. Comparison of baseline and best value costs by program

Switching to best-value drugs across programs could save approximately **USD 52 million**, or **8.4%**, in procurement costs. The largest savings are in the **cancer and acute drugs programs**, with reductions of **13.4%** and **15.7%**, respectively. While chronic drugs see a smaller savings of 3.5%, the overall EDP achieves 7.4%, saving USD 4.3 million. Savings in the EPI are minimal, as UNICEF already procures best-value vaccines. These findings offer Lebanese MoPH and relevant stakeholders a basis for strategic financial planning, enabling resource reallocation to meet growing demands, especially in chronic and cancer drug programs.

Essential Drug Program (EDP): Chronic Drugs and Acute Drugs

In 2017, the YMCA's budget for medical programs under the EDP was around USD 4.6 million, reduced to USD 170,000 due to currency devaluation. The actual annual requirement for effective EDP functioning is estimated at USD 29 million. The main issue affecting EDP's efficiency and causing drug shortages is procurement fragmentation among stakeholders like YMCA, WHO, and various INGOs, each with separate budgets and policies.

Acute drugs show significant cost savings by switching to best-value generics due to many available options, while chronic drugs have minimal savings due to limited generic options and reliance on WHO prequalified lists. Chronic drugs, needed continuously in large quantities, are procured based on WHO standards, limiting further cost savings.

The MoPH's total budget allocation for drug procurement is USD 105 million. As depicted in **Figure 22**, cancer drugs represent the largest portion, consuming approximately 50.7% of the budget, while 39% is allocated to other rare diseases. These high costs, particularly for novel and patented treatments, create a substantial funding gap, underscoring the need for additional resources. Meanwhile, only 10.3% of the budget supports the EDP and other similar programs, a figure that falls short of meeting these programs' growing demands.

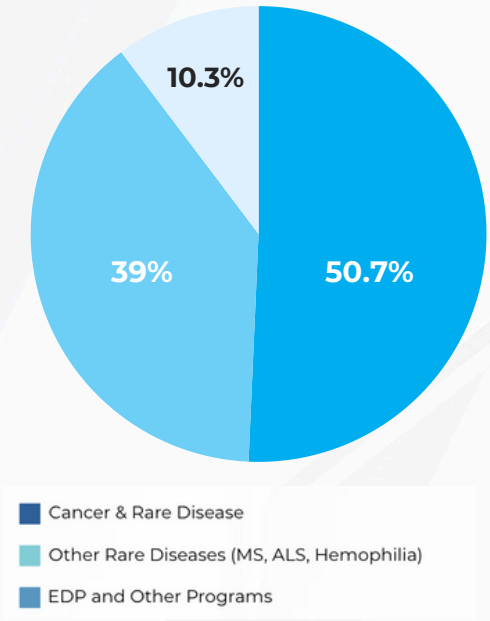
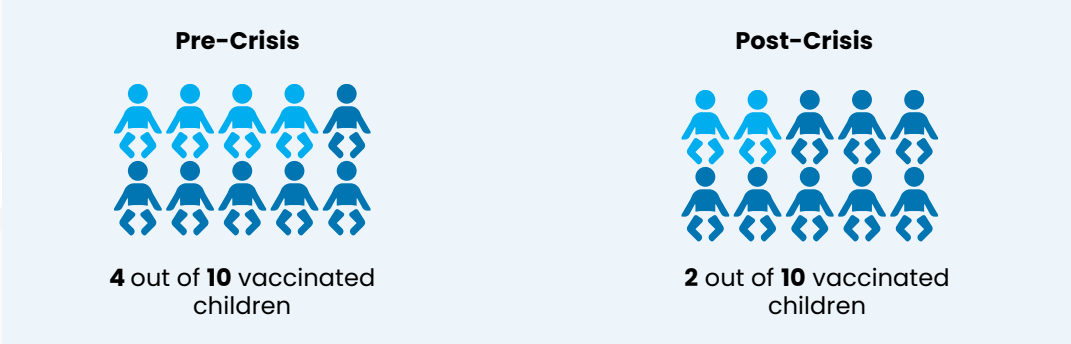


Figure 22. MoPH Drug Procurement Budget Allocation

Expanded Program on Immunization (EPI)

Cost savings within the EPI are limited, at approximately 1%, due to UNICEF's strategic procurement practices, which prioritize high-value generics from a prequalified list. Vaccine costs in Lebanon are closely aligned with UNICEF's global pricing, supporting efficient budget utilization. This fiscal prudence is increasingly vital as economic pressures drive higher demand for public immunization services. Notably, immunization coverage has declined sharply, with only 20% of children of children currently vaccinated, down from 40% prior to the economic crisis.



Component 6: Provider Payment Mechanisms

This component reviewed the literature and country experiences to identify the different provider-payment arrangements at the level of PHC, and examine emerging trends in payment modalities.

KEY FINDINGS:

- Many payment systems have evolved to reach **blended payment models** in similar ways, regardless of their starting points. Countries should work towards using a blended payment model for PHC with **capitation at its center.**
- **Additional payments linked to improvement in health outcomes** or to encourage gate-keeping or care co-ordination have become increasingly popular.
- **Move away** from the **extremes** of either rigid, **input-based line-item budgets** or completely **unmanaged fee-for-service** reimbursement.
- In any model where a portion of the payment is not fee for service, or those services vary in intensity based on the illness and case complexity, **risk adjustment** is of **paramount importance.**

The way that PHC providers are paid and the incentives that these payment mechanisms create, are another tool that can ensure resources reach frontline providers and are used efficiently.

Seven providers payments arrangements at the PHC level have been identified in the literature, including (1) fee-for-service, (2) capitation, (3) salary-based arrangements, (4) budget line-item (5) global budget (6) pay-for-performance, and (7) blended payment arrangements. The most commonly used payment systems to remunerate outpatient care facilities are budgets, capitation, fee-for-service, pay for performance, and mixed systems (Langenbrunner 2009; WHO 2000; Yuan et al., 2017).

In many countries payment systems have evolved beyond fee-for-service and budgets; for instance, additional payments linked to improvement in health outcomes or to encourage gate-keeping or care co-ordination have become increasingly popular.

A survey of more than 70 LMICs on how PHC revealed that at lower- and upper-middle income levels, there is wider use of blended payment methods that combine different payment mechanisms (blended capitation). In low-income level, capitation payment systems are rarely used in low-income countries, whereby most common method for paying public providers for PHC is input-based budgets or a combination of this with fee-for-service (Lancet Commission, 2022).

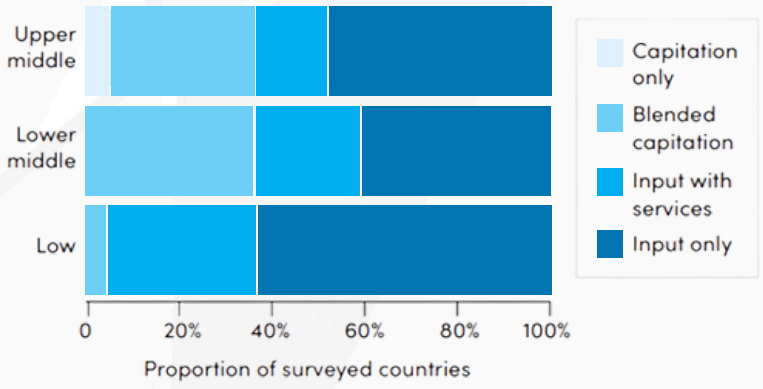


Figure 23. PHC Provider Payment Mechanisms by Income Level.

