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# Health Financing System in Cameroon at the Crossroads Between Beveridge and Bismarck Models: Towards a Hybrid System for Achieving Universal Health Coverage

### Altine Fadimatou\*

ORCID: 0000-0003-3588-6967

Department of Public Health, Faculty of Medicine and Biomedical Sciences, University of Yaoundé 1, P.O Box 1364, Melen, Yaounde, Cameroon and Department of Public Health, Faculty of Medicine and Biomedical Sciences, University of Garoua, Garoua, Cameroon

### Zakariaou Njoumemi

ORCID: 0000-0003-1392-3763

Department of Public Health, Faculty of Medicine and Biomedical Sciences, University of Yaoundé 1, P.O Box 1364, Melen, Yaounde, Cameroon and Health Economics & Policy Research and Evaluation for Development Results Groups (HEREG), Yaounde, Cameroon

### Marie Josee Essi

ORCID: 0000-0002-2587-8309

Department of Public Health, Faculty of Medicine and Biomedical Sciences, University of Yaoundé 1, P.O Box 1364, Melen, Yaounde, Cameroon

### **ABSTRACT**

Health financing reforms are prioritized high on both political and policy frameworks in many low- and middle-income countries where the approach combines tried and tested features of the two theoretical classic models from Europa namely the Beveridge National Health Service and the Bismarck social insurance. The Beveridge model is tax-funded systems of government-run health financing that can provide free healthcare to all residents of a country or to specific target groups at affordable cost but cannot avoid the risk of delivering low and poor quality health services. The Bismarck model has the potential of achieving high quality health service but cannot offer healthcare for the entire population of a country at an affordable cost. In this perspective, African countries have the opportunities to design conceptual health financing systems which can emerge from the strengths and avoid the pitfalls of the two theoretical existing systems. This study aimed to analyze the health financing model for achieving universal health coverage in Cameroon in the light of existing theoretical models. A scoping review method was used for data collection and analysis. The results showed that given the respective principles defining the Beveridgean and Bismarckian models along with their strengths and pitfalls, the hybrid model which is combining the two classic models can stand as the best opportunity of mobilizing sustainable financing

<sup>\*</sup> Corresponding author: altifadi@gmail.com

for achieving universal health coverage in the country. Cameroon adopts a hybrid model of health financing, characterized by a gradual shift from the Beveridgian model to a mixed approach incorporating Bismarckian tools, while retaining specific features linked to the national socio-economic and governance context. However, the Beveridgean and Bismarckian health financing models have strong arguments of strengths in favor as well as weaknesses usually used against them. The hybrid model combines the best features of Bismarck and Beveridge models started with a system financed mainly by taxes and progressively move the spectrum of almost full tax finance to integrate the component of social insurance for universal health coverage in the national health system. The policy implications pointed out that any single theoretical model cannot provide universal affordable services and population coverage. Achieving universal health coverage should require a hybrid tripartite based combination of two classic Beveridge and Bismarck models involving tax funding for public finance and social insurance by employers and employees as well as mobilizing private insurance and innovative domestic financing sources.

**Keywords:** Health financing, Beveridgian model, Bismarckian model, hybrid system, universal health coverage, Cameroon.

### **INTRODUCTION**

In many low and middle income countries the health financing reforms is one of the major challenges of contemporary public health, especially where health needs are unlimited and resources limited, thereby creating a complex structural and allocative challenges (1). The international literature traditionally distinguishes four main models of healthcare funding (3). The Beveridgian model, named after Lord William Beveridge, is based on public funding through taxation and centralized state management. This guarantees universal access to healthcare in accordance with the principle of citizenship. This model, illustrated by the British National Health Service, is characterized by the "three U's": unity of management, universality of coverage and uniformity of benefice package (4). In contrast, the Bismarckian model, inspired by Otto Von Bismarck's reforms in Germany at the end of the 19th century, is based on a compulsory social insurance system. This Bismarckian model is financed by contributions from employers and employees, with joint management and benefits proportional to contributions (5). Between these 2 archetypes, the mix or hybrid model is likely to combine tools of both approaches, using private providers with centralized public funding, as illustrated by the Canadian system (3). Finally, there is the direct payment model, which is predominant in many low income countries, meaning that individuals pay the cost of care directly, creating significant financial barriers to access to healthcare services (6). This theoretical typology of health financing, although useful for comparative analysis, reveals its limitations when applied to the realities of low and middle income countries, where complex hybrid configurations emerge (7). These hybrid systems are often the result of incomplete transition processes, followed by structural budgetary constraints and specific institutional legacies which create original financing architectures that are difficult to classify according to pure models (8). The African region accounts for a disproportionate share of the global burden of disease, yet has the most limited resources to deal with it (2). In this context, the analysis of health financing systems requires a rigorous approach based on fundamental theoretical conceptual models developed in industrialized countries, while taking into account the specificities of African contexts (9).

Cameroon offers a specifically rich case study for analyzing these hybrid dynamics. It is a Central African country with a population of 27 million (10). Its healthcare system is undergoing profound change, characterized by the complex coexistence of public, private and community funding mechanisms (11). Historically, the Cameroonian system has developed along Beveridgian tools, with public funding that is theoretically universal but practically limited by chronic budgetary constraints (12). This situation has led to the emergence of alternative financing mechanisms, with massive direct payments and community insurance initiatives, creating a complex hybrid architecture (13). The recent implementation of universal health coverage (UHC), officially launched in April 2023, marks a new stage in the evolution of Cameroon's healthcare financing system (14). This ambitious reform aims to synthesize the different approaches to financing within a unified framework, while drawing inspiration from international experiences with hybrid systems. Analysis of this transition offers unique insights into the processes of hybridization of health financing systems in African contexts.

In the context of universal health coverage development, health financing reforms are prioritized high on both political and policy frameworks in many low- and middle-income countries where the approach combines tried and tested features of the two theoretical classic models from Europa namely the Beveridge National Health Service and the Bismarck social insurance. The international both theoretical and empirical literature have been quick to highlight the advantages and disadvantages of the various models and options for health financing, but reluctant to be specific about what should be the best system, and what features it should have in specific low and middle income countries, particularly in Africa. Thus, the objective of this research was to analyze the Cameroonian health financing model in the light of existing classic Beveridgian and Bismarckian models for achieving universal health coverage.

### **METHODS**

# **Methodological Approach**

This research adopts a qualitative scoping review approach, based on in-depth documentary analysis and systematic literature review. The methodology was based on the functional analytical framework proposed by Kutzin for the analysis of health financing systems, which distinguishes 3 main functions: resource collection, pooling of funds and purchase of health services (15). This functional approach was complemented by the theoretical framework of Berardiet al. (2025) Comparing the Evolving Dynamics of the Mandatory-Voluntary Financing Mix in OECD Countries: A Composite Measure (16).

