Lisbon School of Economics & Management
Universidade de Lisboa

MASTERS IN
FINANCE

MASTER'S FINAL WORK

DISSERTATION

BRIDGING THE GAP: INSIGHTS FROM RWANDA'S HEALTH FINANCING SUCCESS FOR GUINEA-BISSAU'S HEALTH SYSTEM SUSTAINABLE DEVELOPMENT

DÉBORA INÊS TAVARES SOARES DA GAMA

JULY - 2025

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Un mon son ka pudi toca palmu.
(It takes two hands to clap)
Guinean Proverb

Abstract

The importance of population health expressed in SDG 3 has forced countries to rethink their health system to achieve that goal. One key issue of reforming and improving health systems is financing. Low-income countries, such as those in Sub-Saharan Africa face serious challenges to overcome the financing hurdle. To understand better this problem, this study aims to compare the financing of two African health systems: Guinea-Bissau and Rwanda's. While the latter is recognized as a success case, the former has shown to be fragile and inefficient to improve its financing and therefore the population health outcomes.

The work begins with an introduction to the topic and research objectives, followed by a literature review that contextualizes the concept of health systems, key financing models, and the challenges faced in Africa, with a particular focus on Guinea-Bissau and Rwanda. It then explores in detail the financing models of both countries, identifying similarities, differences, best practices, and weaknesses. The investigation concludes with a presentation of the adopted methodology and a discussion of results in light of long-term health system sustainability.

The analysis is structured around five core dimensions essential to understanding and improving this topic: (a) sources of financing, (b) coverage and equity in access to healthcare services, (c) human and technological resources, (d) health outcomes, and (e) long-term sustainability.

The method is based on a comparative approach, supported by the analysis of academic literature, national institutional reports, and secondary data provided by international partner organizations. This strategy enables the identification of good practices that may be adapted to Guinea-Bissau's context, as well as the main challenges faced, thus contributing to the formulation of more effective and sustainable public health policies.

Keywords: health financing, Guinea-Bissau, Rwanda, health systems, public health policy, sustainable development, equity in access, health in Africa

Glossary

AIDA – Aid, Exchange and Development Association

AIDS – Acquired Immunodeficiency Syndrome

ANC – Antenatal Care

CBHI – Community-Based Health Insurance

CCM – Country Coordinating Mechanism

CECOME –Central Procurement Agency for Essential Medicines

CHE – Current Health Expenditure

COMESA – Common Market for Eastern and Southern Africa

CPA – Complementary Package of Activities

CPIA – Country Policy and Institutional Assessment

CPLP – Community of Portuguese Speaking Countries

EAC – East African Community

ECOWAS – Economic Community of West African States

EXT – External Health Expenditure

GAVI – Global Alliance for Vaccines and Immunization

GDP – Gross Domestic Product

GGE – General Government Expenditure

GGHE-D – Domestic General Government Health Expenditure

GFATM – Global Fund to Fight AIDS, Tuberculosis and Malaria

HIV – Human Immunodeficiency Virus

HSPA – Health System Performance Assessment

INASA – National Institute of Public Health of Guinea-Bissau

MCH – Maternal and Child Health

MoH – Ministry of Health

MOPH – Ministry of Public Health

MPA – Minimum Package of Activities

NHDP – National Health Development Plan

NHRDP - National Human Resource Development Plan

NGOs – Non-Governmental Organizations

NHS – National Health Service

OOP – Out-of-Pocket Payments

PBF – Performance-Based Financing

PIH – Partners in Health

SDGs – Sustainable Development Goals

SHI – Social Health Insurance

TB – Tuberculosis

TBAs – Traditional Birth Attendants

UHC – Universal Health Coverage

UNICEF – United Nations Children's Fund

WAEMU – West African Economic and Monetary Union

WHO – World Health Organization

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1. Introduction

Supported by the understanding that health is not merely a social good but also a fundamental human right, as stated in the Universal Declaration of Human Rights (Article 25), health funding is an increasingly important part of the architecture of health systems. As a signatory to this declaration, Guinea-Bissau carries an international obligation to ensure that all citizens, particularly the most vulnerable, have access to adequate healthcare services. Yet, this obligation remains largely unmet, constrained by structural inefficiencies, underfunding, and political instability that have persistently weakened the country's health sector.

In 2001, African leaders signed the Abuja Declaration in 2001, pledging to devote at least 15% of state budgets to the health sector in recognition of the vital role that health finance plays. Despite this formal commitment, most countries, including Guinea-Bissau have consistently fallen short of this target, reflecting persistent financial limitations and lack of political will to prioritize health.

In parallel, the Paris Declaration on Aid Effectiveness (2005) aimed to reform the dynamics between development partners and aid-recipient countries by focusing on reciprocal accountability, ownership, harmonization of efforts, alignment with national priorities, and results-based management. These principles are especially relevant for nations like Guinea-Bissau, where the relationship between international donors and national institutions often suffers from misalignment and fragmented interventions.

Despite these international frameworks, the health system in Guinea-Bissau remains characterized by dependency on external aid, a disproportionate amount of household out-of-pocket costs, and insufficient domestic resource mobilization. Also, academic research on health financing in West Africa remains limited, especially when it comes to comparative studies between countries on the continent with different processes of creation, development and reform of health systems.

This dissertation seeks to bridge this gap by comparing the health financing models of Guinea-Bissau and Rwanda. Rwanda is recognized internationally for its accomplishments in the health system and outcomes, turning a post-genocide

environment into a model for community-based health programs, strategic funding, and strong governance. This comparison is not only academically relevant but also personally significant. As a descendant of Guinea-Bissau, I feel a profound sense of duty to contribute to the country's development, combining academic research with a commitment to providing useful and significant suggestions for policymakers, health financing agents, and development partners.

The central research question guiding this dissertation is: How might Guinea-Bissau's health system's sustainable development learn from Rwanda's successes with health financing?

To address this, the study pursues the following objectives: comparison of the health financing structures and mechanisms in both countries; assessment of the relationship between financing models and health outcomes, access, and equity; identification of challenges and opportunities for enhancing the long-term sustainability of health financing in Guinea-Bissau; and provision of actionable recommendations for national authorities and external partners engaged in the health sector.

The study adopts a comparative analytical approach, combining secondary data from international and national sources with primary data collected via a questionnaire administered to stakeholders and citizens from Guinea-Bissau. The analysis is structured along the dimensions outlined by the WHO Health System Performance Assessment framework (Papanicolas, Rajan, Karanikolos, Soucat, & Figueras, 2022), enriched by the financial flow perspective of Kutzin (Kutzin, 2013).

The dissertation proceeds as follows: Chapter 2 reviews the theoretical and empirical literature on health structure, financing and sustainability. Chapter 3 describes the methodology and data collection process. Chapter 4 presents the comparative analysis of the two case studies. Chapter 5 identifies policy challenges and opportunities, and Chapter 6 concludes with reflections, limitations, and recommendations for future research.

2. Literature Review

2.1. Overview of Health Financing Systems

2.1.1. Conceptual Foundations and Significance

Universal Health Coverage (UHC) is generally regarded as one of the main objectives of health systems, and health funding is one of their core responsibilities (WHO, 2010). "All activities whose primary purpose is to promote, restore, or maintain health" is how the WHO defines a health system (WHO, 2000, p. 5). It is a complex set of interdependent components, including hospitals, health centres, professionals, non-governmental organisations, insurance plans, and the government that collectively respond to population health needs.

From a financing perspective, countries raise funds to pay for expenses such as infrastructure, medical staff, and medications. Weak financing results in poor coverage, inequitable access, and low quality of care. In turn, UHC works to guarantee that people can obtain quality treatments without experiencing financial hardship. In order to do this, finance systems need to: Mostly rely on capacity-to-pay and pre-payment mechanisms; Provide adequate quality preventative, curative, and rehabilitative services; shield users from monetary risk (WHO, 2010).

Three conceptual pitfalls are identified by Clarke-Grant (2024) when assessing health systems: (i) the "Black Box," which assumes that resource injection alone produces results; (ii) the "Black Hole," which depicts financing as perpetually inadequate; and (iii) the "Laundry List," which sees the system as a collection of independent entities. In line with the WHO's emphasis on responsiveness, the author highlights the importance of acknowledging populations as active actors within systems.

2.1.2. Health Financing Models

Health systems employ a variety of financing mechanisms adapted to their socio-economic context (Kutzin, 2008; Gottret & Schieber, 2006):

Taxes: This is the most common model. Under this system, governments redistribute general tax money to pay for health services.

Insurance: This is subdivided into three categories:

- Mandatory Social Insurance: Revenues under this model originate from compulsory contributions on wages. Both employees and employers contribute a percentage of income to a health fund, which is regulated by the state and operates alongside the state budget.
- Voluntary Private Insurance: This model is optional. Rather than being imposed, insured individuals voluntarily purchase insurance that best suits their personal preferences and, primarily, their financial capacity. This characteristic links this type of financing to higher levels of inequality in access to health services, as it does not guarantee universal coverage.
- Community-Based Health Insurance (CBHI): Designed to cover populations, particularly in rural areas, who are not part of the formal employment sectors (Obiajulu Nnamuchi et al., 2019).