An overview of the different provider-payment arrangements, including their advantages, limitations and when they are recommended in the following table.

Table 15. Overview of the different provider-payment arrangement

Provider Payment Arrangement	Advantages	Limitations (pervasive incentives)	Overcoming Limitations
Fee-for-service (FFS) Payment of a pre-defined fee per each service or set of services (output-based & retrospective) (WHO, 2020) **Recommended when service supply and access are top priorities while cost control is a low priority and when there is a need to retain or attract more providers (WHO, 2020).**	• Incentivizes providers to provide sufficient volume of care; therefore, increasing access and supply (Willcox, Lewis & Burgers, 2011; WHO, 2020). • Prevents negligence and incentivizes providers to sustain quality to retain patients (Willcox et al., 2011; Rudmik et al., 2014) • Creates an incentive to treat both high-cost and low-cost patients (Rudmik et al., 2014) • Attracts providers (particularly useful in conditions where there is a shortage of providers) (WHO, 2020) • Establishes an ethical bond between the patient and the physician since the patient has purchased the physician's time and skills to provide the best care possible (Rice et al., 2021).	• Incentivizes over-prescription and increases healthcare expenditure (supplier-induced demand) (Hutchison et al., 2011; Rudmik et al., 2014; Li et al., 2020). • The fee-for-service mechanism of paying physicians is the major driver of higher healthcare costs in the United States. It contains incentives for increasing the volume and cost of services (whether appropriate or not), encourages duplication, discourages care coordination, and promotes inefficiency in the delivery of medical services (Schroeder & Frist, 2013). • In Australia, fee-for-service payment system was considered to be partially responsible for increasingly fragmented primary health care and the shift away from prevention and has contributed to poor management of chronic diseases (WHO, 2014).	Insurers may deal with this by monitoring the number and types of services provided, or enacting a budget whereby the provision of more services will result in lower fees for each service provided (Rice et al., 2021). The introduction of volume thresholds can put a limit to spending increases in primary care for FFS (National Academies of Sciences, Engineering, and Medicine. 2021; (Mathauer et al., 2019) Putting a cap on fee-for-service payment, for example, and adjusting the base rate in the case-based payment system to counteract excessive increases in admissions can strengthen the beneficial incentives of capitation payment for primary care (Cashin et al., 2015).
Capitation A prospective population payment system through which providers are given a fixed per-person payment, determined and paid in advance, to deliver a defined set of services to each enrolled individual for a specified period of time, which can then be adjusted based on health needs. (output-based & prospective) (WHO, 2020). It is the only method that pays PHC providers to manage population health, prioritizing both health promotion and prevention	• Creates the strongest incentives for providers to deliver people-centred PHC • Can improve equity and create incentives for providers to improve efficiency by reducing unnecessary services, shifting services toward PHC and prevention, and attracting additional enrollees (Andoh-Adjei et al., 2016; Alshreef, 2019; JLN & GIZ 2019). Chilean capitation reduced inequalities in the provision of PHC and resources across the country (Cuadrado et al 2022) • Decreases cost and decreases supplier induced demand for profitable services (Willcox et al., 2011; Andoh-Adjei et al., 2016; WHO, 2020).	• Incentivizes shifting primary care services to other areas of care resulting in more demand for in-patient and emergency care services (Service-shifting) (Andoh-Adjei et al., 2016). • Discourages providers from accepting high-cost clients (cream-skimming) (Hutchison et al., 2011; Andoh-Adjei et al., 2016) • Encourages providers to less expensive inputs and provide patients with fewer medications (skimping use and cream-skimming) (Hutchison et al., 2011; Andoh-Adjei et al., 2016). • May result in a negative provider perception due to decreased pay (Andoh-Adjei et al., 2016). • Providers may sacrifice quality in order to contain costs (Donev & Kovacic, 2013).	Countries that use capitation adjust the payment for risk factors (e.g. age, gender, health status) to discourage skimping of care and "cherry-picking". (National Academies of Sciences, Engineering, and Medicine. 2021; (Mathauer et al 2019). The incentive under capitation for a physician to under-provide services can also be offset by introducing fees for specific services such as vaccination (Simoens & Giuffrida, 2004).

Capitation (cont'd) Mostly used to strengthen primary care and promote equity when cost control is a priority (WHO, 2020).	• Standardizes care and improves adherence to guidelines and policies (Andoh-Adjei et al., 2016). • Positively associated with primary care responsiveness to patients' needs and prompt communication (Murante et al., 2017). • Provides a predictable and stable revenue stream to PHC providers that can be used to flexibly deliver services in responsive ways (Hanson, 2022). • Has the potential to control healthcare costs by creating incentives for providers to reduce the volume of services (Alshreef, 2019). • Allows for providers' financial and managerial autonomy (Hanson, 2022). • Increases motivation for better prevention and disease management; provides flexibility and incentives for PHC teams to organize their care according to patient needs by using resources efficiently and incentivizes group practices (WHO, 2021). • Capitation payments that reflect actual cost enable PHC to deliver the expected PHC service package and reduce incentives to refer patients to secondary level (WHO, 2021).	• Rationing may occur if capitation is too low (narrow scope practice) (Donev & Kovacic, 2013). • May encourage providers to enroll healthier patients (adverse selection) (Donev & Kovacic, 2013). • Patient choice of provider is generally restricted (Donev & Kovacic, 2013).	Features associated with a successful capitation reform include some degree of provider autonomy and strong administrative information systems in place to ensure the credibility of the number of people enrolled in each center and consequently, the amount paid (Langenbrunner et al., 2009).
Salary-based A remuneration mechanism that involves a fixed payout "per length of time." As a result, payment is not based on the quantity of health care activities or patients (Rudmik et al., 2014). **Salaries are an excellent way to recruit and retain physicians in underserved areas.**	• Provides a stable income for providers, particularly in rural underpopulated regions where fee-for-service and capitation provide inadequate income (Rudmik et al., 2014). • Increases the provision of preventive care, and health promotion (Rudmik et al., 2014). • Decreases cost by reducing administrative cost and supplier-induced demand (Rudmik et al., 2014). • Flexibility in resource use with good cash flow and less lost-costs (Donev & Kovacic, 2013).	• Provide incentives to reduce service provision and productivity (Rudmik et al., 2014). • May come with societal opportunity costs by reducing productivity and under-providing appropriate care (Rudmik et al., 2014).	To sustain productivity and health care goals, contracts frequently include pre-negotiated services and work-hour requirements.