## Source of Data

Data collection was based on four main categories of sources, mainly from: (1) primary academic sources, through the bibliographic search carried out in the PubMed, Web of Science and Google Scholar databases, using the keywords "Health Financing", "Cameroon", "Beveridge", "Bismarck". and Google Scholar, using the keywords "Health Financing", "Cameroon", "Beveridge", "Bismarck", "Hybrid Systems", "Sub Saharan Africa" and their French equivalent. The research period covers publications from 1990 to 2025, with a particular focus on articles published in peer-reviewed journals. A total of 47 scientific articles were selected after applying the inclusion and exclusion criteria. (2) From official government documents, this category includes the strategic documents of Cameroon's Ministry of Public Health, in particular the National Health Development Plan (PNDS) 2021- 2025. The health sector

strategy, 2016-2027, the situational analysis of health financing in Cameroon (2023) and the annual performance reports. The documents relating to the implementation of universal health coverage, available on the official websites "csu.minsanté.cm", were a particularly important source. (3) the reports from the World Health Organization (WHO), the World Bank, the Partnership for Health and Mobility (P4H) and other international bodies provide comparative data and sectoral analyses. The WHO- AFRO report "State of Health Financing in the African Region" and the analyses of the Global Health Observatory are essential references. (4) And legislative texts and regulations, in this section, the analysis of the legal framework was based on the texts of the law relating to Cameroonian social security, the Labor Code, the implementing decrees and the documents of the Centre des Liaisons Européennes et Internationales de Sécurité Sociale (CLEISS) concerning the Cameroonian schemes.

# **Analysis Strategy**

The analysis follows a 4-stage approach, inspired by the methodology developed by Shishkin and Sheiman for the study of hybrid systems (17). These steps are as follows, the first stage consisted of an institutional analysis through the identification and characterization of the institutions involved in each of the three (03) health financing functions (collection, pooling, purchasing). The reading grid of the three (03) types of regulation (state, societal, market) was used. Secondly, performance was assessed on the basis of an analysis of the impact of the financing system on health system performance indicators. This analysis included financial accessibility, protection against financial risk, equity in the use of services and allocative efficiency. Then, the third stage marked by the identification of challenges by identifying and analyzing unresolved problems in the current system, with a particular focus on the strategic purchasing function and regulatory mechanisms. The fourth stage, which was intended to be forward-looking, focused on discussions and possible directions for the system's development, taking account of current reforms and comparable international experience.

### **Conceptual Framework for Analysis**

The analysis was based on an original conceptual framework combining several theoretical approaches. The basic model uses the classic Beveridge-Bismarck typology, enriched by recent developments in hybrid systems (18). This grid was adapted to the African context by incorporating the specific features identified in the literature on health financing in sub-Saharan Africa, in particular the importance of direct payments, the role of community mechanisms and the influence of external financing (19). The analytical framework distinguishes five (5) main dimensions: (i) sources of funding and how they are collected; (ii) risk pooling mechanisms; (iii) methods of purchasing and paying providers; (iv) regulation and governance mechanisms; and (v) results in terms of access, equity and efficiency.

### **RESULTS**

# General Architecture of the Health Financing System in Cameroon

Analysis of Cameroon's health financing system reveals a complex architecture characterized by the coexistence of multiple mechanisms and actors, reflecting a progressive hybridization between the theoretical reference models. This architecture can be broken down into the three (03) main functions of health financing, which are:

 The resource collection function defined by the collection of financial resources for health in Cameroon is carried out through five (5) main channels, revealing a fragmented financing structure characteristic of systems in transition. These are direct public funding, which accounts for a relatively small proportion of total expenditure on health, estimated at around 15% in 2015, according to data from the Institute for Health Metrics and Evaluation (20). This proportion, well below the average for middle-income countries, reflects the structural budgetary constraints of the Cameroonian state. The public health budget is financed by general tax revenues, according to a Beveridgian logic, but its level remains insufficient to ensure effective universal coverage. Public spending on health as a percentage of GDP was 1.9% in 2017, less than half the world average of 3.3% (21). This low level of public funding contrasts with the declared political commitment, in particular Cameroon's adherence to the Abuja Declaration in 2001, which calls for at least 15% of the national budget to be allocated to health (22). In reality, public spending on health only represents around 7.2% of total government spending, less than half of the Abuja targets (23). This situation illustrates the gap between the Beveridgian ambitions of the system and the budgetary realities. Concerning the social security contributions, Cameroon's social security system, managed by the National Social Security Funds (NSSF), has partly Bismarckian features but limited coverage (24). The NSSF is responsible for three (03) branches: family benefits, accidents at work/occupational illness and old age/disability/death pensions. However, unlike traditional Bismarckian systems, the NSSF does not directly cover healthcare, as this responsibility falls to employers under the Labour Code. This hybrid configuration creates a paradoxical situation where the Bismarckian elements exist (social contributions, joint management) but do not apply to the financing of healthcare as such. Social contributions represent around 2.5% of the wage bill for family benefits and 4% for pensions, but these resources do not contribute directly to financing the healthcare system (25). Concerning the direct payment by households, these direct payments (out-of-pocket-payment) are the main source of healthcare funding in Cameroon, accounting for around 70% of total healthcare expenditure in 2015 (26, 27). This predominance of out-of-pocket payments, which is characteristic of the fourth model identified by Wallace (3), reflects the failings of financial protection mechanisms and creates major barriers to access to healthcare. The findings of a research on health financing in rural Cameroon identified 14 different mechanisms used by people to finance their healthcare, thereby revealing the complexity of the strategies developed by households in the face of the inadequacy of formal protection mechanisms (13). These mechanisms include risk-sharing arrangements between relatives, gifts from friends, sales of assets and loans, all governed by principles of social reciprocity. Concerning external financing which is the development aid for health represents around 13% of total health expenditure in Cameroon (27). This proportion, although significant, is lower than that observed in the countries' most dependent on external aid in sub-Saharan Africa. External funding focuses mainly on vertical programs targeting specific diseases (HIV/AIDS, malaria, tuberculosis), creating fragmentation in the system and coordination challenges. The private health insurance and community mechanisms: prepaid private expenditure, including private insurance and community insurance mechanisms, represents only around 3% of total healthcare expenditure (26; 27). This low proportion reflects the limited development of these mechanisms, despite the existence of local private health insurance and micro-community health insurance initiatives in some regions.