Out-of-Pocket Payments: This model predominates in many low-income health systems and represents a significant financial burden for households. It corresponds to payments made directly by users at the time-of-service utilization. Requiring individuals to pay at the point and time-of-service delivery discourages service use (especially preventive and health promotion services) and encourages the postponement of medical exams. Consequently, individuals often do not receive treatment during the earliest stages of illness, when the chances of cure are higher (Obiajulu Nnamuchi et al., 2019).

External Aid: Essential for low-and middle-income countries. This can take the form of financial resources, technical and human assistance, medicines, equipment, or funding for specific programs such as HIV/AIDS, malaria, and vaccination.

The aforementioned sources aim, either individually or collectively, to ensure universal access to health care. However, each has limitations that must be considered according to the realities of each health system.

The following chapters will analyse the models employed in Rwanda and Guinea-Bissau, highlighting their particularities, outcomes, and vulnerabilities.

2.2. Common Challenges in Sub-Saharan Africa

Despite abundant natural resources, Sub-Saharan Africa faces persistent poverty[1] and fragile institutions. Health expenditures are limited by financial constraints: between 2015 and 2019, public spending on health averaged less than 5% of government budgets, well below the 15% Abuja target (Figure A1, Appendix). Though unevenly distributed across countries, external aid is nevertheless significant, accounting for around 13% of current health expenditures (Table A1, Appendix). In low-income states, dependence is considerably higher; Mozambique is a paradigmatic case, with over 62% of health expenditure donor-funded between 2015 and 2022.

2.3.Rwanda's Health System

2.3.1. Organizational Structure

The initial reforms of the Rwandan health system began in 1985, however, the 1994 genocide abruptly interrupted institutional progress. Reconstruction efforts resumed in 1995 with the implementation of an innovative model emphasising administrative and financial decentralisation, community involvement, and the gradual integration of various stakeholders. Through these best practices, Rwanda has been recognized by international organizations as a success case within the African health landscape (Republic of Rwanda, 2001; WHO, 2010).

The system is organised into three tiers: central, intermediate, and peripheral corresponding to tertiary, secondary, and primary care respectively. While district hospitals and health centres form the backbone of local provision, referral hospitals are concentrated in Kigali. Medicalised health centres were established, especially for obstetric treatment, to alleviate overcrowding at district hospitals (Bazirete et al., 2020). Service delivery is managed using a complementary package of activities (CPA) at district hospitals and a minimal package of activities (MPA) at health facilities. The CPA handles more specific interventions and training duties, whilst the MPA guarantees access to fundamental preventative, curative, and promotional services. The goal of this uniformity across care levels was to guarantee fair access, better monitoring and

[1] Of the 30 poorest countries in the world, 25 are in Africa. According to the indicator GDP per capita, PPP (current international $), Guinea-Bissau ranks 16th and Rwanda 24th (World Development Indicators, 2025).

evaluation across the country, and improve resource planning (WHO, 2010; Republic of Rwanda, 2001).

Four pillars are used to share provision: Government-assisted facilities (GAHFs), which are mostly non-profit and faith-based and are integrated through formal agreements (Republic of Rwanda, 2001); private providers, who help with service delivery and health data collection; traditional medicine, which is widely used and gradually integrated under the WHO Traditional Medicine Strategy (WHO, 2013; WHO, 2023); and public facilities, which are under the Ministry of Health.

Traditional healers continue to be important, especially for maternity health. Attempts to formalise their role are demonstrated by programs like the training of traditional birth attendants (Bazirete et al., 2020). Nonetheless, there are still issues with regulation and quality control.

2.3.2. Community Health and CBHI (*Mutuelles de Santé*)

A distinctive feature of Rwanda's health system is the active role of communities. Community Health Workers (CHWs), mostly volunteers, bridge rural populations and formal services by providing maternal, child health, and preventive care (Bazirete et al., 2020). Their role enhances continuity, reduces delays, and fosters trust in government-led initiatives.

The WHO's six building blocks[2] for enhancing the health system have been in line with reform initiatives (WHO, 2010). Rwanda made investments in digital medical records, necessary medications, and more stronger governance structures with the help of Partners in Health (PIH).

It is acknowledged that Social Health Insurance (SHI) is especially pertinent in African contexts as it represents cultural ideals of communal support, addresses funding gaps, and strengthens bonds of solidarity. Rwanda stands out for greater commitment and stronger

[2] Six WHO's building blocks: service delivery, workforce, information systems, access to medicines and technologies, financing, and leadership and governance

public trust, when compared to other countries that provide examples of both governance issues and achievements (Clarke-Grant, 2024).

The Community-Based Health Insurance (CBHI), launched in 2001, achieved coverage rates exceeding 90% at its peak. Significant government subsidies that lower rates for the underprivileged; income-based tiered contributions; awareness efforts run by CHWs and local leaders; and mandatory enrolling procedures that guarantee risk sharing are some of the main reasons for its success. By drastically lowering out-of-pocket expenses, CBHI made it possible to receive care without incurring unaffordable expenses. However, persistent government subsidies and effective risk pooling are necessary to maintain such high coverage.

2.3.3. Government and Donor Financing

Since the post-genocide period, Rwanda has prioritised health financing as a strategic national investment. Between 2015 and 2022, government health expenditure as a share of the budget increased steadily, from 7.9% to 9.5% (Table A2, Appendix). This reflects stronger domestic commitment, although it remains below the Abuja 15% target.

However, external aid still plays a major role. Despite a decline from 2016 to 2019, COVID-19 caused it to spike once more, surpassing 42% of current health spending in 2022 (Table A3, Appendix). Donor support remains essential for vertical programs that address diseases like TB, HIV/AIDS, and malaria. Using the ownership, harmonisation, and accountability principles outlined in the Paris Declaration, Rwanda has been comparatively successful in matching aid to national goals, in contrast to many other African nations. Its reform results are frequently attributed to this coordination (Ministry of Health, 2023).

Nevertheless, Rwanda's system is still somewhat reliant on donors, which raises concerns about its long-term viability. Furthermore, Rwanda still has a moderate score on transparency indicators (CPIA: 3.5/6), indicating ongoing risks of mismanagement even though anti-corruption efforts have been reinforced (World Bank, 2025). This draws attention to a paradox: Rwanda is praised as a model of governance partly because of its formal decentralisation in health service delivery—district health offices, community-based health insurance, and CHWs give communities a tangible role in planning and

access. Yet these mechanisms operate under tight central political oversight, with the government closely directing priorities and monitoring performance. This dual arrangement explains Rwanda's relative success, but also raises concerns: decentralisation enhances efficiency and responsiveness, while strong centralisation and external dependence may generate fragility if not carefully balanced (Chemouni, 2018; Golooba-Mutebi & Booth, 2013).

2.3.4. Performance-Based Financing (PBF)

Since its 2001 pilot, PBF has emerged as a leading reform. Payments are based on patient satisfaction and service quality, and financing is linked to performance contracts between fundholders and providers (Soeters et al., 2006). The strategy, which was supported by open monitoring and community involvement, encouraged efficiency, lowered financial barriers,and raised responsibility.

Strong verification procedures, independent and capable fundholders, community input integration, and donor and government coordination are the reasons behind its success.

A distinctive element of Rwanda's PBF is the equity adjustment: facilities serving poorer populations receive higher payments for the same services. This adjustment relies on the ubudehe categorisation, a community-based system that divides households into socioeconomic groups according to income, assets, and living conditions. Although the goal of this method was to increase solidarity and fairness, it has faced criticism for misclassifying certain families, preventing them from receiving subsidies while giving others improper benefits (Chemouni, 2018; Golooba-Mutebi & Booth, 2013). These kinds of distortions cast doubt on the validity of incentives and the possible injustices they could cause.

However there are still issues. Due to its heavy reliance on donor funds, PBF may not be able to continue if subsidies decline. Furthermore, the model runs the risk of giving quantifiable services priority over preventive or more difficult-to-measure aspects of quality. Additionally, research indicates that metropolitan centres with greater resources are better equipped to accomplish goals than rural ones, which could lead to a widening of disparities (Soeters et al., 2006).

Therefore, even if PBF enhanced accountability and service delivery, its long-term sustainability relies on integration with domestic financing and CBHI as well as more robust measures to avoid service quality distortions.

2.4. Guinea-Bissau's Health System

2.4.1. Organizational Structure

The health system of Guinea-Bissau is fragile and characterised by persistent deficiencies. Tuberculosis (136.3 per 100,000 population), lower respiratory infections, stroke, HIV/AIDS, COVID-19, malaria, premature complications, and diarrhoeal diseases were the top causes of death in 2021 (WHO, 2025).

The system is composed of four sectors:

- Public sector: Includes the National Health Service, military, and prison health services, and is regulated by the Ministry of Public Health (MOPH);
- Private sector: Consists of pharmacies, pharmacy stores, clinics, and doctor's offices without formal contracts with the government;
- Conventional sector: Established between the Catholic Church, or NGOs and the State, which provides human resources and defines the policies and strategies to be followed
- Traditional sector: The most widely used, though poorly controlled, with continuous attempts to incorporate it into the official system.