Salary-based (cont'd)	• The more services included in the package, the less the scope for cost shifting (Donev & Kovacic, 2013). • Resources closely linked to size of population served & their health needs (Donev & Kovacic, 2013). • Good case management (Donev & Kovacic, 2013).		
Line-item budget A prospective payment arrangement through which providers are given prospectively a fixed amount of funds to cover specific line items, such as medicines and utilities, for a period (usually a year). **Recommended when management capacity of purchaser and providers is low and when cost control is a top priority (WHO, 2020; Hanson et al., 2022).**	• Controls healthcare costs (Langenbrunner et al., 2009; WHO, 2020). • Requires low management capacity (Langenbrunner et al., 2009; WHO, 2020).	• Incentivizes shifting primary care services to other areas of care resulting in more demand for in-patient and emergency care services (Service-shifting) (Langenbrunner et al., 2009; WHO, 2020). • Does not incentivize the efficient use of inputs (Langenbrunner et al., 2009; WHO, 2020). • Providers are prompted to spend their remaining budgets at the end of every year (Langenbrunner et al., 2009; WHO, 2020).	
Global Budget A prospective payment model through which providers receive a fixed amount for a specified period covering aggregate expenditures to provide an agreed-upon set of services (WHO, 2020). **Mostly used when competition among providers is not possible or not an objective; and when cost control is a top priority (WHO, 2020).**	• Controls cost (Langenbrunner et al., 2009; WHO, 2020). • Possibly increases efficiency when budget allocation is based on volume as providers tend to decrease input (Langenbrunner et al., 2009; WHO, 2020). • Increases service provision when budget allocation is based on volume (Langenbrunner et al., 2009; WHO, 2020) • This model has lower administrative costs compared to fee-for-service (Alshreef, 2019). • Has the potential to control healthcare costs by creating incentives for providers to reduce the volume of services (Alshreef, 2019).	• When the budget allocation is based on input providers tend to under provide services and increase input (Langenbrunner et al., 2009; WHO, 2020). • Global budgets can be an important element of health sector reforms such as decentralization of the healthcare system (Yuan et al., 2017).	When global budgets are formed based on input, they might lead to increased referrals and less provision of services. When global budgets are formed based on volume, they tend to increase the number of services, increase referrals, and decrease input (possible efficiency).

Provider Payment Arrangement	Advantages	Limitations (pervasive incentives)	Overcoming Limitations
Pay-for-performance or Value-based care Paying A pay-for-performance or Value-based care reimbursement model is when providers are given bonus payments (or penalties) for achieving service coverage or quality targets (Eijkenaar et al., 2013; Mendelson et al., 2017; Diaconu et al., 2021).	• Stimulates improvement in clinical care quality (Basinga et al., 2010; Scott et al., 2011; Kolozsvári et al., 2014). • Improves client-provider interaction (Kolozsvári et al., 2014). • Incentivizes test and treatment used for chronic conditions (slightly) (Basinga et al., 2010; Scott et al., 2011; Bitton et al., 2019). • Incentives for chronic conditions management and meeting screening targets were associated with improved patient perception of attentiveness of providers (Murante et al., 2017). • Injects funds at every level of the system and offers providers the autonomy to decide where to allocate funds thus decreasing bureaucratic inefficiencies associated with centralized management (Odutolu et al., 2016). • A systematic review found that this payment method will probably lead to a slight improvement in service delivery, such as the use of tests or treatments for controlling risk factors for chronic diseases, but may lead to little or no improvement in utilization of health services or health outcomes (Yuan et al., 2017). • ·Better NCD and child health management at PHC level, reduced referrals and hospitalizations (WHO, 2021). • Increases trust towards PHC and improves data collection and performance monitoring (WHO, 2021).	• High incentives were associated with gaming/data manipulation (Pesec et al., 2017; Kolozsvári et al., 2014) • Incentives to reduce referrals were associated with negative patient-provider relationship (Murante et al., 2017) • May result in increased inequality due to the selection of healthier patients (So & Wright, 2012). • Providers may focus only on sectors that are incentivized and limit the quantity and quality of services that are not (Rudmik et al., 2014). • Increase in cost in systems where pay-for-performance is provided as a bonus in addition to other methods (Rudmik et al., 2014). • Complex remuneration method requiring accurate monitoring of performance indicators (Rudmik et al., 2014). • Unavailability of electronic information system or resources to support administrative cost of P4P will limit its use (Yuan et al. 2017). • Doctors prefer to treat patients with milder disease condition or better socioeconomic status, which not only intensifies inequity, but may also exaggerate improvement of clinical performance (Lin et al., 2016). • More research is required to fully understand the advantages and limitations of this payment arrangement (Rudmik et al., 2014).	Financial incentives should be relatively low-powered to prevent disproportionate focus on rewarded tasks and to ensure sustainability (Steel et al., 2007; Campbell et al., 2009; Mullen et al., 2010; Hanson et al., 2022). Furthermore, performance monitoring should happen alongside the implementation of the blended payment model.

Provider Payment Arrangement	Advantages	Limitations (pervasive incentives)	Overcoming Limitations
Blended payment Includes a combination of different payment arrangements such as fee-for-service, capitation, and budget (Hutchison et al., 2011).	• Allows funders to align funding with health system priorities (Hutchison et al., 2011). • Balances negative incentives resulting from fee-for-service (supplier-induced demand) and capitation (skimping and cream-skimming) (Hutchison et al., 2011). • Supports infrastructure development (Hutchison et al., 2011). • Encourages delivery of priority services & aligns funding with desired outcomes (Hutchison et al 2011). • Hybrid funding through capitation and fee-for-service incentivizes providers to provide sufficient services while also offsetting costs (Willcox et al., 2011; Angell et al., 2019). • Associated with a higher level of patient dignity (Murante et al., 2017). • Increases outpatient visits and decreases inpatient admissions (Angell et al., 2019). • Combining capitation and pay-for-performance was found to increase rates of primary care visits, reduce inpatient admissions and decrease cost (Angell et al., 2019). • A longitudinal study concluded that the combination of capitation and pay-for-performance (based on financial performance of the service) led to an increase in primary care visits, a reduction in inpatient admissions and a decreased cost of outpatient visits. However, performance payments had no impact on reducing inappropriate prescribing practices (Sun et al., 2016).	• More research is required to fully understand the advantages and limitations of this payment arrangement (Rudmik et al., 2014).	Blended payment systems or mixed models for PHC provider payment typically include a budget payment to cover unavoidable fixed costs, particularly in low-population or hard-to-serve areas; some fee-for-service carve-outs for health conditions or services that are high priority or at higher risk of being underprovided in capitation; and, in some cases, performance-based payment to incentivize reaching coverage targets for priority services and improving quality of care. Other complexities may be added to align with evolving and innovative service delivery models (Hanson et al., 2022). Choosing a mix of payment methods that complement one another, designing them strategically, and putting the right implementation arrangements in place are crucial for getting the most benefit for the health system from provider payment policy (Cashin et al., 2015).

