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# Making Universal Health Coverage Effective in Low- and Middle-Income Countries: A Blueprint for Health Sector Reforms

*Peter O. Otieno and Gershim Asiki*

## Abstract

Health sector reforms not only require attention to specific components but also a supportive environment. In low- and middle-income countries (LMICs), there is still much to be done on ensuring that people receive prioritized health-care services. Despite LMICs spending an average of 6% of their GDP on health, there have been minimal impacts compared to high-income countries. Health sector reform is a gradual process with complex systems; hence, the need for a vision and long-term strategies to realize the desired goals. In this chapter, we present our proposal to advance universal health coverage (UHC) in LMICs. Overall, our main aim is to provide strategies for achieving actual UHC and not aspirational UHC in LMICs by strengthening health systems, improving health insurance coverage and financial protection, and reducing disparities in healthcare coverage especially on prioritized health problems, and enhancing a primary care-oriented healthcare system.

**Keywords:** universal health coverage, health sector reform, health systems, low- and middle-income countries

## 1. Introduction

More than three-quarters of the world's population now live in low- and middle-income countries with the largest burden of infectious and non-communicable diseases [1]. Unlike the developed countries, LMICs are characterized by inadequate resources and lack of pragmatic interventions to tackle this crippling yet increasing disease burden [2]. Demographic and epidemiological transitions are fast shifting the disease burden from communicable to NCDs with LMICs contributing to more than two-thirds of the global burden of NCDs [3]. The preparedness of most LMICs to respond to these changes is questionable, with most countries still grappling with inequities in access to healthcare resulting from the pluralistic and fragmented healthcare systems [2]. As a result, most LMICs countries are currently undergoing profound health sector reforms as strongly influenced by international bodies such as the World Health Organization (WHO), World Bank,

the Inter-American Development Bank, and the International Monetary Fund. While some of the reform objectives are specific to each country, a common central focus has been around the need to develop a robust mechanism that ensures an efficient allocation of scarce resources and equitable healthcare access based on population needs.

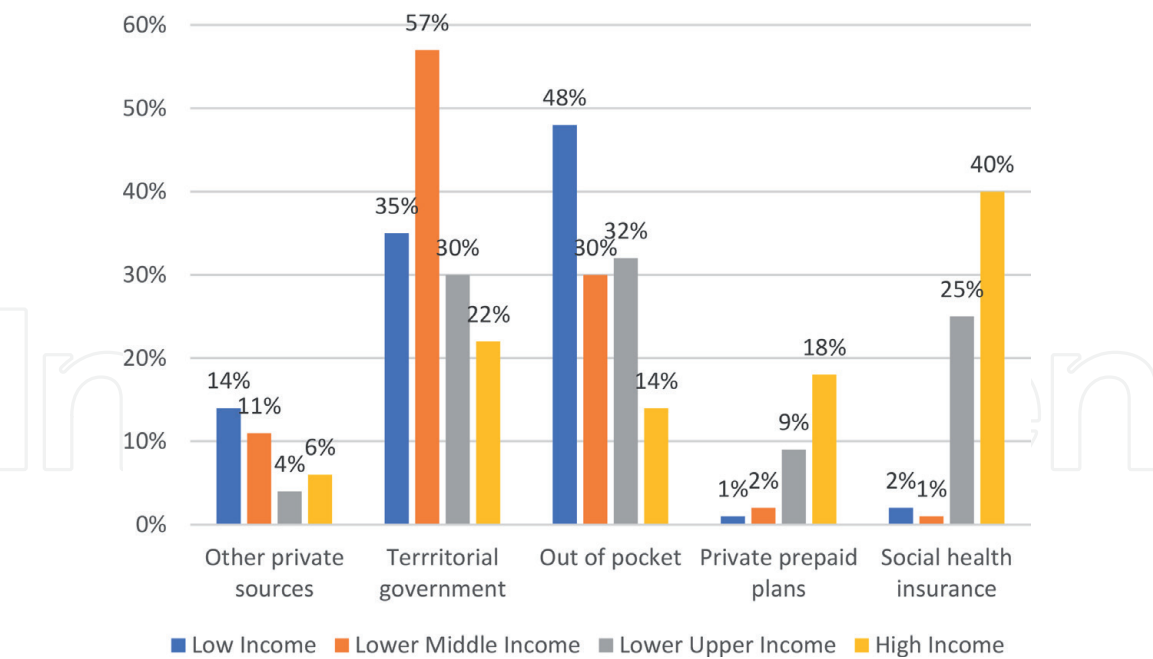
Most of the LMICs have set universal health coverage (UHC) as an aspirational goal for national health sector reform [4]. The dimensions of UHC as envisaged by the World Health Organization comprises of three key elements: the proportion of the national population that is covered by pooled funds; the proportion of direct healthcare costs covered by pooled funds; and the health services covered by those funds [4]. Reich et al. classified four distinct groups of LMICs at different points along the UHC ladder: The first group comprises countries such as Bangladesh and Ethiopia found at the bottom of the UHC ladder. The countries in this group are still grappling with the integration of the UHC agenda within the national policy. The second group comprises countries such as Indonesia, Peru, and Vietnam that have made significant progress toward UHC but still face huge gaps in coverage. The third group comprises of countries, such as Brazil, Thailand, and Turkey that have attained several UHC policy goals but are still struggling with the sustainability issues. The fourth group comprises countries such as France and Japan that have already achieved UHC but still need to implement major national policy adjustments targeting demographic and epidemiological challenges of aging populations and the increasing prevalence of degenerative diseases as well as innovations in technology [5].