Formally, there are three levels of healthcare: local (114 health areas with health facilities), regional (11 health regions with hospitals), and central (policy and referral institutions) (Djalo et al., 2023). However, regional and municipal tiers are severely constrained in practice. Due to inadequate infrastructure, several health centres have closed; decentralisation policies have not been fully implemented, leaving regional authorities operationally and financially dependent on the centre. Although access restrictions have been somewhat reduced by initiatives like mobile teams (estrategia avançada), coverage is still poor (Guerreiro et al., 2017).

In addition to structural weaknesses, policy continuity has been undermined by recurrent political instability. No strategic plan has been carried out in its entirety since

independence, and government turnover frequently delays improvements. For example, the 2021 launched Ianda Guiné Saúde project was never operationalised since the National Health Development Plans (NHDP) were not adopted and updated. The gap between planning and execution is evident in the limited implementation of the consecutive NHDPs (I, II, III, and the 2023–2032 update), despite its alignment with the UN 2030 Agenda and African Union Agenda 2063 (Republic of Guinea-Bissau, 2023).

2.4.2. Actors in Health System Financing

Health financing in Guinea-Bissau relies on three main sources: households, government, and external donors (Araujo et al., 2019).

With out-of-pocket (OOP) payments accounting for 64.9% of current health expenditures in 2022 (World Bank, 2025), they are more than twice as high as the average for Sub-Saharan Africa (see Figure A2, Appendix). This heavy reliance on households creates profound inequities: poorer families often forgo food, housing, or preventive services to cover health expenses, exposing them to catastrophic health spending (over 5% of the population in 2018) and deepening poverty (WHO, 2025; World Bank, 2025).

Government spending remains constrained. Despite a slight increase in recent years, health only accounted for 5.16% of the state budget in 2022, well below the Abuja 15% objective (see Table A4, Appendix). The low commitment reflects both fiscal constraints and weak political prioritisation of health, despite its importance to development (Government of Guinea-Bissau & Ministry of Health, 2017).

Much of the deficit is filled by external aid, which frequently substitues the government. The government primarily pays salaries, sometimes with delays, while donors often finance over 90% of project costs, according to interviews with national and international actors (Casimiro et al., 2024). Aid accounted for 18.23% of current health spending in 2022 (Table A5, Appendix). But there is a lack of coordination with donors frequently following their own agendas, leading to duplication and reduced national ownership.

The Bamako Initiative's (1997) attempts to strenghten financing through Autonomous Funds were mainly unsuccessful, despite being intended to increase local autonomy by reinvesting small user fees at the facility (Guerreiro et al., 2017).

This failure does not contradict the fact that OOP remains the dominant source of health financing. In reality, Autonomous Fund revenues were minimal and irregular, constrained by poverty, non-payment, weak fee collection systems, stockouts that discouraged service use, and donor interventions that bypassed national mechanisms (Guerreiro et al., 2017; World Bank, 2023). On the other hand, most household OOP occurs outside these funds in private clinics, pharmacies, and informal providers, when public facilities fail to deliver adequate care.

Overall, Guinea-Bissau's financing structure is household-driven, donor-dependent, and inadequately state-funded, reflecting long-term vulnerability and compromising both equity and sustainability.

3. Methodology and Data

3.1. Study Method

This dissertation examines the finance of the health systems in Rwanda and Guinea-Bissau using a comparative case study methodology. The decision underscores the understanding that, without contextual adaptation, what works in one nation would not be transferable to another (Healy et al., 2018). The study used a variety of techniques, such as secondary statistical analysis, qualitative data collecting via a questionnaire, and the reading of policy papers and literature, to guarantee a strong comparison.

The Asia Pacific Observatory on Health Systems and Policies, in particular its methods for analysing low-and middle-income countries, served as a source for the analytical framework. The two most pertinent categories were (i) studies of financing and service delivery functions and (ii) assessments of Health Systems in Transition (HiT) that focus on performance, governance, and resources. The comparative perspective, in accordance with Healy et al. (2018), included contextual, organisational, financial, and governance aspects, evaluated using both cross-sectional and time-series data (e.g., GDP share, OOP, UHC Index, and health expenditure) (Figure A3).

3.2.Data Sources

The study used both secondary and primary data.

The primary data was collected through a self-created questionnaire in June 2025, to obtain insights into the perceptions of the Guinean population and stakeholders directly involved in health financing. The questionnaire was developed using Google Forms and gathered responses from 186 participants. The questions addressed topics such as access to healthcare services, out-of-pocket payments, perceived quality of care, and sources of health financing.

Two complementary strategies were used for distribution: (i) social media dissemination to reach younger and general public, and (ii) snowball sampling through professional networks based on trust, such as family members employed by the Ministry of Health and government agencies who distributed the survey to colleagues in hospitals, NGOs, and international organisations. Given Guinea-Bissau's small health industry and lack of centralised professional databases, this strategy was deemed adequate.

The secondary data was obtained from internationally renowned sources, including the World Bank – World Development Indicators, the WHO Global Health Observatory, and official reports from the Ministries of Health. These sources provided data on key indicators such as public health expenditure, out-of-pocket expenditure, universal health coverage (UHC Index), infant mortality rates and life expectancy, among others.

Two main reasons justify the choice of data sources:

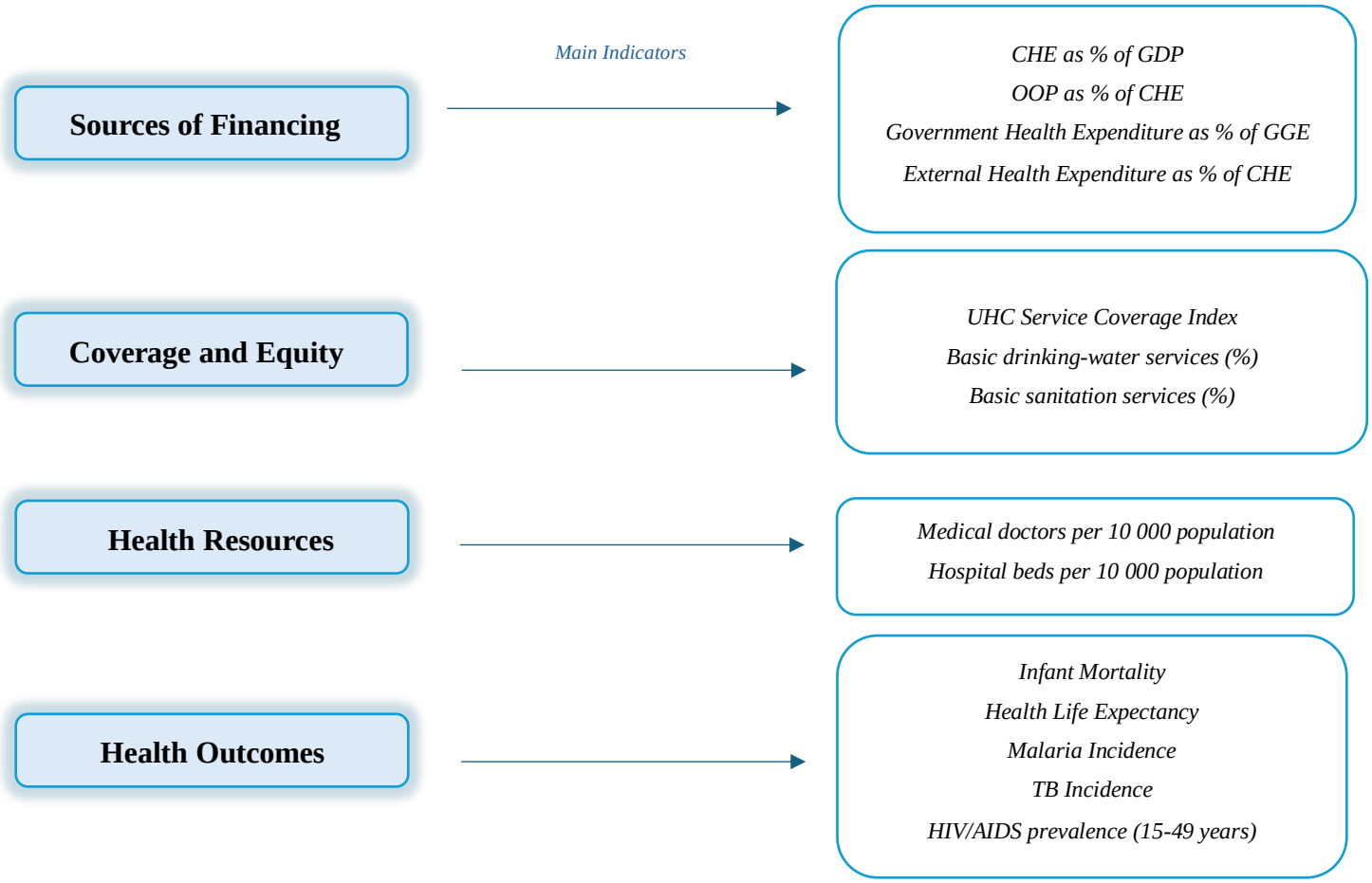
(i) the scarcity of complete and up-to-date datasets in both Guinea-Bissau and Rwanda, which according to Healy et al. (2018)'s methodological framework makes secondary data the primary tool for comparative case study analysis;

(ii) the necessity of incorporating the opinions of Guineans and those working directly in health financing, considering that, in contrast to Rwanda, Guinea-Bissau currently lacks efficient procedures for incorporating the population in the decision-making processes of the health system. Therefore, by gathering opinions at the local level, the questionnaire was created to help close this gap and encourage a decentralised viewpoint that is consistent with the guidelines for inclusive and participatory health governance, as demonstrated by Rwanda's community-based approach.