Impact of the four most common payment models (Park et al., 2018)

Payment model	Impact on: Health outcomes	Experience of care	Cost control	Provider satisfaction	Allows proactive investment in primary care	Access to care	Continuity of care	Coordination of care	Comprehensiveness of package
Fee-for-service (FFS)	↓	↓	↓	↓	✗	↓	↔	↓	↑↓
Capitation (Full risk)	↔	Mostly ↑	Mostly ↑	↓	✓	↓	Insufficient evidence	Insufficient evidence	↑↓
Pay-for-performance (P4P)	↑↓	↑↓	↑↓	↓	✗	↑↓	↓	↔	↓
Blended FFs & capitation	↑↓	↑↓	↑↓	Insufficient evidence	✓/✗	↑	↑	↑	Insufficient evidence

↑ Evidence of positive outcomes

↓ Evidence of negative outcomes

↑↓ Evidence of mixed effects

↔ No significant effect or change

✓ Allows proactive investment in primary care

✗ Does not allow proactive investment in primary care

✓/✗ Some components allow proactive investment in primary care while others do not

Evolution of the payment system

Countries should work towards using a blended payment model for PHC with capitation at its center (Hanson et al., 2022). Blended payment models bring the benefits of capitation as the starting point and then complement it with elements of other payment mechanisms to offset capitation's disadvantages and support the attainment of other specific health system objectives.

Many payment systems have evolved to reach blended payment models in similar ways, regardless of their starting points. In most countries, introducing equity-orientated and efficiency-oriented payment system reforms begin with a basic population-based capitation model which is transparent, involves simple per-capita payments, and is easy to administer in places where data automation is limited. Most payment systems then introduce risk adjustments. Complexity continues to increase over time as additional payment methods are added.

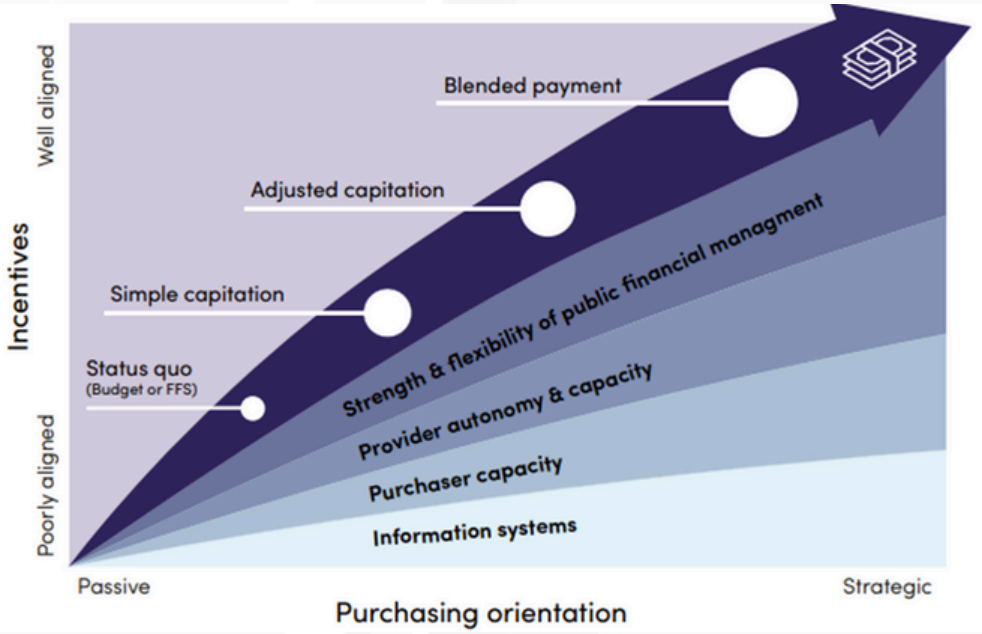


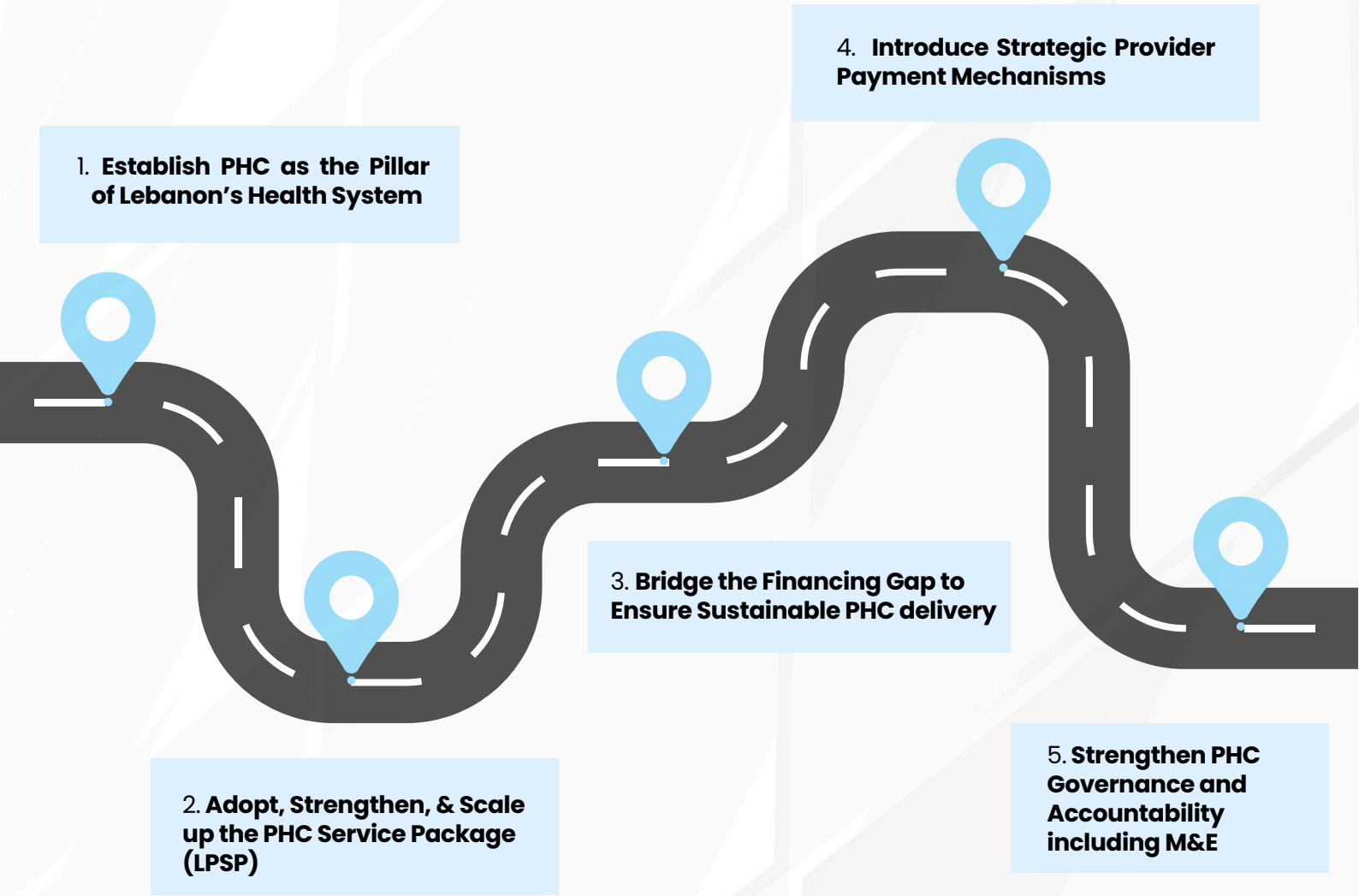
Figure 24: Strategic pathway for moving to a blended capitation-based payment (Hanson et al., 2022)