• The risk-pooling function, which reveals the structural weaknesses of the Cameroonian financing system and largely explains the predominance of direct payments. This

mutualization is either limited, i.e. the public health system theoretically provides universal risk pooling in accordance with the Beveridgian principle, but this pooling remains largely theoretical due to the inadequacy of public resources. The free provision of certain services (vaccinations, ante- natal consultations in some regions) is the only effective form of public pooling for part of the population. Social mutualization is therefore absent. In other words, unlike the Bismarckian system, Cameroon does not have a compulsory health insurance system based on social contributions. This is a major gap in the architecture of the system, leaving the majority of the population without formal financial protection. However, the community mutualization is in its early stage, which is why community insurance and health micro-insurance initiatives exist, but remain fragmented and limited in scope. These mechanisms, although inspired by the principles of social solidarity, fail to create risk pooling large enough to provide effective protection. The informal family and social pooling through traditional family and community solidarity mechanisms are an informal but important form of risk pooling. The finding of a research showed that these mechanisms, based on reciprocity, play a crucial role in healthcare financing strategies, especially in rural areas of the country (13).

The health services purchasing function shows significant fragmentation and the absence of strategic and effective purchasing mechanisms. In the case of the public sector provision, the State buys healthcare services directly through the public healthcare network, financed by the general budget. This purchasing is carried out mainly through budget allocations to public hospitals and health centers, without any well-organized contractual or performance incentive mechanisms. Purchasing by employers based on the Labour Code regulation requires employers to provide medical care for their employees, creating a decentralized system of purchasing by companies. This requirement, inherited from the colonial period, introduces elements of insurance logic without constituting a true Bismarckian system. Direct purchase by households is the most form predominant of direct payment means that most purchases of services are made directly out-of-pocket by households. Without intermediaries or price regulation mechanisms, this situation creates major inefficiencies and inequalities of access. The vertical purchases by vertical programs financed by external aid, develop their own purchasing mechanisms, which are for the most part more sophisticated than those of the general public system, leading to the creation of further fragmentation.

# Characterising Hybridisation: Between a Degraded Beveridge and an Embryonic Bismarckian System

The hybrid model emerges from the two classic health financing models.

National health system or social health assistance program is a Beveridgean concept which tax-funded systems is providing free health care to all residents of a country or to a specific target group. The United Kingdom is the birthplace of this model, the principles of which were set out in 1942 by Lord Beveridge. He proposes a social security reform based on the socialization of costs at the national level. The following principles define the Beveridgean system (i) Universality of social security through coverage of the entire population and all social risks, (ii) Uniformity of benefits, based more on needs than on income, (iii) Financing of social security through taxation and, (iv) Uniqueness, with state management of all social security. Advantages of

Beveridgean system include pooling risks for the entire population but this advantage is limited by the risks of unstable and insufficient financing due to competing public spending. There is progressivity in financing (tax) but this limited by generally weak performance incentives. Potential for improved administrative efficiency and cost control but the quality of services is often perceived as poor. There are cross-subsidies between groups (large and small risks, rich and less rich). International example of countries using this model are the United Kingdom, Canada, Sweden, Denmark, Thailand, Malaysia, Sri Lanka, Brazil, and Mexico which rely primarily on taxes for their health financing. Examples in Africa are "free" healthcare coverage for government employees in public healthcare facilities, establishment of a fund for the indigent, "free" healthcare coverage for certain illnesses (malaria, tuberculosis, HIV/AIDS, cesarean sections, etc.), free healthcare coverage for certain vulnerable groups (children under 5, pregnant women, the elderly, etc.), medical evacuations within and outside the country. However, examples of findings in Africa include the increased use of health services by beneficiaries. But many difficulties are observed including delayed payments by the government leading to funding difficulties for health facilities and a decline in the quality of care, difficulties identifying beneficiaries, stigmatization of beneficiaries, and devaluation of free services meaning that what is free has no value.

Social health insurance is a Bismarckian concept which emerged in Germany at the end of the 19th century during the reign of Chancellor Bismarck, when the state took responsibility for institutionalizing social protection, previously provided by numerous welfare funds. The main characteristic of social insurance is that social protection is granted in return for professional activity. Four fundamental principles define the Bismarckian system: (i) Social protection based exclusively on work, (ii) Mandatory social protection for employees, (iii) Social protection based on the insurance technique, which establishes proportionality of contributions to wages and proportionality of benefits to contributions and (iv) Social protection managed by employers and employees themselves. The advantages allow the system to generate stable income but there is the restriction to formal sector workers and their families. There are benefits from strong and frequent support from the population who receive high-quality services, while the contributions can lead to a decrease in competitiveness and generate a higher unemployment rate. Bismarckian system allows access to a wide range of services but the complex management requires high capacity and transparency. Participation of social partners in the organizational system while the insurance can lead to escalating costs unless effective contractual mechanisms are put in place. There is the redistribution between high and low risk and between high and low income groups in the covered population, but this often needs state subsidy.

A detailed analysis of the Cameroonian system allows us to characterize its hybrid nature as resulting from the combination of a degraded Beveridgian model and embryonic Bismarckian elements, all in a context where the market mechanisms predominate. Thus, the Cameroonian system retains several characteristics of the Beveridgian model, but in a degraded form which limits its effectiveness. The organization of the public health system follows a hierarchical logic with 3 levels (central, intermediate and peripheral), which is the characteristic of national healthcare systems (28; 29). The theoretical free provision of certain services and the stated objective of universal coverage are in line with the Beveridgian philosophy. However, these Beveridgian elements are undermined by the chronic inadequacy of public funding. The gap

between the Universalist ambitions and the resources available creates what can be described as a "Beveridge facade", where the structures and principles exist without the resources to implement them effectively. This situation gives rise to a number of malfunctions, such as frequent supply disruptions, a deterioration in the quality of services, and insufficient and unmotivated staff. The Cameroonian health financing system is also similar to the Bismarckian model, but in an embryonic and incomplete form. The existence of the National Social Secutity Funds (NSSF) and the social contribution system constitute a potential infrastructure for a social insurance like characteristic of Bismarckian system. However, these elements remain embryonic because they are not integrated into a coherent system of compulsory social health insurance. The NSSF does not manage health insurance, and employers' obligations remain largely theoretical and unevenly applied. The essential mechanisms of a Bismarckian system are missing, in particular: the pooling of risks between employers and employees, joint management of health insurance, and benefits proportional to contributions. In the absence of effective public or social financial protection mechanisms, the pure market model predominates. Households bear the cost of healthcare directly, according to their ability to pay, creating major inequalities and financial barriers to access. This situation corresponds to the 4th model identified by Wallace, characteristic of countries "too poor or disorganized to provide a national health system"(3). Table 1 presents a systematic comparison of theoretical models of healthcare financing according to the main characteristics. This representation serves as an analytical grid for characterizing the Cameroonian system.