3.3.Comparison Criteria

The comparative framework was organised around five dimensions essential for assessing health financing and performance: (a) sources of financing, (b) coverage and equity in access to healthcare services, (c) human and technological resources, (d) health outcomes, and (e) long-term sustainability (Figure 1).

Figure 1. Comparative Framework for Analysing Health Systems: Dimensions and Main Indicators



Source: Author's elaboration

Due to the lack of accurate quantitative metrics for this dimension, indicators of long-term sustainability were evaluated mainly through qualitative analysis, with an emphasis on the resilience of domestic finance methods and reliance on external aid. The indicators that were most pertinent to the goals of this study and conceptually compatible with the WHO Health System Performance Assessment (HSPA) framework were prioritised from the large pool of possible indicators.

Kutzin's (2013) health financing model, which separates four interconnected functions - revenue raising, pooling, purchasing, and service provision - was also incorporated into

the framework. The mobilisation of resources through taxes, insurance premiums, or out-of-pocket expenses is known as revenue raising. Pooling reduces personal financial risk and protects households from catastrophic expenditures. Allocating pooled resources to suppliers, specifying which services are financed, and deciding on payment options are all part of purchasing. Lastly, the actual supply of healthcare to the population is referred to as provision (Figure A4). According to Kutzin (2013), the system's ability to increase coverage, strenghten resources, and lessen the financial hardship on households increases with the efficiency with which these activities are conducted.

By connecting financial flows to governance structures, the WHO HSPA study further emphasises how financing arrangements influence both intermediate goals (equity, efficiency, and access) and ultimate health outcomes (Papanicolas et al., 2022). As a result, this dissertation takes the stance that effective systems rely on how resources are raised, pooled, distributed, and spent in addition to the amount of resources that are available.

Based on this pillar, the comparative framework is implemented through five evaluative criteria: (i) the sustainability and diversification of financing sources, (ii) the degree of equitable access to healthcare for vulnerable and marginalized populations, (iii) the system's service coverage and capacity to meet population health needs, (iv) the contribution of financing mechanisms to measurable improvements in health outcomes, and (v) the resilience of the health financing model in the face of financial, political, or systemic shocks (Healy et al., 2018; Kutzin, 2013; Papanicolas et al., 2022).

4. Comparative Analysis of Health Systems

4.1. Structure and Functioning of Health Systems

Formally, the health systems of Rwanda and Guinea-Bissau are similar as they are structured around central, regional, and local levels and function through public, private, conventional, and traditional sectors. The systems' functionality, efficacy, and political commitment diverge sharply, despite the similar institutional form.

A key distinction lies in their responses to historical crises. The 1994 genocide in Rwanda served as an incentive for structural change. Redefining health as essential to the country's

recovery sparked changes that improved community involvement, decentralisation, and governance. In contrast, Guinea-Bissau has been embroiled in political instability since the civil war in 1998, and the ongoing implementation of reforms has been hindered by frequent changes in the government. As a result, the health sector has made little headway in institutional development and is now strongly linked to precarious political dynamics.

In order to identify local needs and incorporate them into district planning and national strategies, Rwanda established bottom-up engagement methods. In addition to improving responsiveness and building confidence, this also helps to match population priorities with service delivery. In Guinea-Bissau, on the other hand, attempts to integrate and control traditional medicine are mostly symbolic, despite the fact that it is officially acknowledged as a part of the system. This reflects a larger gap between implementation competence and regulatory frameworks.

At the operational level, the differences are also evident. Decentralisation has been successfully institutionalised in Rwanda, while it is still mainly a rhetorical concept in Guinea-Bissau. Although there are regional and local organisations, they do not have financial or decision-making autonomy, and authority is still centralised. Basic service accessibility is still restricted, and outreach initiatives only partially make up for inadequate infrastructure. Important frameworks like the minimum package of activities (MPA) and staffing criteria were created by National Health Development Plans (NHDPs), but they have only been partially implemented, demonstrating the ongoing disconnect between strategic planning and execution.

Moving on to governance metrics, Rwanda receives a score of 3.5 out of 6 on the World Bank's CPIA index for accountability and transparency, whereas Guinea-Bissau receives a score of 1.5 (World Bank, 2025). These figures demonstrate how corruption and bad governance in Guinea-Bissau continue to obstruct reforms, but Rwanda's comparatively more robust institutions have made it possible to turn ideas into tangible action.
In the end, the degree of political commitment is what distinguishes the two situations more than the formal framework of their institutions. Because Rwanda has continuously prioritised health development, reforms, resource mobilisation, and widespread access to services have been made possible. In Guinea-Bissau, reforms have mostly remained on

paper due to a lack of consistent political will, which has limited progress towards universal health care and perpetuated instability.

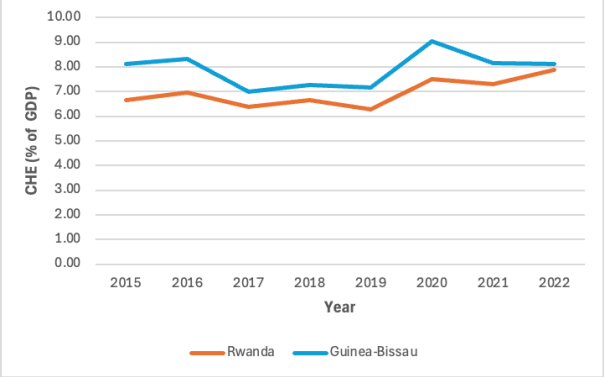
4.2.A Comparison between Health Financing in Guinea-Bissau and Rwanda

Sources of Financing

Government spending, foreign aid, community-based health insurance (CBHI), and performance-based financing (PBF) are the main sources of financing for Rwanda, with households making comparatively small out-of-pocket (OOP) contributions. Guinea-Bissau, on the other hand, relies heavily on households, making its system vulnerable to shocks and equity risks.

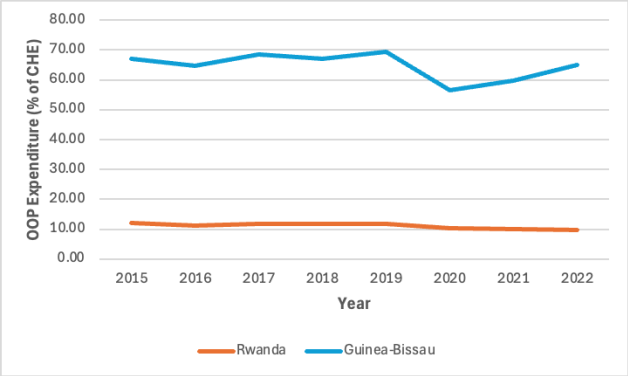
As shown in figure 2, Current Health Expenditure (CHE) as a percentage of GDP is slightly higher in Guinea-Bissau (8.1% in 2022) than in Rwanda (7.9%). Yet, this higher ratio has not resulted in better performance. OOP illustrates the notable disparity: in Guinea-Bissau it remains above 50% of CHE, reaching 56% in 2022, while in Rwanda it stays below 12% (see Figure 3). In a context where nearly 40% of Guineans live under $3/day, such reliance on direct payments is regressive and exposes families to catastrophic health expenditures.

Figure 2. Current Health Expenditure (CHE) as a percentage of GDP, 2015-2022



Source: World Bank (2025). Author's elaboration.

Figure 3. Out-of-Pocket (OOP) Expenditure as a percentage of CHE, 2015-2022



Source: World Bank (2025). Author's elaboration.

Government spending also reflects contrasting trajectories. While Guinea-Bissau just exceeded 5% of its budget in 2022, Rwanda regularly allocates about 10% of its budget on health (Figure 4). Although both are still below the 15% Abuja target, Rwanda's trajectory shows a higher level of priority. In both situations, donor help is crucial, although in Rwanda it is better matched with national goals (Figure 5).