The trajectory towards a population-based payment model involves several steps (Hanson et al., 2022):

- **Establish a baseline capitation payment system:** If capitation is to promote equity and generate clear incentives, it would be important to base the payment amount on a formula that links the payment parameters (base per-capita rate, number of enrollees linked to provider, and any individual or provider-level adjustments) to a defined package of PHC services. Each payment parameter can range from simple to complex and function as strategic levers to maximize the potential benefits of the payment system while minimizing adverse incentives, and unintended consequences.
- **Define the PHC package:** Defining a package of PHC services linked to capitation payment creates an opportunity for a given country to clarify what its definition of PHC includes. Specifying what is included in the PHC package and where it is provided can drive shifts in service delivery priorities and promote the integration of vertical programs into PHC.
- **Manage enrollment:** The assignment of a fixed and defined population to a single PHC provider is an advantage of the system. Individuals can be enrolled with providers through administrative assignment (as defined by a geographical catchment area) or by their own choice (known as open enrolment). Open enrollment during select time periods allows financing to support users' choices; in principle, this creates incentives for providers to be responsive to patients and provide high-quality services.
- **Adjust for risk levels:** Risk adjustment is a correction tool which utilizes a measure of risk variation to compensate health providers appropriately for the projected costs of providing necessary services for their enrolled populations. Variation in health need is accounted for, by using data on different baseline characteristics such as levels of health, sex or gender, chronic disease risk, and socioeconomic status. Risk adjustment protects higher risk and sicker patients from the incentive providers have to avoid caring for them when their care is predicted to be especially resource consuming.
- **Blend payment methods:** The precise blend of payment changes as a country's system matures. Various factors, including history, culture, priorities within the PHC system, or shifting disease patterns in a country, can drive these changes.
- **Ensure payment methods incentivizes providers in the right direction:** Payment rate, the sufficiency of payment rate to cover the cost of services, timeliness of payment, payment schedule, performance requirements, and accountability mechanisms are key characteristics of provider payment methods that influence health care providers' behavior (Kazungu et al., 2018).

Roadmap for Policy & Action

The following roadmap outlines five actionable recommendations aimed at enhancing PHC financing over the next six years.



Adopting these five actionable recommendations will mark the start of a transformative journey towards a resilient PHC system, paving the way for UHC in Lebanon. Achieving this vision requires strategic investment, strong governance, sustained political commitment, and multi-sectoral collaboration.

Action 1: Establish PHC as the Pillar of Lebanon's Health System

PHC has the potential to serve as the cornerstone of Lebanon's health system, ensuring equitable access to quality services and addressing systemic inefficiencies. However, the PHC network remains underutilized as a gatekeeper due to fragmented care pathways, insufficient political commitment, and low public awareness. Strengthening its role requires a unified national commitment that prioritizes PHC in policy and governance frameworks. This effort must go beyond technical interventions, embedding PHC as a sustainable pillar of the health system to drive long-term improvements in access, equity, and quality.

- Secure endorsement for a National PHC Declaration, prioritizing PHC in budgets, service delivery, and governance reforms.
- Position PHC as a key component of Lebanon's UHC goals, backed by regular public reporting on progress toward coverage and equity targets.
- Conduct high-level advocacy to secure government-wide commitment to PHC reforms, emphasizing their economic and social returns.
- Prioritize population catchment zoning to ensure that PHC serves as the gatekeeper into the overall health system. This zoning should focus on providing a comprehensive range of health services throughout the life course, using an "Identify – Early – Address – Early" approach to improve prevention and early intervention at the primary care level.
- Strengthen coordination between municipal and regional levels, decentralizing PHC support to improve efficiency and equity in service delivery.
- Launch campaigns emphasizing PHC's benefits in reducing out-of-pocket (OOP) expenses and improving health outcomes, targeting communities, healthcare providers, & decision-makers.
- Establish inclusive mechanisms to involve healthcare providers, policymakers, and communities in PHC reform design and monitoring, fostering trust and alignment. Prioritize equity in all health initiatives, focusing on underserved and vulnerable populations.
- Develop a cohesive strategy to communicate reforms, benefits, and progress to the public, leveraging diverse channels to ensure widespread awareness.
- Collaborate with international donors, NGOs, and private sector actors to secure technical and financial support for PHC initiatives. Ensure partnerships align with national priorities and adhere to shared accountability frameworks.
- Design or revise health policies to include contingency measures and adaptive frameworks that address economic volatility, demographic changes, and health emergencies.
- Utilize scenario-based planning methodologies to anticipate potential challenges and devise targeted policy responses for a range of future scenarios.

Action 2: Adopt, Strengthen & Scale-up the LPSP

The introduction of the LPSP marks a pivotal step in addressing healthcare inequities and enhancing the accessibility of essential services at the PHC level. This initiative is especially critical given Lebanon's socio-economic challenges, including economic instability, resource limitations, and a fragmented healthcare system. Strengthening the LPSP as a standalone, comprehensive framework that aligns with UHC goals, while strategically addressing identified service gaps, is essential to improving health outcomes and ensuring equitable access to care.

- The LPSP remains the proposed PHC standard of care in Lebanon. The government should transition from the current PHC program to the LPSP, which could save $105,000 per center annually while delivering 2,008 additional services per PHC facility.
- Conduct foundation assessments of PHC centers (followed by regular re-assessments) to evaluate readiness in terms of infrastructure, human resources, and equipment.
- LPSP package development should not be seen as a one-off action. Regular revisions, based upon the current disease burden and future expected innovations and budgetary increases, will ensure that the package remains relevant, responsive to population needs, and aligned with international best practices.
- Consider expanding the LPSP to include considerations for services such as palliative care, occupational health, delivery services, and standalone cancer care packages.
- Strengthen referral systems, follow-up mechanisms, and integration across care levels to enhance the package's ability to deliver comprehensive, coordinated care, and to create a dynamic, adaptable, and sustainable PHC system that can respond to the population's changing health needs
- Streamline the delivery of laboratory services, which account for 33% of LPSP costs, through centralized procurement and better technology use.
- Invest in staff training for task-shifting and multitasking to reduce staffing costs while maintaining service quality. Training non-physician health workers to deliver certain essential NCD interventions, for example, can enhance service accessibility and efficiency
- Continuously monitor laboratory services, medicines, and staff salaries to manage primary cost drivers effectively and sustainably.
- Design and implement a national campaign to inform the public about the LPSP package, including available services and patient entitlements.
- Prioritize the evaluation of the LPSP package through regular assessments to ensure continuous alignment with population needs and health outcomes.

Action 3: Bridge the PHC Financing Gap to Ensure Sustainable PHC Delivery

Efforts should be invested to mobilize sufficient and sustainable resources to close the PHC financing gap and ensure universal access to the Lebanese PHC Service Package (LPSP). Currently, PHC expenditures account for only 5% of General Government Health Expenditure (GGHE). Implementing the expanded LPSP will require an estimated $1.684 billion over six years (approximately $280.7 million annually). Even with efficiency improvements, the annual funding gap exceeds $9 million, highlighting the urgent need for innovative financing strategies to sustain PHC services and achieve UHC goals.