Table 1: Comparison of theoretical models of health financing

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Beveridge model	Bismarck model	National	Pure market
		insurance model	model
General taxation	Social security	Taxes plus	Direct
	contributions,	insurance	payments
	employers and	premiums	
	employees.		
Centralised state	Joint management	State, with	Free market
management	(employers and	private	
	employees)	providers	
Universal,	Employment-related.	Universal	According to
citizenship		(residence).	ability to pay
Uniform	Proportional to	Uniform	According to
according to	contributions.	according to	financial
needs		needs.	means
United Kingdom,	Germany, France	Canada, Taiwan	Developing
Spain			countries
High Principle.	Average. Professional	High Principle.	Low
	status.		
Variable	High (incentives)	Average	Low (barriers
			to access)
Depends on	Stable (contributions)	Depends on	Unstable
public budget		public budget	
	General taxation  Centralised state management  Universal, citizenship  Uniform according to needs  United Kingdom, Spain  High Principle.  Variable  Depends on	Beveridge model  General taxation  General taxation  Centralised state management  Management  Universal, citizenship  Uniform according to needs  United Kingdom, Spain  High Principle.  Variable  Bismarck model  Social security contributions, employers and employees.  Joint management (employers and employees)  Employment-related.  contributions.  Germany, France  Spain  Average. Professional status.  Variable  High (incentives)	General taxation General taxation General taxation General taxation General taxation General taxation Contributions, employers employees.  Centralised state management (employers and employees) General taxation Contributions General taxation Contributions Contribution

Source: Authors' compilation

# The Financing Reform of Universal Health Coverage: Towards a Hybrid Model

The implementation of universal health coverage, officially launched in April 2023, represents

an ambitious attempt to combine different theoretical models of financing. This reform merits detailed analysis, as it could substantially modify the architecture of the system. Cameroon's UHC has some original features that set it apart from conventional models. It combines Beveridgian elements (public financing, universal vocation) and Bismarckian elements (insurance mechanism, unique identification card). Financing for phase 1, estimated in 2024 at 123 billion CFA francs, comes mainly from the public budget (54%) and the remaining 46% from the technical and financial partners, slightly in line with a Beveridgian logic (14). However, the design of the UHC also provides for the gradual integration of existing social insurance mechanisms and the development of new contribution mechanisms, suggesting a move towards a more hybrid model. The introduction of a single card identifying the health of each citizen is inspired by the experience of national insurance systems such as that in Canada. The implementation strategy reveals a pragmatic, progressive approach that takes account of budgetary constraints. Phase 1 targets pregnant women, children under 5 and specific diseases (malaria, HIV, tuberculosis, dialysis) as a priority, maximizing the health impact with limited resources while creating a momentum for gradual expansion. The initial targeted focus on limited health package benefits corresponds to the most disadvantaged and vulnerable groups in the country, reflecting a concern for population coverage equity. This targeting was inspired by international experiences in implementing universal coverage in Rwanda and Ghana. However, the financing reform of the UHC faces major challenges in terms of systemic integration with existing mechanisms. The link with the social security system managed by the NSSF remains to be defined and clarified. The integration of existing community health insurance mechanisms and coordination with vertical programs financed by external aid are also complex issues. The question of sustainable funding for the UHC remains a major challenge. While the initial phase is financed mainly by the public budget, gradual extension will require the mobilization of substantial additional funding from other sources outside of the government and external sources. Discussions currently underway on the adoption of a specific law on the UHC aimed at clarifying long-term funding mechanisms and ensuring the sustainability of the system through domestic innovative health financing sources.

# Factors Explaining Hybridization of Cameroon Health Financing System

Analysis of the factors that explain the emergence and persistence of this hybrid configuration reveals the complex interaction of historical, economic, political and socio-cultural determinants. The French colonial legacy has had a profound impact on the organization of the Cameroonian healthcare system. The French model, itself a hybrid of Beveridge and Bismarck, influenced the design of the Cameroonian system after independence. However, transplanting this model into a different economic and social context created significant distortions. Postindependence development has been marked by successive attempts of reforms, which have superimposed different rationales without ever arriving at a coherent system. The reforms of the 1990s, inspired by structural adjustment policies, introduced market mechanisms (cost recovery, financial participation by users) which coexisted with existing public structures. The chronic budgetary constraints of Cameroonian State were major factors in this hybridization. The impossibility of implementing health financing through the full Beveridgian system has led to a search for alternative mechanisms for mobilizing health financing tools that characterize hybrid systems. On the other side, the structure of the Cameroonian economy, dominated by the informal sector, limits the scope for developing a classic Bismarckian system based on social insurance contributions. According to estimates, the informal sector accounts for more than 70% of total employment, considerably reducing the potential base for social security

# contributions (30).

Political choices in terms of health financing reflect complex trade-offs between different priorities and constraints. The low priority given to health sector in public budgets about 7.2% of government spending, compared with the 15% recommended by Abuja - bears witness to this trade-off (23). The governance of the healthcare system, characterized by considerable institutional fragmentation, also contributes to hybridization. The multiplicity of key players (Ministries of Health, Finance, Planning and Economics, Labour, NSSF, local authorities, external partners, other ministries and stakeholders) creates sometimes contradictory logics and complicates the emergence of a unified approach. The traditional social solidarity mechanisms play a crucial role in Cameroon's health funding system. These mechanisms, based on reciprocity and family or community ties, constitute a form of informal mutualization that supplements failing formal mechanisms. However, these traditional mechanisms can also act as a brake on the development of formal insurance mechanisms as the previous research shows that the notion of reciprocity can discourage people from joining voluntary formal insurance schemes, with individuals preferring traditional mechanisms where they can expect a direct return on their contributions (13).

### **DISCUSSION**

# Theoretical Implications: Towards an Enriched Typology of a Hybrid System for Universal Health Coverage

The analysis of the Cameroonian model contributes to highlight the theoretical understanding of hybrid health financing systems, particularly in the context of developing countries. Our results suggest the need to move beyond the binary Beveridge-Bismarck typology to develop more nuanced conceptual frameworks capable of capturing the complexity of emerging configurations. Given the respective principles defining the Beveridgean and Bismarckian models along with their strengths and pitfalls, the hybrid model which is combining the two classic models can stand as the best opportunity of mobilizing sustainable financing for achieving universal health coverage in the country. The classic Beveridge-Bismarck typology, developed to analyze systems in industrialized countries, reveals its limitations when applied to African contexts.