Figure 4. Government Health Expenditure as a percentage of General Government Expenditure (GGE), 2015-2022

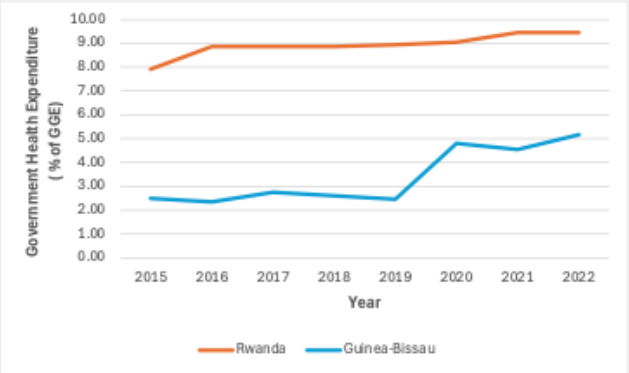
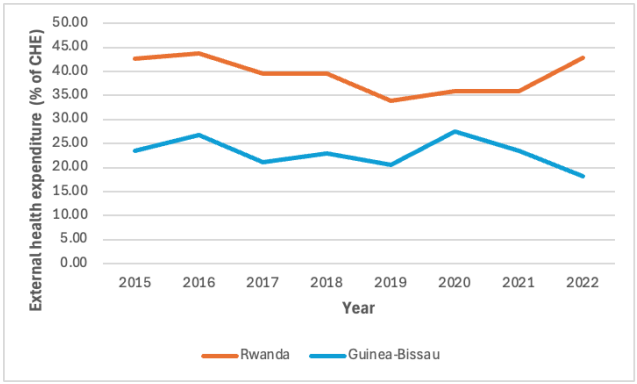


Figure 5. External Health Expenditure (EXT) as a percentage of General Government Expenditure (GGE) for Guinea-Bissau and Rwanda, 2015-2022



Source: World Bank (2025). Author's elaboration.

Coverage and Equity

The Universal Health Coverage (UHC) Service Coverage Index highlights this divergence. Rwanda steadily improved from 44 in 2015 to 49 in 2021, while Guinea-Bissau remained stagnant at 37–38, as indicated in Table I. The findings indicate that improved service coverage is correlated with higher public investment when compared to government health spending (Table II).

Table I. *UHC Service Coverage Index (SDG 3.8.1)*

Year	Guinea-Bissau	Rwanda
2015	37	44
2017	38	48
2019	36	47
2021	37	49

Source: World Bank (2025). Author's elaboration.

Table II. *UHC Index and Government Health Expenditure as % of GGE*

	Guinea-Bissau		Rwanda	
Year	UHC Index	Government Health Expenditure (%)	UHC Index	Government Health Expenditure (%)
2015	37	2.50	44	7.91
2017	38	2.75	48	8.88
2019	36	2.44	47	8.93
2021	37	4.55	49	9.47

Source: World Bank (2025). Author's elaboration.

These distinctions are reinforced by structural determinants. In comparison to Guinea-Bissau, where sanitation availability is still around 30%, Rwanda has gradually increased access to drinking water and sanitation (Figures 6 and 7). Equity and health outcomes are directly harmed by these disparities.

Figure 7. Population using at least basic drinking-water services (%), 2015-2022

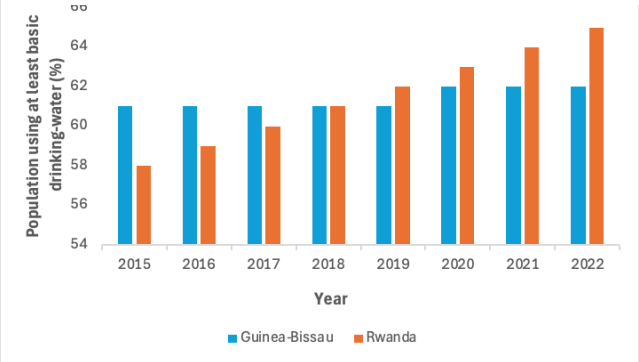
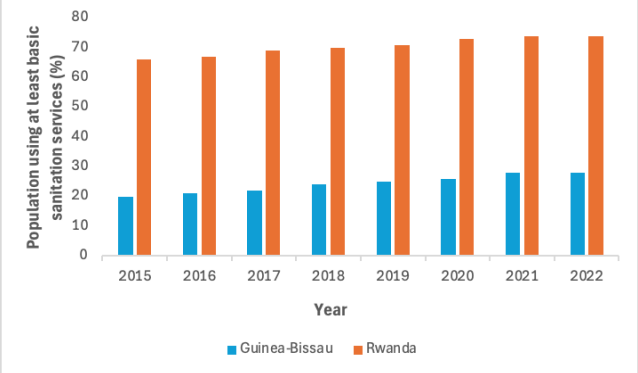


Figure 6. Population using at least basic sanitation services (%), 2015-2022



Health Resources

In both countries, there is still a shortage of health workers and infrastructure. According to Table III, Rwanda has fewer than one doctor per 10,000 inhabitants in 2022, whereas Guinea-Bissau has 2.5. Additionally, there is a shortage of beds; in 2020, Rwanda reported only 7.4 beds per 10,000, while in 2009, Guinea-Bissau reported 10 beds per 10,000. Yet the implications differ: in Guinea-Bissau, delayed care-seeking behaviour

and a curative-oriented system increase demand for hospital treatment. By contrast, Rwanda's emphasis on prevention, through vaccination campaigns, screenings, and community health workers, reduces the need for hospitalisation, making fewer beds sufficient despite the overall shortage.

Table III. *Medical doctors and Hospital beds per 10 000*

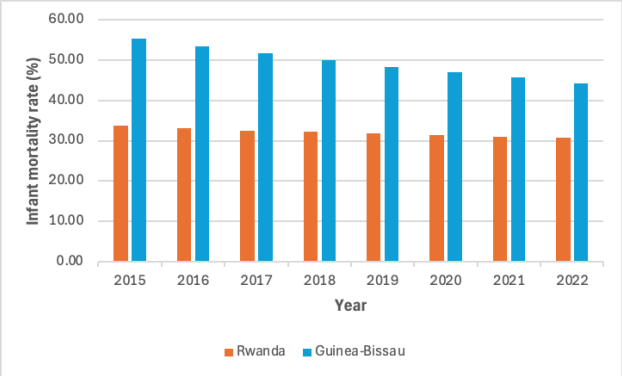
	Guinea-Bissau		**Rwanda**	
Year	Medical doctors (10 000 inhabitants)	Hospital beds (10 000 inhabitants)	Medical doctors (10 000 inhabitants)	Hospital beds (10 000 inhabitants)
2009	0.81	10	n.a.	7.5
2015	1.98	n.a.	1.1	7.4
2016	1	n.a.	1.2	7.3
2017	n.a.	n.a.	1.35	7.2
2018	3.01	n.a.	1.32	7.2
2019	n.a.	n.a.	1.17	7.2
2020	1.91	n.a.	1.16	7.4
2021	2.2	n.a.	1.21	n.a.
2022	2.52	n.a.	0.9	n.a.

Source: World Bank (2025). Author's elaboration.

Health Outcomes

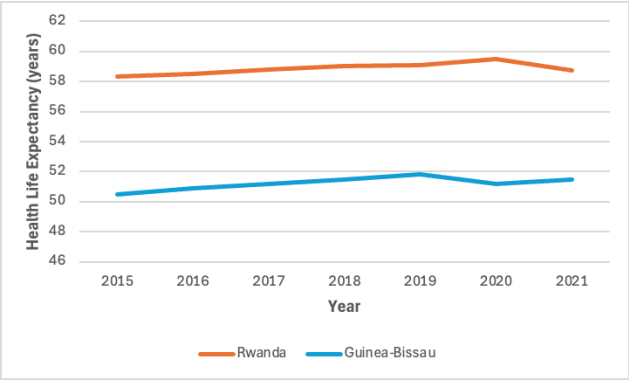
Despite decreases in both nations, infant mortality is still significantly greater in Guinea-Bissau (Figure 8). Although it has increased more steadily in Rwanda, healthy life expectancy has gradually increased in both countries (Figure 9).

Figure 8. Infant mortality rate (%) – between birth and age 1 - per 1000 live births, 2015-2022



Source: World Bank (2025). Author's elaboration.

Figure 9. Health life expectancy (years), 2015-2022



Source: World Bank (2025). Author's elaboration.

The statistics on communicable diseases are much more startling. As indicated in Table IV, the incidence of malaria decreased from 478 to 86 in Rwanda during the same period, but it nearly doubled in Guinea-Bissau (from 66 to 111 per 1,000 at-risk population) between 2018 and 2022. In Guinea-Bissau, the incidence of tuberculosis has remained at 361 per 100,000 since 2015, while in Rwanda, it decreased to 56 in 2022. Although the frequency of HIV has decreased in both nations, it is still higher than 1%, making it a widespread pandemic.

Table IV. *Estimated malaria incidence (per 1000 population at risk), Prevalence of HIV among adults aged 15 to 49 (%), Incidence of tuberculosis (per 100 000 population per year), 2015-2022*

	Guinea-Bissau			**Rwanda**		
Year	Malaria Incidence	HIV/AIDS Prevalence	TB Incidence	Malaria Incidence	HIV/AIDS Prevalence	TB Incidence
2015	n.a.	3.2	361	n.a.	3.4	61
2016	n.a.	n.a.	361	n.a.	n.a.	62
2017	n.a.	n.a.	361	n.a.	n.a.	58
2018	66.48	n.a.	361	477.57	n.a.	59
2019	74.82	n.a.	361	385.35	n.a.	57
2020	94.41	2.7	361	213.12	2.9	57
2021	106.17	2.6	361	118.74	2.9	56
2022	110.86	2.5	361	85.57	2.8	56

Source: World Bank (2025). Author's elaboration.