UHC with a people-centered approach cannot be achieved in the context of fragmented health financing. International experience has shown that using multiple financing arrangements is inefficient, leading to overlaps, duplication, and coordination problems. While external funding will remain critical in the short-to-medium term, these partnerships should be managed to reduce fragmentation and maximize impact. As Lebanon's economy stabilizes, the government should gradually shift towards increased sustainable domestic resources for PHC. This could involve improving domestic revenue collection mechanisms, reallocating health resources more efficiently, and ensuring that financing mechanisms are aligned with national health goals and priorities.

Once the LPSP is fully rolled-out, conducting a comprehensive costing analysis of Lebanon's PHC system under the LPSP presents crucial implications for enhancing healthcare efficiency and accessibility. Key areas for policy and practice include strengthening data collection, managing cost drivers, investing in workforce flexibility, focusing on preventative care, and adapting resource allocation to meet local population needs.

-> Reprioritize the MoPH budget for PHC

- Increase PHC's share of GGHE from 5% to 35%, generating $1.26 billion over six years. This reprioritization would mark a substantial policy shift, redirecting resources from hospital care to PHC. The shift addresses inefficiencies caused by over-reliance on tertiary services and aligns with global recommendations to dedicate more resources to primary care as a cost-effective health strategy.

-> Leverage external resources for health (short-medium term only)

- Partner with international donors such as the World Bank, WHO, and bilateral aid agencies to secure targeted grants and technical assistance for PHC strengthening. Coordinate donor funding to align resources with national priorities and improve efficiency.
- Increase external health funding from 2.3% to 5% of Total Health Expenditure (THE), generating an additional $475.9 million over six years. This funding will be used to reduce out-of-pocket (OOP) expenses and enhance the sustainability of PHC services.
- Frame donor engagement within Lebanon's commitment to UHC, emphasizing the potential of PHC to improve health equity and reduce the financial burden on households.

Action 3: Bridge the PHC Financing Gap to Ensure Sustainable PHC Delivery (cont'd)

-> Integrate cost-saving measures across PHC programs

- Promote generic medicines to reduce inefficiencies in drug procurement. Potential savings of $52 million annually can be achieved by transitioning to best-value generics. This equates to an 8.4% cost reduction across procurement programs, driven by:
  - § Acute medications, offering the highest savings at 15.6% due to multiple generic options per active pharmaceutical ingredient (API).
  - § Cancer and rare disease medications, with potential savings of 13.4% through strategic substitution.
  - § Chronic medications, where savings are limited to 3.5% because procurement is already optimized with WHO-prequalified suppliers.
- Centralize procurement processes to reduce fragmentation and negotiate better pricing with suppliers.
- Strengthen the Essential Drug Program by focusing on generics, optimizing prescribing practices, and launching public education campaigns to encourage their use.

-> Diversify domestic revenue streams

- Introduce innovative revenue mechanisms, such as a PHC sustainability levy (e.g., small taxes on non-essential goods like tobacco, alcohol, or luxury items) earmarked for PHC funding.
- Explore public-private partnerships (PPPs) to finance PHC infrastructure and service expansion.
- Conduct feasibility studies to assess the viability of these mechanisms in Lebanon's socio-economic context.

-> Conduct regular fiscal space analysis and link it with National Health Strategy

- Conduct regular fiscal space analysis for health to review context (annually) and provide a holistic view of the financing needs and opportunities for healthcare in Lebanon.
- Align fiscal space findings with the MoPH's national health strategy to guide resource mobilization efforts effectively.

Action 4: Introducing Strategic Provider Payment Mechanisms

The MoPH should revise and adequately strengthen the existing provider payment mechanisms (PPM) at the PHC level to promote cost-effective, cost-containment, and efficient approaches that improve performance and deliver value for money. Each PPM has its own strengths, weaknesses, and potential unintended effects and must be supported by complementary actions, including legal frameworks, financial systems, referrals, quality assurance, and functional health information systems (HIS). For example, capitation payments require an effective referral system, while case-based payments depend on a functional HIS for accurate coding and record-keeping of each managed case.

The MoPH should prioritize adopting a blended payment model, which combines the strengths of different payment methods to maximize beneficial incentives and minimize potential negative outcomes. In doing so, the MoPH can better align financial incentives with health outcomes, fostering a more sustainable and efficient PHC system.

- Expand the existing PPM framework to adopt a blended payment model, combining capitation with fee-for-service and performance-based incentives to balance equity, efficiency, and quality of care in PHC.
- Refine and implement a capitation payment system linked to LPSP, based on a formula incorporating a per-capita rate, number of enrollees, and individual or provider-level adjustments. Ensure payments reflect the health needs and demographics of the enrolled population. Adjust payments to cover the full spectrum of services included in PHC package.
- Enhance performance-based incentives within the existing PPM framework to reward PHC providers for improving service quality and achieving equity targets. Define clear and measurable performance indicators and link rewards to achievement of specific benchmarks.
- Integrate risk-adjustments into payment mechanisms, using data on health risks, chronic disease prevalence, sex/gender, and socio-economic factors to ensure equitable and needs-based funding across different population groups.
- Establish a mechanism for periodic reviews of payment rates to ensure they remain adequate to cover service costs and reflect inflationary changes. Adjust the capitation and performance payment rates as needed to maintain financial sustainability.
- Gradually shift and adjust the blend of payments in response to system maturity, changing disease patterns, and national priorities, ensuring that payment methods are aligned with healthcare goals.
- Strengthen accountability in provider payment systems to ensure incentives are aligned with performance. Key considerations include payment rates, timeliness of payment, payment schedules, performance requirements, and accountability mechanisms.
- Develop a robust monitoring system for PHC provider payments, including a performance framework, performance indicators, and mechanisms for data collection, analysis, and interpretation. Establish consequences for underperformance that drive improvements at both the provider and health system levels.

Action 5: Strengthen PHC Governance and Accountability, including M&E

To sustain PHC reforms, it is critical to build a robust governance framework, leveraging and enhancing existing structures within the MoPH. The MOPH already has a dedicated PHC department overseeing a network of PHC centers. However, the scale and complexity of the LPSP and broader PHC reforms require additional mechanisms to coordinate financing, implementation, and accountability, while ensuring transparency and stakeholder engagement. This also includes establishing a robust monitoring and evaluation (M&E) framework to track PHC performance, ensure transparency, and inform data-driven decision-making at national and subnational levels.

→ Strengthen the capacity of the MoPH's PHC department

- Enhance the PHC department's capacity to oversee the LPSP's implementation, including service delivery, financing, and referral integration.
- Allocate additional resources for staffing, training, and digital tools to enable real-time performance monitoring and data-driven decision-making.
- Establish a multisectoral PHC oversight unit to coordinate the broader reform agenda and engage external stakeholders.
- Facilitate collaboration with donors, civil society, and non-health sectors to address social determinants of health.
- Develop a comprehensive M&E framework using indicators such as service coverage, financial protection, and equity to track progress
- Publish regular progress reports and host biannual forums for stakeholder feedback.
- Perform periodic follow-up studies to adapt costing models based on evolving demographic and economic contexts.