The case of Cameroon illustrates the existence of configurations that do not correspond to any of the classic models, and consequently these models cannot be simply described as mixed or transitional. Rather, they are stable hybrid systems, with their own operating logics and their own equilibrium. This situation is in line with the empirical observations on the evolution of the Russian system, which show how attempts to transition from one model to another can lead to lasting hybrid configurations rather than pure systems (17). However, the case of Cameroon has specific features linked to the context of a low income country, such as the predominance of direct payments, the importance of the informal sector, and the role of traditional solidarity mechanisms. Based on the Cameroonian analysis of the comparative literature, we propose an enriched typology that distinguishes several types of hybrid systems according to two main dimensions: the degree of development of formal financial protection mechanisms and the dominant type of regulation. The hybrid model in this category includes systems such as that in Cameroon, where hybridization is mainly the result of the inadequacy of formal financial protection mechanisms. These systems combine Beveridgian and degraded Bismarckian features with a predominance of market mechanisms and informal arrangements. The hybrid

systems by design, in this category includes systems that deliberately combine elements of different models to optimize their respective advantages. The French example, analyzed by Nezosi, illustrates this type of deliberate hybridization (31). The transitional hybrid systems defined as systems in active transition from one model to another, such as the Russian case study (17). Cameroon's UHC could fall into this category if it succeeds in creating a dynamic of systemic transformation. The Cameroonian analysis reveals hybridization mechanisms specific to the African context that deserve particular attention. The coexistence of formal and informal financing mechanisms is a major feature of these systems. Unlike in developed countries, where hybridization is mainly between formal public/private and insurance/tax mechanisms, African systems integrate substantial informal and formal mechanisms. The role of traditional solidarity mechanisms (13) illustrates this specificity. These mechanisms are not simply temporary safety nets pending the development of formal mechanisms, but sustainable components of the financing system with their own logic and advantages. Another specific feature of African systems is the vertical fragmentation associated with the program financed by external aid. This fragmentation creates islands of deficiency for certain diseases or population groups, while leaving the rest of the system underfunded. This situation generates profound inequalities and complicates the emergence of a systemic integrated financing approach.

# Assessing the Performance of Cameroon's Hybrid System

Assessing the performance of the Cameroonian system according to the classic criteria for a health financing system (equity, efficiency, sustainability) reveals contrasting results that reflect the tensions inherent in hybrid systems. Equity is probably the dimension in which the Cameroonian system has the greatest weaknesses. The predominance of direct payments (70% of total healthcare expenditure) creates significant financial barriers to access to care, especially for the poorest populations (26; 27). This situation contradicts the equity objectives of the Beveridgian and Bismarkian models. The benefit incidence analysis developed by Asante et al (32) shows that public subsidies disproportionately benefit urban and rich populations who have better access to quality public services. This degressivity of public funding exacerbates inequalities rather than reducing them. However, certain elements of the system help to improve equity. Free access to certain services (immunization, malaria treatment for children under five) and traditional solidarity mechanisms offer partial protection to vulnerable populations. The UHC, by initially targeting the most disadvantaged groups and geographical underserved region, could help to improve societal and territorial equity. The efficiency of the Cameroonian system is compromised by several structural factors. The fragmentation of funding generates high transaction costs and duplication. The lack of a strategic purchasing mechanism limits the system's ability to direct resources towards the most cost-effective interventions. A previous Research on strategic purchasing in Cameroon shows that the existing mechanisms are rudimentary and do not optimize resource allocation (33). The introduction of performance-based financing has shown promising results in terms of improving the availability of essential medicines, suggesting the potential for improving efficiency through targeted reforms (34). Technical efficiency is also affected by malfunctions in the public system (supply disruptions, staff absenteeism, maintenance, equipment failure), which drive patients to the often more expensive private sector. The financial sustainability of the Cameroonian system poses considerable challenges. Dependence on direct payments, even if it provides immediate financing for services, is not sustainable in the long term, since it excludes a significant proportion of the population and does not make it possible to finance the

investment needed to develop the system. Public funding is insufficient and unstable, it cannot ensure the sustainability of the system on its own. Fluctuations in public revenue, linked in particular to fluctuations in the price of raw materials, have a direct impact on healthcare financing. The UHC represents an attempt to solve these sustainability problems by creating a more stable and predictable financing mechanism. Meanwhile, the sustainability of the UHC will also depend on the government's ability to mobilize the resources needed for its gradual expansion.

# **International Comparison and Lessons Learned**

Overall, Cameroon adopts a hybrid model of health financing, characterized by a gradual shift from the Beveridgian model to a mixed approach incorporating Bismarckian tools, while retaining specific features linked to the national socio-economic and governance context. However, the Beveridgean and Bismarckian health financing models have strong arguments of strengths in favor as well as weaknesses usually used against them. The hybrid model combines the best features of Bismarck and Beveridge models started with a system financed mainly by taxes and progressively move the spectrum of almost full tax finance to integrate the component of social insurance for universal health coverage in the national health system.

Cameroon's experience can be illuminated by comparison with other African countries that have developed different approaches to solving the challenges of health financing. Ghana offers an interesting example of a hybrid system that has evolved towards greater integration. Ghana's National Health Insurance Scheme (NHIS), launched in 2003, combines Beveridgian (tax-financed) and Bismarckian (social insurance contributions) features in a unified system (35). Although the NHIS has faced financial sustainability challenges, it has succeeded in significantly reducing the proportion of direct payments and improving access to care. Rwanda presents another model of successful hybridization with its community health mutual system integrated into a coherent national framework. The Rwandan system combines community financing, public subsidies and external aid in a unified architecture that has made it possible to achieve near-universal coverage (36). These experiences show that hybridization can be an effective strategy if it is part of a coherent systemic vision supported by strong political leadership. They also highlight the importance of progressive implementation and adaptation to local contexts. International experience offers several lessons (37) for the pursuit of reform in Cameroon. Firstly, the importance of a systemic vision that integrates all existing mechanisms, rather than allowing them to co-exist in a fragmented way. Cameroon's UHC should strive to gradually integrate community insurance mechanisms, employers' obligations and existing vertical programs. Secondly, the need for diversified and stable funding. Ghana's experience shows the risks of excessive dependence on a single source of funding. Cameroon should develop a funding mix combining public resources, social contributions and innovative funding mechanisms. Finally, the need for an effective strategic purchasing mechanism. Experiments with performance-based financing in Rwanda and the Democratic Republic of Congo show the potential for improving efficiency through appropriate incentive mechanisms.

## Challenges and Prospects of Health Financing Model in Cameroon

Analysis of Cameroon health financing system reveals a number of major challenges that will need to be addressed to ensure a successful transition to a more integrated and efficient system. Institutional fragmentation is a major challenge to the development of the system. Coordination between key stakeholders; ministry of public health, ministry of labour and

social security, ministry of finances, ministry of planning and economics, NSSF and other ministries and stakeholders requires strengthened governance mechanisms. The creation of the national intersectoral technical group for the UHC is a first step, but permanent coordination structures will be needed. The limited institutional capacity of the Cameroonian administration also poses challenges for the implementation of complex reforms. Developing skills in insurance systems management, strategic purchasing and regulation is a prerequisite. Financing the extension of the UHC is the most critical challenge. Estimates suggest that achieving universal health coverage would require a doubling of public spending on health, which implies major tax reforms to develop new innovative sources of funding. Broadening the base of social security contributions through the gradual inclusion of the informal sector is a promising avenue, although complex to implement. Experience in other low income countries shows that such inclusion requires mechanisms tailored to the specific characteristics of the informal sector with flat-rate contributions and decentralized collection mechanisms (38). Implementing the UHC requires the development of high standard information systems for managing beneficiaries, processing payments, claims and monitoring and evaluation performance indicators. Developing these systems represents a significant technical and financial challenge. Training and motivating healthcare staff are also crucial issues. Improving the quality of services is essential to ensure public support for the UHC and to justify the investments made in the health sector.