Long-term Sustainability

The WHO HSPA framework asserts the manner in which resources are raised, pooled, and purchased, as well as whether governance guarantees equity, efficiency, and financial protection, are more important factors in determining sustainability than spending levels (Kutzin, 2013; Papanicolas et al., 2022).

Rwanda demonstrates partial resilience through good partner alignment and a diverse mix of donors, CBHI, PBF, and government. However, due to centralised decision-making and heavy external dependence, sustainability is still precarious, necessitating increased domestic mobilisation.

The combination of a high CHE/GDP, stagnated results, and an OOP above 50% in Guinea-Bissau, on the other hand, reflects fragmented donor efforts, poor protection, and inadequate pooling. Inadequate institutional capability and poor governance make it more difficult to absorb shocks or finance reform.

All things considered, the comparison supports the HSPA's position that more investment is insufficient. In order to transform resources into tangible health benefits, sustainability necessitates lowering OOP, strengthening pooled prepayment, and enhancing governance and strategic purchasing.

4.3.Descriptive Statistics of the Survey Respondents

Before analysing respondents' perceptions, this section presents the descriptive statistics of the questionnaire sample, considered essential for contextualising the findings. Accordingly, data on citizenship, gender, age, geographical residence, educational background, professional status, and institutional affiliation are reported, along with the number of valid responses per question, providing a comprehensive overview of the dataset and ensuring transparency in future interpretations.

Out of the 186 respondents, the vast majority (97.3%) identified as Guinea-Bissau nationals, with only five reporting other nationalities. Nearly half (48.9%) currently reside within Guinea-Bissau, while 51.1% live abroad, reflecting a significant representation of the diaspora.

The questionnaire sample is male-skewed and relatively young. Of all respondents, 44.1% were women and 55.9% were men. Age-wise, the largest group consisted of people between the ages of 25 and 34 (30.6%), followed by those between the ages of 18 and 24 (21%). Approximately 14% and 17% of the sample consisted of middle-aged respondents

(35-44 and 45-54), followed by those aged 55-64 (12.9%), and those 65 and over (4.3%). People under the age of 35 make up most of the sample overall.

The sample is also highly educated. Just over half (50.5%) had an undergraduate degree, and almost one-third (31.7%) said they had earned a master's or postgraduate degree. A smaller proportion indicated secondary education (8.1%) or vocational/technical training (7%), while only 2.7% held a doctoral degree. In terms of employment status, over two-thirds were working (62.4% as workers and 10.2% as self-employed). Most of participants were either working or enrolled in school at the time of the poll, as evidenced by the fact that about 23.7% were students and only 3.8% said they were unemployed (Table A6).

The questionnaire collected 186 responses, which were divided into two analytical groups based on respondent's involvement in the health sector. Group A included 62 individuals that support or interfere with Guinea-Bissau's health system, while Group B consisted of 124 individuals who said they had no relationship with health-related organizations, representing the general population (Table V). To guarantee analytical clarity, these classifications are maintained throughout this chapter and the one that follows.

Respondents were then divided into different organizational types under Group A. With 27 responders working in ministries or public agencies, government organizations made up the highest percentage. Healthcare facilities or suppliers (6 respondents), international NGOs or bilateral partners (7 respondents), and international or multilateral organizations (15 respondents) came next. Research, development, and technology institutions (4 respondents) and civil society or religious associations (3 respondents) had smaller numbers. Appendix Table A8 contains the complete list of participating organizations.

Table V. *Professional Affiliation with the Health Sector, n = 186*

Affiliation	Frequency (n)	Percentage (%)
Works in a health-related organization (Group A)		
Government bodies	27	14.5
International / multilateral organizations	15	8.1
International NGO's / bilateral partners	7	3.8
Healthcare facilities/suppliers	6	3.2
Civil society / religious associations	3	1.6
Research, development and technology institutions	4	2.2

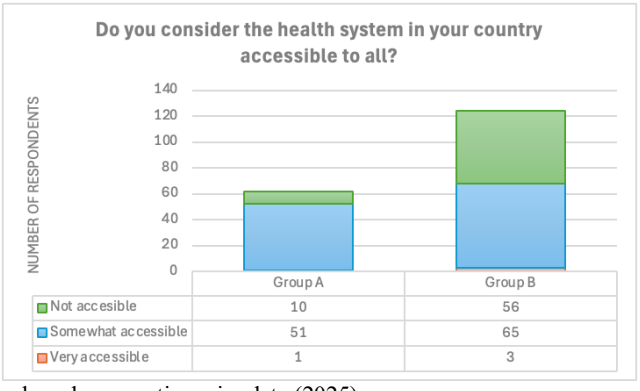
Total	62	33,3
Does not work in a health-related organization (Group B)		
Total	124	66.7
Total (Groups A and B)	186	100

Source: Author's elaboration based on questionnaire data (2025)

Table A7 provides a summary of the distribution of answers to the questionnaire's central questions, which capture respondents' opinions about the healthcare system. Since the answers to these questions (Questions 10, 11, 12, 13, 16, 18, and 19) were highly consistent across groups, the results are shown in aggregate form. Group A (health-sector professionals) and Group B (the general public) did not require additional disaggregation at this stage as one response option consistently received an overwhelming majority (always exceeding 100 responses).

In addition to these aggregated findings, further analysis was conducted on selected questions where a disaggregated view between Groups A and B provided relevant insights. As illustrated in Figure 10, perceptions of accessibility to the health system (Q9) show that while most respondents in both groups thought it was only "somewhat accessible" (51 in Group A and 65 in Group B), a significant number of Group B respondents (56) thought it was "not accessible," suggesting a more critical attitude among those who do not work directly in the health sector. This discrepancy emphasizes how perceptions of service availability are influenced by one's closeness to the system.

Figure 10. Question 9, number of responses breakdown

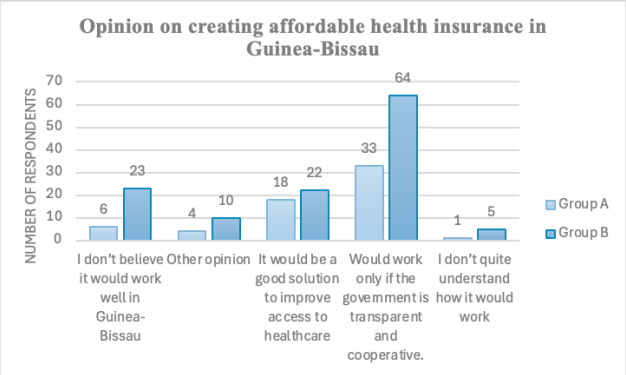


Source: Author's elaboration based on questionnaire data (2025)

Similarly, respondents' views on the creation of an affordable health insurance program in Guinea-Bissau are presented in Figure 11. The majority indicated that such a system "would only work if the government is transparent and cooperative" (33 in Group A and 64 in Group B), demonstrating the importance of institutional trust and governance. A

smaller yet notable proportion viewed it as "a good solution to improve access to healthcare" (18 in Group A and 22 in Group B), reflecting cautious optimism about its potential impact. Conversely, 6 respondents in Group A and 23 in Group B expressed skepticism, stating they do not believe it would work well in Guinea-Bissau, while a limited number provided "other opinions" (4 in Group A and 10 in Group B) or admitted they "don't quite understand how it would work" (1 in Group A and 5 in Group B). These findings show a cautiously positive attitude toward health insurance, balanced by respondents' worries about institutional responsibility, governance, and public understanding of such mechanisms.

Figure 11. Question 14, number of responses breakdown



Source: Author's elaboration based on questionnaire data (2025)

With 97.3% of respondents naming the government as the primary actor, Figure A5 demonstrates the overwhelming support for state-led finance when it comes to the topic of who should primarily fund healthcare services. The acknowledgment of a supportive role for foreign organizations (25.8%) and, to a lesser extent, households through out-of-pocket contributions (23.1%) and other actors (7%) complement this expectation. The population's strong desire for a publicly funded health system that is supported by outside aid but not primarily dependent on household contributions is reflected in these preferences.

Lastly, Figure A6 investigates opinions regarding the function of international organizations in the country's healthcare system. A significant percentage of respondents criticized these organizations for "pursuing their own interests with little collaboration" (17 in Group A and 31 in Group B), while the most common opinion expressed by respondents was that they "provide aid with little coordination or understanding of needs" (20 in Group A and 48 in Group B). A smaller group reported having "no formed opinion

on the matter" (7 in Group A and 27 in Group B), indicating a degree of uncertainty or lack of awareness regarding these organizations' roles. These results point to widespread concerns about the coherence and responsiveness of international efforts to Guinea-Bissau's real health needs, even while a smaller percentage acknowledged their alignment with local and governmental aims (18 in both Group A and Group B).