In this chapter, we develop our proposals to advance UHC in LMICs. The chapter includes an overview of the health system in LMIC, the driving forces for changes, and our action plans to implement health sector reform for moving forward the UHC agenda in LMICs.

## 2. The healthcare system of LMICs

The healthcare systems of LMICs are highly fragmented across the public and private sector with expenditures averaging to 6% of GDP [6]. A recent report by the WHO has drawn attention to the weaknesses of the healthcare systems of LMICs. Of the 75 countries that account for more than 95% of maternal and child deaths, the median proportion of skilled birth attendance is only 62%, with pregnant mothers without financial protection at the highest risk of unskilled delivery [7]. **Figure 1** shows the health care financing sources according to a country's income. About half of health care financing in low-income countries comes from out-of-pocket payments, as compared to a third and in middle and a quarter high-income countries [8]. Thus, the financial protection of households from the already impoverishing effects of catastrophic health expenditures has been a major challenge for LMICs with only about a third of healthcare financing combined in funding pools [8].

Health insurance is considered by most LMIC as a promising means of achieving UHC [9]. Most countries have introduced various types of health insurance schemes with the commonest being National or social health insurance (SHI) which is based on mandatory insurance for formal sector employees [10]. Others include voluntary health insurance such as private health insurance (PHI) and community-based health insurance (CBI). The PHI have been implemented on a large scale in middle-income countries compared to low-income countries while CBHI are available in countries like Democratic republic of Congo, Ghana, Rwanda, and Senegal. [10]. The various types of health insurance may confer



**Figure 1.**  
*Sources of healthcare financing.*

different health impacts on the populations covered. For example, PHI mainly covers the affluent segments of a population while community-based health insurance (CBHI) is often preferred for the poor and the most vulnerable segment of the population [11]. Therefore, LMIC countries wishing to introduce health insurance schemes into their health systems must take into account the differences in various types of health insurance schemes. Studies on the population health by impacts of health insurance schemes in LMIC are scarce. Previous studies have evaluated the impacts of health insurance based on enrollment, financial management, and sustainability [2, 5, 12, 13]. A recent study on the performance of CBHI in LMICs, with a particular focus on China, Ghana, India, Mali, Rwanda, and Senegal revealed that the picture in Africa and Asia is very patchy [14]. Furthermore, the design of CBHI is heterogeneous with wide variations in population coverage, healthcare services covered and costs achieved [10]. The paucity of literature on the impact of SHI and PHI has resulted in a limited direct comparison of their options. Furthermore, most studies available on reforms in health insurance in LMIC are somewhat outdated.

The commitment by LMICs toward financial protection has been affirmed as part of the UHC. For example, countries in South and Southeast Asia such as the Philippines and Vietnam, have resorted to expand health insurance coverage by encouraging voluntary enrollment in social health insurance programs, while other countries, such as Thailand, have channeled funds from general taxation to the ministry of health and local authorities [15]. A recent report from the High-Level Expert Group on Universal Health Coverage in India recommended more financial allocations from the tax revenue base to public providers through a public purchaser at the state level as opposed to contributory insurance arrangements [16].