# Policy Implications for Optimizing the Hybrid System

The policy implications pointed out that any single theoretical model cannot provide universal affordable services and population coverage. Achieving universal health coverage should require a hybrid tripartite based combination of two classic Beveridge and Bismarck models involving tax funding for public finance and social insurance by employers and employees as well as mobilizing private insurance and innovative domestic financing sources. On the basis of the analysis carried out and international experience, several orientations can be made to optimize the evolution of the Cameroonian system towards a more efficient and equitable hybrid model. The strategic orientations for optimizing the hybrid system are essential. They are as follows:

- Development of an integrated systemic vision such that the UHC should be conceived as an integrating framework that progressively unites all existing health financing mechanisms, rather than as an additional mechanism. This integration should include public tax funded, social insurance with strong employers' obligations, private insurance, community insurance mechanisms and vertical programs.
- Diversification and stabilization of health financing for the development of a balanced financing mix combining public resources (general and earmarked taxes), social insurance contributions (formal and informal sector) and innovative mechanisms (tax on harmful products, international funding mechanisms) would reduce dependence on direct payments while ensuring the sustainability of the national health financing system.
- Strengthening strategic purchasing mechanisms, including contractualization with service providers, payment by performance and price regulation, thereby making it possible to improve the efficiency of the system and the quality of services.

As for the operational orientations:

- The gradual and adaptive implementation of extension of the UHC should follow a gradual approach that allows learning from pilot experiences and adapting monitoring mechanisms, robust evaluation and regular adjustments.
- Institutional capacity building through an ambitious training program should be put in
  place to develop the skills needed to manage a modern insurance system. This program
  should include staff training, financial risk management, third-party payment
  mechanisms, development of information systems and the strengthening of regulatory
  mechanisms.
- The community engagement and communications success of the UHC will largely depend on the support of the population. A communication and community engagement strategy should be developed to explain the benefits of the system and encourage participation and contributions to health financing system.

Moreover, this study has analyzed the hybrid nature of Cameroon's health financing system and characterized its mutation between the theoretical models of Beveridge and Bismarck. The analysis reveals a complex system that combines degraded Beveridgian features, embryonic Bismarckian mechanisms and a predominance of pure market mechanisms, creating an original hybrid configuration adapted to Cameroon's socio-economic context. The architecture of the Cameroonian system is characterized by a significant fragmentation of health financing mechanisms, with five main sources: direct public funding (15%), limited social contributions, predominantly direct payments (70%), external funding (13%) and marginal private and community mechanisms (2%). This structure reveals the shortcomings of formal financial protection mechanisms and explains the persistence of significant barriers to access to healthcare. The functional analysis shows that the three functions of health financing (collection, pooling, purchasing) are carried out in a fragmented and inefficient ways. The collection function suffers from insufficient public funding and a narrow social security contribution basis. The pooling function is largely deficient, leaving the majority of the population without formal financial protection. The purchasing function lacks strategic mechanisms and effective regulation. The characterization of hybridization reveals a system that is "hybrid by default" rather than "hybrid by design", resulting from the inadequacy of formal mechanisms rather than a deliberate optimization strategy (39). This hybridization can be explained by the interaction of historical factors (colonial heritage), economic factors (budgetary constraints, size of the informal sector), political factors (government priority, institutional fragmentation), and socio-cultural factors (traditional solidarity mechanisms) (40).

# Research Contribution and Prospects for Health Financing Reforms in Cameroon

This research contributes to the scientific literature on several levels (theoretical, empirical and methodological). From a theoretical point of view, it enriches our understanding of hybrid health financing systems by proposing a typology that distinguishes between 'hybrid by default', 'hybrid by design' and 'transitional' systems. This typology provides a better understanding of the diversity of configurations observed in low and middle income countries, and overcomes the limitations of the classic Beveridge-Bismarck typologies. Also, from an empirical point of view, the study provides an in-depth analysis of a specific national case, documenting the concrete operating mechanisms of an African hybrid system. This documentation is particularly valuable in a context where data on African health financing

systems remains limited. As from a methodological point of view, the research proposes an analytical framework tailored to the specific features of African systems, incorporating informal financing mechanisms and the dynamics of vertical fragmentation linked to external aid. This framework could be applied to the analysis of other African systems. The results of this study have significant implications for health policies in Cameroon and other African countries facing similar challenges. The implementation of the UHC in Cameroon represents a unique opportunity to transform a 'hybrid by default' system into a 'hybrid by design' system, but this transformation requires a systemic approach that goes beyond simply adding new mechanisms. The findings highlight the importance of gradually integrating existing mechanisms, diversifying funding and developing robust institutional capacity. Cameroon's experience could serve as a laboratory for other African countries engaged in a similar process of reforming their health financing systems.

The future of Cameroon's health financing system will largely depend on the successful implementation of the CSU and its ability to create a dynamic of systemic transformation. Several scenarios can be envisaged. The optimistic scenario would see the UHC succeed in gradually integrating all existing financing mechanisms into a unified framework, significantly reducing the share of direct payments and improving equity of access to care. This scenario would require sustained political commitment, significant mobilization of resources, and substantial strengthening of institutional capacity. The pessimistic scenario would see the UHC fails to develop beyond its pilot phase, for lack of sufficient resources or political will, leaving the system in its current hybrid configuration with its dysfunctions. This scenario could result from economic crises, political changes or failures in implementation. The intermediate scenario, probably the most realistic, would see the UHC develop gradually but in a limited way, creating a multi-speed system where different protection mechanisms coexist depending on the population and the region. This scenario, although imperfect, could nevertheless significantly improve the situation compared with the status quo.

### **Research Limitations**

This study has a number of limitations that open up prospects for future research. The exclusively documentary approach does not allow us to grasp certain informal or undocumented dynamics of the system. In-depth qualitative studies, including interviews with key players and field observations, would enrich our understanding of how the system actually works. Secondly, the limited availability of recent quantitative data on certain aspects of health financing in Cameroon constrains the analysis in certain respects. The rapid evolution of the health financing system, such as the implementation of the UHC, requires longitudinal monitoring to assess the real impact of the reforms. Rigorous evaluation studies using quasi-experimental methods would be particularly useful for measuring the effect of the UHC on access to care, financial protection and equity. The generalizability of the findings to other African contexts deserved to be tested by comparative multi-country studies. A comparative analysis of the different hybridization approaches in sub-Saharan Africa would provide a better understanding of the factors behind the success and failure of health financing reforms.