The final open-ended question (Q20) invited respondents to share their perceptions and recommendations for improving the health system in Guinea-Bissau. Infrastructure, human resources, medicines and equipment, access, financing, governance, and prevention were the seven main themes that emerged from the qualitative analysis of these replies. The improvement of health infrastructure was the most often mentioned theme (32% of respondents), as indicated in Table VI. This indicates that there is a general worry about the poor condition of facilities, particularly in rural areas. Recommendations for improving human resources, particularly through hiring, training, and higher pay for medical personnel, came next (27%), followed by the necessity of guaranteeing a consistent supply of necessary medications and equipment (24%). Increasing public financing (19%), strengthening governance through anti-corruption measures and increased transparency (16%), promoting preventive strategies (13%), such as public health education and sanitation campaigns, and improving access to care (22%), especially for vulnerable populations and those living in remote areas, were among the other priorities.

Table VI. *Question 20, number of responses breakdown*

Theme	Frequency (n)	Percentage (%)	Quotes
Infrastructure	60	32	"Build more hospitals and health centres in the country's interior." "Rehabilitate and improve the infrastructure of existing hospitals." (**Group A**)
Human Resources	50	27	"Train and hire more doctors, nurses, and health technicians." "Improve salaries and working conditions for health professionals to motivate them." (**Group B**)
Medicines & Equipment	45	24	"Ensure the availability of essential medicines in hospitals and health centres." "Equip hospitals with the necessary

			devices and materials for quality care." (**Group A**)
Access	40	22	"Establish more health posts in rural areas to bring services closer to the population." "Ensure that basic healthcare services are accessible and free for low-income people." (**Group A**)
Financing	35	19	"Increase public investment and funding in the health sector." "Allocate a larger share of the State Budget to health." (**Group B**)
Governance	30	16	"Combat corruption and the embezzlement of funds in the health sector." "Improve management and transparency in the health system." (**Group B**)
Prevention	25	13	"Carry out education and awareness campaigns on hygiene and disease prevention." "Improve basic sanitation and hygiene conditions to prevent illnesses." (**Group A**)

Source: Author's elaboration based on questionnaire data (2025)

These findings not only reflect the challenges faced by Guinea-Bissau's health sector but also provide valuable insights into the population's expectations and proposed solutions. Building on this framework, the following chapter turns to a deeper exploration of respondents' perceptions, moving beyond descriptive statistics to analyse the underlying narratives shaping their views on the health system.

4.4.Perceptions of the Health System in Guinea-Bissau

The questionnaire's findings reveal that political instability is widely acknowledged as one of the primary barriers to the improvement of the health sector, even among respondents who admitted to having limited knowledge of its functioning. In Question 12, which asked whether political instability was perceived to impact the health system, almost unanimous agreement was recorded, with 182 out of 186 respondents confirming this view. This indicates a collective understanding that as long as the nation does not

achieve political and institutional stability, any structural reform or significant improvement will be limited.

The need for a participatory health system, closely aligned with the population's needs, was also evident in Question 13, by addressing the importance of involving local communities in defining public health priorities. In Group A, only one respondent, affiliated with the government, did not recognize the importance of such involvement. In Group B, only three participants shared this view. This consensus emphasises the general understanding that health policies designed without engaging the population tend to be ineffective and disconnected from local realities.

Regarding external dependence, Question 16 sought to assess whether respondents believed that international aid is indispensable for the functioning of the health system. In Group A, only one respondent (from an NGO) disagreed. In Group B, twelve respondents rejected the idea. Despite these exceptions, the predominant perception underscores the fragility of national financial independence and the critical reliance on external aid to sustain essential healthcare services.

The relationship between the health sector and international partners was further explored in Question 17, which assessed the performance of international organizations. Divergent views emerged even within the same institutions. For example, while some UNDP respondents and a representative from the African Development Bank (AfDB) were critical arguing that international actors "primarily pursue their own interests and priorities, with limited collaboration with national stakeholders", another UNDP respondent stated they had no formed opinion on the issue. Similarly, a respondent from the Agency for the Safety of Air Navigation in Africa and Madagascar (ASECNA) also expressed no position. These mixed responses highlight both the recognition of misalignment between external interventions and national priorities, and, at the same time, a degree of disconnection from operational coordination with the Guinean government.

To assess perceptions of government performance, Question 11 asked whether the government had done enough to improve the health system. All six government-affiliated respondents unequivocally stated that it had not. This unanimity from within the state

reinforces the widespread perception of either a lack of commitment or the inadequacy of policies implemented thus far.

Significant scepticism was reflected in the responses regarding the possibility of implementing health insurance mechanisms, particularly considering the country's weak governance and economic fragility. More than half of the respondents believed that such a system would only be viable if the government demonstrated transparency and collaborated closely with the population. This conditional acceptance reflects a general lack of confidence in governmental institutions and worriedness about the fair administration of health financing.

Some respondents provided their recommendations on potential models for contributory systems rather than choosing from the pre-defined options. One such proposal highlighted that, if the system were to be created by the State, it would be essential to delegate its management to an autonomous public administrative body, with financial, administrative, and patrimonial autonomy.
Alternatively, the system could emerge through social responsibility initiatives led by associations or health-focused NGOs. An illustrative example is the proposal from ACOBES, an organization that has long advocated for the creation of the *Caixa Poupança Saúde* (CPS), a health savings fund designed to encourage citizens to make prior contributions to cover medical and pharmaceutical expenses. However, such a scheme would necessitate prior government authorization and robust oversight mechanisms, particularly from the health, finance, and social action sectors, to ensure transparency and accountability.

There were also discussions about the *Instituto Nacional de Previdência Social*'s possible contribution to the development of trustworthy, organized and transparent social security system, which could help fund and enhance the health system's overall functioning.
However, given the prevalence of informal employment and the insufficient salaries, respondents also raised concerns about the population's ability to make a financial contribution.

Other suggestions involved establishing mechanisms for direct withholding through social security, where a minimal amount would be deducted and put it aside specifically

for the maintenance and innovation of public hospitals as well as creating a sustainable community funding mechanism:

"*Direct withholding of a minimal amount through social security so that this value is applied annually in the maintenance and innovation of public hospitals."* (Survey respondent, Group B)

"There should be a community-based contributory scheme to help cover household health expenses." (Survey respondent, Group A)

The valorisation of human resources was another recurring theme in the recommendations, as the lack of incentives to retain qualified professionals, particularly in remote areas, was cited as a factor contributing to inadequate patient care and demotivation — a fact also highlighted by Ministério da Saúde Pública da Guiné-Bissau (2023), who noted that the existence of financial subsidies linked to participation in internationally funded programs, such as those for combating tuberculosis, HIV/AIDS, and malaria, contributes to disparities in motivation among health workers. Although legislation provides for specific subsidies (such as *vela*, isolation, and installation allowances[3]), these are not effectively implemented in practice, further aggravating the precarious working conditions in the sector. This demotivation is further compounded by persistent corruption and extortion:

"Everything, from infrastructure to the training of professionals who will genuinely love their work, so that patients are not treated as test subjects." (Survey respondent, Group B)

"Unfortunately, there are cases of corruption where some doctors demand extra payments from patients' families or ask them to bring basic medical supplies, which worsens the patients' situation." (Survey respondent, Group B)

Additionally, respondents emphasized the unsustainability of technological initiatives. For instance, the telemedicine system installed at the Hospital Nacional Simão Mendes was never effectively operationalized, and the dialysis centre has remained under construction for over a decade without becoming functional.

[3] The vela allowance is intended as a monthly payment for on-call or night-shift duties; the isolation allowance provides additional compensation for staff working in remote or hard-to-access areas; and the installation allowance is a one-time payment to support staff relocation and setup when taking up new posts.

Ultimately, the proposals gathered from Question 20 were diverse yet converged on several critical areas for reforms:

Education emerged as a foundational pillar, both in raising public knowledge of disease prevention and in the ongoing training of health professionals.

"Our health system should be structured with a preventive focus, prioritizing actions that prevent diseases rather than merely treating them. Prevention is always more economical, effective, and humane than cure." (Survey respondent, Group B)

Respondents also pointed out the need for structural reforms, including an independent institutional diagnosis to map systemic strengths and weaknesses, and the establishment of mechanisms to separate the health sector from political interference, particularly concerning the appointment and dismissal of technical personnel.

"End the direct interference of politics in the health system, particularly the permanent appointment or dismissal of technical staff based on political affiliations." (Survey respondent, Group A)

Final recommendations centred on strengthening governance, increasing public financing, ensuring the equitable distribution of professionals, guaranteeing the regular supply of medicines, and investing in digital health systems to support data-driven decision-making. Effective coordination between national institutions and international partners was also highlighted as essential for improving transparency and focusing on primary healthcare and community engagement. Nevertheless, many respondents emphasized that these efforts would remain insufficient without achieving political stability, considered the essential foundation for any sustainable reform of the health system.