In Africa, Rwanda and Ghana have emerged as one of the countries with the highest health insurance coverage although the depth of the coverage is limited and there still exist financial protection gaps between the rich and the poor in both countries [13, 17]. The national health insurance program in Ghana is compulsory for every individual in the formal sector and voluntary for those in the informal

sector and free for the poorest members of the population. However, the challenges of having affordable premiums and maintaining voluntary enrolment have prompted the national government to propose a one-time payment rather than annual payment from those in the informal sector [13]. Given that the national healthcare system of Ghana is mainly financed by general taxation through value-added tax therefore the proposal to introduce a one-time payment would signal a decline in the importance attached to contributory insurance [13].

In view of the limited resources and narrow tax base, budgetary allocations in most LMICs to the healthcare sector have fallen short of the 15% envisaged in the Abuja declaration [18]. Consequently, there has been a limited ability of many households to pay for health care, whether directly or through health insurance. While progress toward universal health coverage may inevitably be gradual, LMIC countries need to draw on a mix of healthcare financing sources. In particular, the financing options should take into account the diversities in the economic, social, and political environment and ensure that the most vulnerable segment of the population is financially protected with a reasonable depth of coverage.

## 2.1 Driving forces for changes

Despite LMICs spending an average of 6% of its GDP on health, there have been minimal impacts compared to high-income countries. The health care system challenges in LMICs can be observed throughout the public and private sectors. First, public health services delivery is highly fragmented, and implementation of decentralization policies has failed in most LMICs. Also, there is a lack of primary care orientation, low institutional capacity, poor health information systems, and widespread inequalities in health care utilization. Second, most LMICs have low health insurance coverage and limited financial protection of households from the impoverishing effects of catastrophic health expenditures mainly due to the high levels of unemployment and poor management of pooled resources via the national health insurance schemes.

In the private health sector, problems arise due to a rigid regulatory framework that has resulted in the proliferation of private health providers which are unregulated, unaccountable, and out of control. In most LMICs, the growth of the private health sector has been characterized by poor planning and government reluctance in monitoring licensing provisions. Most health professional councils are defunct and being misused by the dominant vested interests. Although equity in health service delivery and availability of health resources including human power have featured in policy documents of LMICs, the legal and licensing provisions for healthcare providers, setting up health facilities are not often seriously enforced. As a result, there is gross imbalance between the actual growth of the physical services and the quality of healthcare services provided.

## 3. A blueprint for health sector reforms in LMICs

To achieve effective UHC, meaning that people receive quality prioritized healthcare services resulting in the actual translation of goals into out-come improvements on prioritized conditions, the LMIC countries will need to address and correct some of the dysfunctional gears in the health system. In approaching this health sector reform process, we have decided to focus on several key issues (see **Table 1**). After describing each strategic challenge, we provide our proposed actions for reform. This is our blueprint for health sector reforms in LMICs.



Key issue	Strategy
<b>Community and household level</b>	
<ul style="list-style-type: none"><li>Physical, social, and financial barriers to access</li></ul>	<ul style="list-style-type: none"><li>Focus on expanding “close to client services,” for example, primary care services provided by community health volunteers (CHVs)</li><li>Improve financial protection by expanding health insurance coverage and removing financial barriers at the point of use</li><li>Improve responsiveness of the health service delivery through pay for performance approaches</li></ul>
<ul style="list-style-type: none"><li>Poor demand for evidence-based interventions</li></ul>	<ul style="list-style-type: none"><li>Community mobilization by creation of support groups and welfare organizations to spread health information such as antenatal care and screening for chronic illnesses</li></ul>
<b>Healthcare service delivery</b>	
<ul style="list-style-type: none"><li>Inadequate qualified health workforce especially at primary care level</li></ul>	<ul style="list-style-type: none"><li>Increase number of qualified staff</li><li>Implement task shifting by training CHVs to treat common illness</li><li>Increase allowance for work in remote areas</li></ul>
<ul style="list-style-type: none"><li>Lack of motivation of staff and low remuneration, weak technical guidance, program management, and supervision</li></ul>	<ul style="list-style-type: none"><li>Increase salaries sustainably and strengthen training and support supervision</li></ul>
<ul style="list-style-type: none"><li>Inadequate medical supplies and equipment, poor health infrastructure, and limited access to healthcare services</li></ul>	<ul style="list-style-type: none"><li>Improve public supply systems and utilize private retail system</li><li>Allocate adequate resources for renovating, upgrading, and expanding public facilities, contract nongovernmental organizations to provide services</li></ul>
<b>Policy and strategy management in health sector</b>	
<ul style="list-style-type: none"><li>Fragmented and overly centralized planning and management systems</li></ul>	<ul style="list-style-type: none"><li>Decentralize planning and management</li></ul>
<ul style="list-style-type: none"><li>Weak drug policies and supplies system</li></ul>	<ul style="list-style-type: none"><li>Introduce new supply mechanisms</li></ul>
<ul style="list-style-type: none"><li>Rigid regulatory frameworks and proliferation unregulated, unaccountable, and out of control private health sector</li></ul>	<ul style="list-style-type: none"><li>Strengthen regulation through enforcement legal mechanisms, for example, licensing provisions for healthcare providers and setting up health facilities</li></ul>
<ul style="list-style-type: none"><li>Poor cooperative action and partnership between civic organizations and government</li></ul>	<ul style="list-style-type: none"><li>Engagement of civic organizations in planning and service oversight</li></ul>
<ul style="list-style-type: none"><li>Weak incentives to use inputs efficiently and to respond to user needs and preferences</li></ul>	<ul style="list-style-type: none"><li>Use of output-based payments and external assistance programs</li></ul>
<ul style="list-style-type: none"><li>Fragmented donor funding, which reduces flexibility and ownership; low priority given to systems support</li></ul>	<ul style="list-style-type: none"><li>Implement reforms to aid management and delivery (e.g., sector wide approaches and International Health Partnership Plus)</li><li>Provide increased financing for systems support</li></ul>
<b>Political and physical environment</b>	
<ul style="list-style-type: none"><li>Governance and overall policy framework (e.g., corruption, weak government, weak rule of law and enforceability of contracts, political instability and insecurity, social sectors not given priority in funding decisions, and weak structure for public accountability)</li></ul>	<ul style="list-style-type: none"><li>Encourage improved stewardship and accountability mechanisms by encouraging growth in civic organizations</li></ul>