## **CONCLUSION**

Cameroon's health financing system illustrates the complex challenges facing African countries in their quest for universal health coverage. Hybridization is not necessarily a failure or a transitional stage, but can be a strategy adapted to the specific constraints and opportunities of

these contexts. However, the success of this strategy depends on the ability to transform "hybrid by default" configurations into a "hybrid by design" system guided by a clear vision and effective regulatory mechanisms. Cameroon's ongoing experience offers valuable lessons for other African countries and is helping to enrich our understanding of possible routes to universal health coverage. This study contributes to the scientific literature on several levels. From a theoretical point of view, it enriches our understanding of changes in health financing systems in developing countries. From a methodological point of view, it proposes an analytical framework adapted to the specific characteristics of African health systems. Finally, from a policy point of view, it offers elements of evaluation and recommendations for current and future reforms of the Cameroonian healthcare financing system. This study contributes to the scientific literature on several levels. From a theoretical point of view, it enriches our understanding of changes in health financing systems in developing countries. From a methodological point of view, it proposes an analytical framework adapted to the specific characteristics of African health systems. Finally, from a policy point of view, it offers elements of evaluation and recommendations for current and future reforms of the Cameroonian healthcare financing system.

Future research into health financing systems in Africa must continue to evolve to keep space with these changes and provide decision-makers with the conceptual and empirical tools they need to design effective and equitable health financing policies. From this perspective, analysis of the hybrid system is a promising field of research that deserves to be deepened and broadened. There are several areas of research that need to be developed in order to gain a deeper understanding of hybrid health financing systems in Africa. Formal analysis is a promising but little explored area of research. Studying the transition processes and success factors of health financing reforms in Africa would require innovative methodological approaches, combining quantitative and qualitative analysis, longitudinal and comparative studies. The development of evaluation tools tailored to the specific characteristics of African systems, integrating the dimensions of equity, efficiency and sustainability, would be an important contribution to health research.

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Ethical considerations were observed in line with the Ethics and Regulation of research using secondary data.

### References

- 1. Asante A, Wilson -, Wasike SK, Ataguba JE. Health Financing in Sub-Saharan Africa: From Analytical Frameworks to Empirical Evaluation. Appl Health Econ Health Policy [Internet]. 19 Oct 2020 [cited 14 Jun 2025];18:743-6. Available from: https://doi.org/10.1007/s40258-020-00618-0
- 2. Apeagyei Id AE, Lidral-Porter B, Id NP, Solorio J, Tsakalos G, Wang Y, et al. Financing health in sub-Saharan Africa 1990-2050: Donor dependence and expected domestic health spending. 2024 [cited 14 June 2025]; Available from: https://doi.org/10.1371/journal.pgph.0003433
- 3. Wallace LS, Professor A, Fam A. Family Medicine Updates From the North American Primary Care Research Group. Ann Fam Med. Feb 2013;11(1):84-5.
- 4. Gilles Nezosi. Comment la France se situe-t-elle entre le modèle bismarckien et le modèle beverigien d'Etat providence. Vie Publique [Internet]. 29 Feb 2016 [cited 21 Jun 2025]; Available from: https://www.vie-publique.fr/parole- dexpert/24117-france-quel-modele-detat-providence-bismarckien-ou- beverigien
- 5. Liaropoulos L, Goranitis I. Health care financing and the sustainability of health systems. Int J Equity Health [Internet]. 15 Sep 2015 [cited 14 Jun 2025];14(1):1-4. Available from: https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-015-0208-5
- 6. Gabani J, Mazumdar S, Suhrcke M. The effect of health financing systems on health system outcomes: A cross-country panel analysis. Health Economics (United Kingdom). 1 March 2023;32(3):574-619.
- 7. Ifeagwu SC, Yang JC, Parkes-Ratanshi R, Brayne C. Health financing for universal health coverage in Sub-Saharan Africa: a systematic review. Glob Health Res Policy [Internet]. 1 Dec 2021 [cited 14 June 2025];6(1):1-9. Disponible sur: https://ghrp.biomedcentral.com/articles/10.1186/s41256-021-00190-7
- 8. Arhin K, Oteng-Abayie EF, Novignon J. Effects of healthcare financing policy tools on health system efficiency: Evidence from sub-Saharan Africa. Heliyon [Internet]. 1 Oct 2023 [cited 14 June 2025];9(10):e20573. Available from: https://www.sciencedirect.com/science/article/pii/S2405844023077812
- 9. Gabriela de Carvalho, Achim Schmid, Johanna Fischer, Classifications of health care systems: Do existing typologies reflect the particularities of the Global South?, Global Social Policy, 10.1177/1468018120969315, 21, 2, (278-300), (2020).
- 10. United Nations. United Nations. 2024. Department of Economic and Social Affairs Population Division.
- 11. Ntangsi J. An Analysis of Health Sector Expenditures in Cameroon Using a National Health Accounts Framework.
- 12. Jean Paul Beyeme Ondoua. Le système de santé camerounais. Actualité et dossier en santé publique [Internet]. June 2002 [cited 21 June 2025];(39):61-5. Available from: https://www.hcsp.fr/explore.cgi/telecharger/ad396165.pdf
- 13. Ojong N. Healthcare financing in rural Cameroon. Societies. 1 Dec 2019;9(4).
- 14. Ministry of Public Health. Extract from the Speech by the Head of State, H.E. PAUL BIYA, to the Nation, . 2017.
- 15. Kutzin J. A descriptive framework for country-level analysis of health care financing arrangements. Health Policy (New York) [Internet]. 1 June 2001 [cited 14 June 2025];56(3):171-204. Available from: https://www.sciencedirect.com/science/article/abs/pii/S0168851000001494
- 16. Chiara Berardi, Heidi Wechtler, Madeleine Hinwood, Frederik Schut, Comparing the Evolving Dynamics of the Mandatory-Voluntary Financing Mix in OECD Countries: A Composite Measure, Social Indicators Research, 10.1007/s11205-025-03621-x, (2025).