→ Strengthen and institutionalize Monitoring & Evaluation (M&E) mechanisms

- Revise and expand the existing M&E framework to include indicators on service coverage, financial protection, and equity to track PHC performance and progress.
- Publish regular progress reports and host biannual forums to share experiences, exchange learnings, and solicit stakeholder feedback.
- Conduct follow-up studies at regular intervals to refine costing models and performance indicators, adapting them to evolving demographic, economic, and epidemiological contexts.

→ Enhance strategic governance and leadership

- Implement strategic purchasing to improve the effectiveness of PHC financing and align with health system goals such as equity and quality of care.
- Partner with academic institutions to generate evidence-based policy briefs and analyses to guide PHC reform priorities, including broader fiscal space analyses for health in Lebanon.
- Coordinate with donors and development partners to secure short- to medium-term funding for PHC, ensuring alignment with national priorities and reducing fragmentation.
- Advocate for earmarked sin taxes (e.g., on tobacco, alcohol, fuel) to support healthcare/PHC financing, alongside public-private partnerships and donor contributions.
- Conduct region-specific assessments to identify optimal locations for new PHC centers, addressing factors like infrastructure, energy, and population demands.
- Develop and implement a strategic HR policy to train, recruit, and retain skilled PHC providers, ensuring quality and accessibility.

→ Implement digital health tools for governance

- Expand the use of digital platforms for data collection, patient tracking, & financial oversight.
- Integrate dashboards for real-time monitoring of PHC center performance, financing flows, and referral system efficiency.

References

Alegre, J. C., Sharma, S., Cleghorn, F., & Avila, C. (2024). Strengthening primary health care in low-and middle-income countries: furthering structural changes in the post-pandemic era. Frontiers in Public Health, 11, 1270510.

Allen, L. N., Pettigrew, L. M., Exley, J., Nugent, R., Balabanova, D., Villar-Uribe, M., ... & Abimbola, S. (2023). The role of Primary Health Care, primary care and hospitals in advancing Universal Health Coverage. BMJ global health, 8(12).

Aoun, N., & Tajvar, M. (2024). Healthcare delivery in Lebanon: a critical scoping review of strengths, weaknesses, opportunities, and threats. BMC Health Services Research, 24(1), 1122.

Baltussen, R., Mwalim, O., Blanchet, K., Carballo, M., Eregata, G. T., Hailu, A., ... & Majdzadeh, R. (2023). Decision-making processes for essential packages of health services: experience from six countries. BMJ Global Health, 8(Suppl 1), e010704.

Bawazir, A., Al-Surimi, K., Suwaidan, S. D., AlShehri, A. M., AlFarhan, A. I., & Abolfotouh, M. A. (2019). Capacity and readiness of primary health care centers for implementation of the basic strategy for prevention and control of non-communicable diseases in Saudi Arabia.: A case study from the Ministry of National Guard-Health Affairs, Riyadh, Saudi Arabia. Saudi medical journal, 40(6), 614.

Bou Sanayeh, E., & El Chamieh, C. (2023). The fragile healthcare system in Lebanon: sounding the alarm about its possible collapse. Health Economics Review, 13(1), 21.

Daou, D., Saliba, C., & Josseran, L. (2024). Prevalence and socioeconomic factors associated with non-utilization of dental care in Lebanon: A nationwide cross-sectional survey. Community Dentistry and Oral Epidemiology, 52(6), 880-888.

Debie, A., Nigusie, A., Gedle, D., Khatri, R. B., & Assefa, Y. (2024). Building a resilient health system for universal health coverage and health security: a systematic review. Global Health Research and Policy, 9(1), 2.

El-Jardali, F., Fadlallah, R., Shaya, R., & Masri, R. (2022). Lebanon: a primary health care case study in the context of the COVID-19 pandemic. World Health Organization.

El-Jardali, F., Masri, R., & Sleem, Z. (2023). Rethinking Lebanon's healthcare system amid the economic crisis.

ESCWA. (2021). Multidimensional poverty in Lebanon (2019-2021) Painful reality and uncertain prospects. Retrieved from https://www.unescwa.org/sites/default/files/news/docs/21-00634-_multidimentional_poverty_in_lebanon_-policy_brief_-_en.pdf

Glassman, A., Giedion, U., Sakuma, Y., & Smith, P. C. (2016). Defining a health benefits package: what are the necessary processes?. Health Systems & Reform, 2(1), 39-50.

Hallit, S., Selwan, C. A., & Salameh, P. (2020). Primary health care policy and vision for community pharmacy and pharmacists in Lebanon. Pharmacy Practice (Granada), 18(2).
Hamadeh, R. S., Kdouh, O. A., Hammoud, R., Leresche, E., & Leaning, J. (2020). Can Primary Healthcare be Protected as a Public Good in Lebanon Today?.

Hanson, K., Brikci, N., Erlangga, D., Alebachew, A., De Allegri, M., Balabanova, D., ... & Wurie, H. (2022). The Lancet Global Health Commission on financing primary health care: putting people at the centre. The Lancet Global Health, 10(5), e715-e772.

IOM. (2024). Lebanon - Baseline Assessment Round 4. Retrieved from https://dtm.iom.int/reports/lebanon-baseline-assessment-round-4

Khatri, R., Endalamaw, A., Erku, D., Wolka, E., Nigatu, F., Zewdie, A., & Assefa, Y. (2023). Continuity and care coordination of primary health care: a scoping review. BMC Health Services Research, 23(1), 750.

Kutzin, J., Witter, S., Jowett, M., & Bayarsaikhan, D. (2017). Developing a national health financing strategy: a reference guide (p. 2017). Geneva: World Health Organization.

L'Orient Today. (2024). Abiad launches World Bank 'Reaya' program. Retrieved from https://today.lorientlejour.com/article/1426680/abiad-launches-world-bank-reaya-program.html

Langenbrunner, J., Cashin, C., & O'Dougherty, S. (Eds.). (2009). Designing and implementing health care provider payment systems: how-to manuals. World Bank Publications.

Langlois, E. V., McKenzie, A., Schneider, H., & Mecaskey, J. W. (2020). Measures to strengthen primary health-care systems in low-and middle-income countries. Bulletin of the World Health Organization, 98(11), 781.

Mendis, S., Al Bashir, I., Dissanayake, L., Varghese, C., Fadhil, I., Marhe, E., ... & Chestnov, O. (2012). Gaps in capacity in primary care in low-resource settings for implementation of essential noncommunicable disease interventions. International journal of hypertension, 2012(1), 584041.

Moosa, S. (2022). Provider perspectives on financing primary health care for universal health coverage. The Lancet Global Health, 10(5), e609-e610.