Key issue	Strategy
Global health	
<ul style="list-style-type: none"><li>• Fragmented governance and management structures for global health</li></ul>	<ul style="list-style-type: none"><li>• Improve global coordination (e.g., the Paris Declaration, Accra Agenda for Action)</li></ul>
<ul style="list-style-type: none"><li>• Emigration of doctors and nurses to high-income countries</li></ul>	<ul style="list-style-type: none"><li>• Seek voluntary agreements on migration of doctors and nurses</li></ul>

**Table 1.**  
*Key issues faced by healthcare systems in LMICs and proposed action for reform.*

#### 4. Measuring and monitoring implementation

The essential components of the health sector reforms proposed in **Table 1** are only the gears to drive health sector reforms in LMICs to improve health outcomes. The realized gains from these reforms should be equitable distributed between and with LMICs. Monitoring progress of health sector reforms requires a robust health management information system embedded in a national interoperability plan. The measurable standards at the national at global level can be obtained level can be obtained from this plan to ensure that information generated can be harmonized and used for surveillance, monitoring, and evaluation of interventions and policies and clinical decision making at the point of care.

Enhancing prevention, promotion, treatment, rehabilitation, and palliative care to people in need without financial hardship as envisaged in the UHC requires major focus on the three interrelated components of UHC: first, ensuring a full spectrum of quality health services according to the needs; second, improving financial protection from direct payment for health services when consumed; and, lastly, expanding coverage for the entire population. In this regard, we propose a system of UHC monitoring in LMICs that will ensure that progress toward UHC reflects the unique epidemiological and demographic profiles of LMICs as well as the population demands and levels of economic development. The monitoring and evaluation plan for UHC in LMIC should include two guiding principles: financial protection and coverage of healthcare services. The primary outcomes include effectiveness, equity, and quality of healthcare at all levels of the health system for the full population across the life cycle, including all ages and genders.

#### 5. Conclusions

Health sector reforms in LMIC not only require a central focus on the health systems components but also a supportive environment for innovation and change. Health sector reform is a gradual process with complex systems hence the need for a vision and long-term strategies to realize the desired goals. Although most LMICs have prioritized UHC in their national policy agenda, there are still needs to work on achieving effective UHC, especially with regard to quality and equity. Therefore, the LMIC should focus on achieving actual and not aspirational UHC by strengthening health systems by improving health insurance coverage and financial protection, improving access to healthcare, reducing disparities in healthcare coverage especially on prioritized health problems, and enhancing a primary care-oriented healthcare system.

## **Conflict of interest**

The authors declare no conflict of interest.

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## **Author details**

Peter O. Otieno\* and Gershim Asiki  
African Population and Health Research Center, Nairobi, Kenya

\*Address all correspondence to: [pootienoh@gmail.com](mailto:pootienoh@gmail.com)

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