- 17. Kaneva M, Heinrich A, Odoch W, Bautista MC, Cited M, Shishkin S, et al. Open access edited by The hard way from the Beveridge to the Bismarck model of health finance: Expectations and reality in Russia. Frontiers in Public Health frontiersin.org.
- 18. Michael Cichon, Charles Normand. Betwee, Beveridge and Bismark\_ Options for health care financing in central and eastern Europe. World Health Forum [Internet]. 1994 [cited 21 June 2025];15(4):323-8. Disponible sur: https://iris.who.int/bitstream/handle/10665/45367/WHF\_1994\_15(4)\_p323-328.pdf
- 19. CM Jones, L Gautier, V Ridde. A scoping review of theories and conceptual frameworks used to analyze health financing policy processes in Sub-Saharan Africa [Internet]. 2021 Feb. Available from: http://mc.manuscriptcentral.com/heapolhttp://mc.manuscriptcentral.com/heapol
- 20. Institute for Health Metrics and Evaluation. Financing Global Health 2017 [Internet]. 2018. 1-178 p. Available from: www.healthdata.org
- 21. WHO. https://data.who.int/countries/120. 2023. Health statistics, Cameroon.
- 22. African Summit /OAU/SPS/ABUJA. Abuja declaration on HIV/AIDS, Tuberculosis and other related infectious diseases. 2001 Apr.
- 23. World Health Organization Regional office for Africa. State of health financing in the African Region. 2013 Jan.
- 24. Social security in Cameroon [Internet]. [cited 14 June 2025]. Available from: https://www.cleiss.fr/docs/regimes/regime\_cameroun.html
- 25. Caisse National de Prévoyance Sociale. Annuaire statistique 2022 [Internet]. Yaoundé; 2022 [cited 21 June 2025]. Available from: https://www.cnps.cm/images/parutions/Annuaire\_statistique\_CNPS\_2022-Final1.pdf
- 26. Zakariaou Njoumemi, Altiné Fadimatou, Samuel Honore Ntavoua, Ousseni Mongbet, Rahimatou Manouore. Health Insurance Coverage and Its Socioeconomic and Demographic Determinants in Cameroon. International Journal of Health Economics and Policy. Vol. 8, No. 2, 2023, pp. 44-56. doi: 10.11648/j.hep.20230802.13
- 27. Diaby O, Mbanga C, Biwole Fouda J, Beyina Edzana YP, Saidu Y. Factors associated with household willingness to pay for Universal Health Coverage in Cameroon: a nationwide cross-sectional analysis. BMC Health Serv Res. 1 Dec 2024;24(1):1313.
- 28. Ministry of Public Health. Health Sector Strategy. SOPECAM; 2016. 1-208 p.
- 29. Işik H, Ndifusah H. Health care system and health financing structure, the case of Cameroon. International Anatolia Academic Online Journal. 2013;1(2):24-44.
- 30. Ministry of Public Health. National Health Development Plan PNDS 2021-2025 [Internet]. [cited 21 June 2025]. Available from: https://cdnss.minsante.cm/sites/default/files/PNDS\_MOITIE\_1.pdf
- 31. Institut National de la Statistique. Second General Census of Enterprises in 2016 (RGE) [Internet]. 2018 Sep. Available from: www.statistics-cameroon.org
- 32. Nezosi G. La protection sociale 2 e Édition [Internet]. Paris; 2021 [cited 21 Jun 2025]. Available from: https://fr.scribd.com/document/649050631/La-protection-sociale-Gilles-Nezosi-z-lib-org-1
- 33. Asante A, Price J, Hayen A, Jan S, Wiseman V. Equity in health care financing in low-and middle-income countries: A systematic review of evidence from studies using benefit and financing incidence analyses. PLoS One. 1 Apr 2016;11(4).
- 34. Sieleunou I, Tamga DDM, Maabo Tankwa J, Aseh Munteh P, Longang Tchatchouang EV. Strategic Health Purchasing Progress Mapping in Cameroon: A Scoping Review. Health Syst Reform [Internet]. 1 Jan 2021 [cited 15 June 2025];7(1). Disponible sur: https://www.tandfonline.com/doi/pdf/10.1080/23288604.2021.1909311
- 35. Sieleunou I, Turcotte-Tremblay AM, De Allegri M, Taptué Fotso JC, Azinyui Yumo H, Magne Tamga D, et al. How does performance-based financing affect the availability of essential medicines in Cameroon? A qualitative study. Health Policy Plan. 1 Dec 2019;34:III4-19.

- 36. Blanchet NJ, Fink G, Osei-Akoto I, Blanchet NJ. The effect of ghana's National health insurance scheme on health care utilization. Vol. 46. 2012.
- 37. Sekabaraga C, Diop F, Soucat A. Can innovative health financing policies increase access to MDG-related services? Evidence from Rwanda. Health Policy Plan. Nov 2011;26(SUPPL. 2).
- 38. Federico Toth, Classification of healthcare systems: Can we go further?, Health Policy, 10.1016/j.healthpol.2016.03.011, 120, 5, (535-543), (2016).
- 39. Claus Wendt, Health System Typologies, Health Care Systems and Policies, 10.1007/978-1-4614-6419-8\_21-1, (1-11), (2018).
- 40. Karine A. Hajyan, Առողջապահության ոլորտի արդյունավետ ֆինանսավորման ժամանակակից մոդելների համեմատական վերլուծություն / A comparative analysis of modern models of effective health sector financing, Регион и мир / Region and the World, 10.58587/18292437-2024.6-236, (236-248), (2024).

## **Appendices**

### Appendix 1: Chronology of health financing reforms in Cameroon

**1960 to 1980:** Post-independence period - 1960: Independence and legacy of the colonial system - 1967: Creation of the Caisse Nationale de Prévoyance Sociale (CNPS) - 1974, adoption of the Labour Code, with employers' obligations.

**1980 to 2000:** period of structural adjustment - 1987: onset of the economic crisis and cuts in public budgets. 1993: introduction of cost recovery policies. 1996: new Constitution with decentralization.

**2000 to 2020**: Period of sectoral reforms. 2001: Adherence to the Abuja Declaration. 2009: first health sector strategy. 2015: creation of national technical groups for the CSU. 2016: Adoption of the 2016-2027 health sector strategy.

**2020-present:** Period of implementation of the CSU. 2021: adoption of the National Health Development Plan. 2021-2025. 2023: Official launch of universal health coverage phase (1). 2024: extension to phase 2 of the CSU.

### Annex 2. Glossary of technical terms

**Strategic purchasing:** process of purchasing health services which aims to maximize health gains for the population by allocating resources in an optimal way.

**Universal Health Coverage (UHC)**: A system that guarantees all individuals and communities access to the health services they need without financial hardship.

**Beveridgian model:** health financing system based on public financing through taxation, state management and universal access in accordance with the principle of citizenship.

**Bismarckian model:** health financing system based on compulsory social insurance, financed by contributions from employers and employees, with joint management.

**Risk pooling**: mechanism whereby individuals pool their resources to protect themselves collectively against the financial risks associated with illness.

**Direct payment (out-of-pocket payment)**: payments made directly by patients when they use healthcare services, without an insurance intermediary.

**Hybrid system:** health financing system that combines elements of different theoretical models, such as the Beveridgian and Bismarckian models.

Correspondence:	
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