MoPH/PHC. (2024). وزارةالصحة العامة مراكز شبكةالرعاية الصحية االولية. Retrieved from https://www.moph.gov.lb/userfiles/files/HealthCareSystem/PHC/phcc.pdf

MoPH/PHC. (2021). National health accounts of Lebanon, 2021-Summary table. Retrieved from https://www.moph.gov.lb/userfiles/images/Statistics/NHA%202021-%20SummaryTable.pdf

Lebanon's Ministry of Social Affairs (MOSA). (2021). The National Strategy for Older Persons in Lebanon 2020-2030. Retrieved from https://www.unescwa.org/sites/default/files/news/docs/online_-_final_english_strategy_for_online_use_1.pdf

National News Agency. (2024). Mikati urges UN Security Council for decisive action against Israeli aggression. Retrieved from https://www.nna-leb.gov.lb/en/politics/720058/mikati-urges-un-security-council-for-decisive-acti

Park, B., Gold, S. B., Bazemore, A., & Liaw, W. (2018). How evolving United States payment models influence primary care and its impact on the quadruple aim. The Journal of the American Board of Family Medicine, 31(4), 588-604.

Randa Hemadeh, Ola Kdouh, Rawan Hammoud, Tarek Jaber & Lama A. Khalek. (2020). The primary healthcare network in Lebanon: a national facility assessment. Eastern Mediterranean Health Journal, 26 (6), 700 - 707. World Health Organization. Regional Office for the Eastern Mediterranean. https://doi.org/10.26719/emhj.20.003. License: CC BY-NC-SA 3.0 IGO

Reynolds, T., Wilkinson, T., Bertram, M. Y., Jowett, M., Baltussen, R., Mataria, A., ... & Jama, M. (2023). Building implementable packages for universal health coverage. BMJ Global Health, 8(Suppl 1), e010807.

Rudmik, L., Wranik, D., & Rudisill-Michaelsen, C. (2014). Physician payment methods: a focus on quality and cost control. Journal of Otolaryngology-Head & Neck Surgery, 43(1), 34.

Sacks, E., Schleiff, M., Were, M., Chowdhury, A. M., & Perry, H. B. (2020). Communities, universal health coverage and primary health care. Bulletin of the World Health Organization, 98(11), 773.

Scholz, S., Ngoli, B., & Flessa, S. (2015). Rapid assessment of infrastructure of primary health care facilities–a relevant instrument for health care systems management. BMC health services research, 15, 1-10.

The Washington Post. (2021). Lebanon was famed for its medical care. Now, doctors and nurses are fleeing in droves. Retrieved from https://www.washingtonpost.com/world/middle_east/lebanon-crisis-healthcare-doctors-nurses/2021/11/12/6bf79674-3e33-11ec-bd6f-da376f47304e_story.html

The World Bank (2023). Project Information Document (PID). Retrieved from https://documents1.worldbank.org/curated/en/099120123042024570/pdf/P1804520fadace0a08e2900157e2fc3347.pdf

The World Bank. (2024). External health expenditure (% of current health expenditure) - Lebanon. Retrieved from https://data.worldbank.org/indicator/SH.XPD.EHEX.CH.ZS?end=2021&locations=LB&start=2021&view=bar

UN General Assemblies. (2021). 2015–2030 Global Health Commitments. Retrieved from https://www.uhc2030.org/fileadmin/uploads/uhc2030/Documents/UN_HLM_2019/Global_Health_Commitments_2015-2030.pdf

UNHCR. (2024). UNHCR Lebanon at a Glance. Retrieved from https://www.unhcr.org/lb/about-us/unhcr-lebanon-glance

UNICEF. (2023). UNICEF Lebanon Country Office Annual Report 2023. Retrieved from https://www.unicef.org/reports/country-regional-divisional-annual-reports-2023/Lebanon

UNICEF. (2024). Emergency Response in Lebanon Amid Ongoing Hostilities. Retrieved from https://www.unicef.org/lebanon/emergency-response-lebanon-amid-ongoing-hostilities

WHO. (2000). The WORLD HEALTH REPORT 2000 - Health systems: Improving Performance. https://cdn.who.int/media/docs/default-source/health-financing/whr-2000.pdf

WHO. (2017). PRIMARY HEALTH CARE SYSTEMS (PRIMASYS): Case Study of Lebanon. Retrieved from https://iris.who.int/bitstream/handle/10665/341170/WHO-HIS-HSR-17.19-eng.pdf?sequence=1

WHO. (2021). Disease burden, 2000–2021. Retrieved from https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/global-health-estimates-leading-causes-of-dalys

WHO. (2022a). Country Cooperation Strategy for WHO and Lebanon. Retrieved from https://applications.emro.who.int/docs/9789292740092-eng.pdf?ua=1

WHO. (2022b). Lebanon Primary Health Care Network in Urgent Need of Fuel Support. Retrieved from https://reliefweb.int/report/lebanon/lebanon-primary-health-care-network-urgent-need-fuel-support-march-2022

WHO. (2023a). Universal health coverage (UHC). Retrieved from https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)

WHO. (2023b). Country Cooperation Strategy for WHO and Lebanon. Retrieved from https://applications.emro.who.int/docs/9789292740092-eng.pdf

WHO. (2023c). WHO African Region Health Expenditure Atlas 2023. https://www.afro.who.int/publications/who-african-region-health-expenditure-atlas-2023-0

WHO. (2023d). Lebanon. Retrieved from https://data.who.int/countries/422

WHO. (2024). Understanding the private health sector in Lebanon. Retrieved from https://applications.emro.who.int/docs/9789292742225-eng.pdf

Yuan, B., He, L., Meng, Q., & Jia, L. (2017). Payment methods for outpatient care facilities. Cochrane Database of Systematic Reviews, (3).

Acknowledgment:

This policy memo was led by UNICEF Lebanon's Health Section, under the leadership of Rima Chaya, with co-leadership and technical support from the Knowledge to Policy (K2P) Center at the American University of Beirut (AUB). The work was made possible with funding from UNICEF Lebanon.

We extend our deep appreciation to the K2P team, Fadi El Jardali, Racha Fadlallah, and Nadine Darwiche, for their technical leadership in developing this memo. The structure and format of the memo were adapted from the policy memo template and approach developed by the K2P Center.

This work forms part of a broader initiative of six studies aimed at strengthening Lebanon's primary healthcare system. We sincerely thank the Primary Healthcare Department at the Ministry of Public Health (MoPH/PHC) for their leadership, strategic guidance, and support throughout this work. Their role in facilitating stakeholder engagement, enabling access to data, validating findings, and guiding field visits was essential. All data and figures presented in this memo related to Lebanon's PHC system are drawn from the MoPH/PHC.

We also acknowledge the leads of the individual reports that informed this memo, Joseph Kamara, APIS Health Consulting Group (Quentin Baglione, Randa Rustom, and Mirella Khoury), together with the Global Health Team of Experts. Finally, we thank the wider network of stakeholders, including PHC centers, development partners, NGOs, and civil society actors, whose contributions and insights were invaluable in shaping this work.

Suggested Citation:

This project is a joint collaboration between UNICEF, the K2P Center at AUB, and the MoPH/PHC. It should be cited as follows: UNICEF, K2P Center and MOPH/PHC (2025). K2P Policy Memo: Optimizing primary healthcare financing for universal health coverage in Lebanon - A Comprehensive Analysis. Beirut, Lebanon.

unicef

for every child

United Nations Children's Fund (UNICEF)
Lebanon Country Office
www.unicef.org/lebanon