"To improve the health system in Guinea-Bissau, it is essential to strengthen governance, increase public funding, invest in training and equitable distribution of professionals, ensure regular medical supplies, and establish digital systems for informed decision-making. Coordination between institutions and partners must be enhanced, focusing on primary care, community participation, and greater transparency in resource management." (Survey respondent, Group A)

"First and foremost, there must be political stability; without it, it will be very difficult to have any prospect of improving the health system!" (Survey respondent, Group B)

These perceptions and recommendations all converge to the same conclusion: in the absence of political stability, governance reforms, valorisation of health professionals, a State that leads with transparency and social commitment, and the effective involvement of the population, it will be difficult for Guinea-Bissau's health system to achieve the minimum standards of efficiency, equity, and sustainability.

5. Opportunities and Challenges in Health Financing Policy

This chapter, which draws selectively from Rwanda's experience, examines the difficulties Guinea-Bissau faces and suggests strategic reform opportunities following the comparative analysis. Given its strong government commitment, community involvement, varied financial sources, and donor collaboration, Rwanda is frequently held up as an example in Africa. Its CPIA governance score of 3.5 out of 6 indicates that health is a national priority. Performance-based financing (PBF) and community-based health insurance (CBHI) lower financial obstacles, and cooperation with foreign partners guarantees more effective use of resources. Significant advancements were made possible by these actions, such as immunisation rates exceeding 97% and decreases in child malnutrition (Clarke-Grant, 2024).

However, the Rwandan model is not easily transferable. Its accomplishments are still heavily reliant on outside assistance and strict central authority. PBF has increased the gaps between rural and urban institutions while increasing service coverage. It also runs the risk of placing too much emphasis on quantitative outputs at the expense of care quality. There is still a lack of human resources; in 2022, there were just 0.9 doctors for every 10,000 residents. Furthermore, a highly centralised political system has imposed restrictions on Rwanda's much-lauded decentralisation. While Golooba-Mutebi and Booth (2013) observe that citizen participation is encouraged but closely watched, Chemouni (2014) contends that decentralisation was intended to control rather than empower local elites. Rapid change has been made possible by this paradox (e.g. formal decentralisation under authoritarian supervision) but it also raises questions about fragility, elite capture, and restricted accountability. Therefore, Rwanda's experience

should be viewed as a source of learning that can be selectively adaptable for fragile circumstances like Guinea-Bissau, rather than as a role model.

The situation in Guinea-Bissau is marked by ongoing institutional fragility. The nation's low commitment and general suspicion in the state's ability to spend resources honestly are reflected in its CPIA governance indicator score of just 1.5 (Correia, Ferrinho & Andrade, 2021). In a nation where over 40% of the population makes less than $3 per day, out-of-pocket payments account for the majority of health financing, surpassing 50% of current health expenditures in recent years. This is a highly regressive method. Even with the adoption of strategic plans like the NHRDP (2023–2032) and the NHDP III (2023–2028), implementation is still uneven and frequently hampered by political unrest and a lack of enforcement. Due to a lack of infrastructure and qualified medical personnel, many services are either unavailable or of low quality. Yet there are still opportunities: if well executed, the strategic documents offer at least a foundation upon which to grow, and the youth might serve as a catalyst for health education and mobilisation.

Drawing on Rwanda's lessons and adapting them to Guinea-Bissau's reality, a strategic framework can be proposed. Five pillars emerge as priorities: (i) Decentralising decision-making to improve responsiveness and cut waste, (ii) strenghtening preventive health to alleviate pressure on curative services and improve outcomes in cost-effective ways, (iii) expanding universal access and pooling mechanisms to protect the most vulnerable, (iv) combating corruption and reaffirming government commitment to rebuild trust, and (v) coordinating international aid with national policies to ensure ownership and prevent duplication. These pillars are in line with the main SDGs (1, 3, 16, 17), Kutzin's funding flows, and WHO HSPA targets. The structure is summed up in Table VII, which connects each pillar to objectives, funding sources, and accountable parties.

Table VII. *Proposed Health Policy Strategy for Guinea-Bissau: Pillars, System Goals, Financing Functions, SDGs and Main Responsible Actors*

Strategic Pilar	WHO HSPA System goals	Kutzin's Health Financial Flows	SDG's	Main Responsible Actor(s)
Decentralised Decision-Making	Efficiency, People-Centeredness	Purchasing	SDG 3.8	Government and Ministry of Health, Local Authorities, Community Leaders

Preventive Health Focus	Efficiency, Health Improvement	Purchasing	SDG 3.3 SDG 3.8	Government, Community-Based Organizations, NGOs, Health Professionals
Universal Access for Vulnerable Populations	Equity, Financial Protection	Pooling	SDG 1 SDG 3	Government, International Donors, NGOs
Combatting Corruption & Building Commitment	Financial Protection, Efficiency	Revenue Raising Purchasing	SDG 16.5	Government and Ministry of Health, Civil Society
Aligning Aid with National Policies	Efficiency, Equity	Revenue Raising	SDG 17.3 SDG 17.15	Government, International Partners

Source: Author's elaboration

Implementing these reforms will be challenging. Failures in the past, including the incomplete NHDP III, highlight the risk of plans that are only ever considered on paper. Public scepticism persists and participation is weakened in the absence of evident government commitment and accountability. Although the 2024 UNDP-sponsored accountability workshop was a good start, more methodical procedures are needed, like more frequent independent audits and more robust community oversight (UNDP, 2024).

Innovative financial mechanisms might be useful in addition to governance. Guinea-Bissau in 2020 had excise taxes on alcohol, tobacco, and sugary drinks (often known as "sin taxes"), with 40% of the money raised going to health (Barros et al., 2024). However, the systems for collecting and allocating these taxes are still ineffective. If handled openly, increasing these allocated taxes or looking into transaction levies and equity funds might yield more funding. PPPs, or public-private partnerships, also show both promise and danger. Under an international partnership, the Raoul Follereau tuberculosis hospital's management decreased in-hospital TB mortality from 21% to 6% and removed patient diagnostic expenses (Vieira et al., 2014). However, this achievement was mostly dependent on outside finance and leadership rather than internal capabilities. PPPs may lead to injustices in delicate environments if they are not supported by strict regulation and impartial oversight. As a result, they ought to be carefully explored through closely monitored pilot initiatives.

Another potential solution is national health insurance, although research from Ghana, Rwanda, and Gabon indicates that it only works when there is administrative ability, political commitment, and fairness (Nabyonga Orem et al., 2023). A stepwise strategy is

necessary, beginning with the building of community-based programs or the trial of specific insurance funds before thinking about a statewide rollout, given Guinea-Bissau's huge informal sector and inadequate governance. The study's survey results support respondents' cautious optimism and cynicism, highlighting the importance of open communication and fostering trust.

Overall, improved donor cooperation, dependable domestic funding, and government reform must be Guinea-Bissau's top priorities. A more robust and fair system might be created by carefully modifying Rwanda's experience while avoiding an excessive reliance on centralisation and outside assistance. A practical way forward is provided by a well-thought-out combination of decentralised decision-making, an emphasis on preventative health, equitable pooling, anti-corruption initiatives, and coordinated aid flows. Such actions, if maintained, would create the groundwork for long-term sustainability by lowering poverty and vulnerability (SDG 1) and improving health outcomes (SDG 3).

6. Conclusion, Limitations and Future Research

This study analysed health financing in Rwanda and Guinea-Bissau using a comparative framework combining Kutzin's functions and the WHO HSPA dimensions. Findings show that governance quality, institutional coherence, and political prioritisation of health matter more for sustainability than spending volume.

Rwanda illustrates how, even with scarce resources, strong political commitment, diverse financing (CBHI, PBF), and coordinated donor support can expand coverage, equity, and disease control. Yet reliance on aid, shortages of staff and infrastructure, and risks linked to PBF reveal that progress remains fragile without stronger domestic mobilisation and governance.

By contrast, Guinea-Bissau demonstrates that when governance is weak, institutions fragmented, and OOP dominates, higher spending (CHE/GDP) fails to deliver better outcomes. The result is stagnation, inequity, and high vulnerability to catastrophic health costs.

Still, opportunities exist. Guinea-Bissau could reduce OOP reliance, diversify revenues, and improve governance. Innovative tools such as sin taxes, transaction levies, or

carefully piloted PPPs) may provide complementary resources, while better donor coordination would enhance efficiency. However, reforms like national health insurance or PBF require transparent institutions and consistent government commitment before becoming viable.

This research faced limitations. Quantitative analysis was constrained by incomplete data, especially for Guinea-Bissau. The anonymity of the survey also prevented verification of respondents' affiliations. Nevertheless, trusted networks reduced misrepresentation, and self-reported experiences remain valid for analysing perceptions.

Future research should combine perception-based evidence with financial audits and advanced econometric methods (e.g., multivariate regression, structural equation modelling) to clarify causal links between financing mechanisms and health outcomes. Qualitative tools such as focus groups, Delphi panels, and the nominal group technique could also systematically prioritise stakeholder perspectives. Comparative studies with other low-income African countries would help identify contextual factors shaping financing reforms.

In conclusion, this dissertation shows that sustainable health financing in fragile states cannot be achieved through resources alone. What distinguishes stagnation from progress is the strategic alignment of financing, governance, and accountability, ensuring that health systems protect the vulnerable and advance equity.

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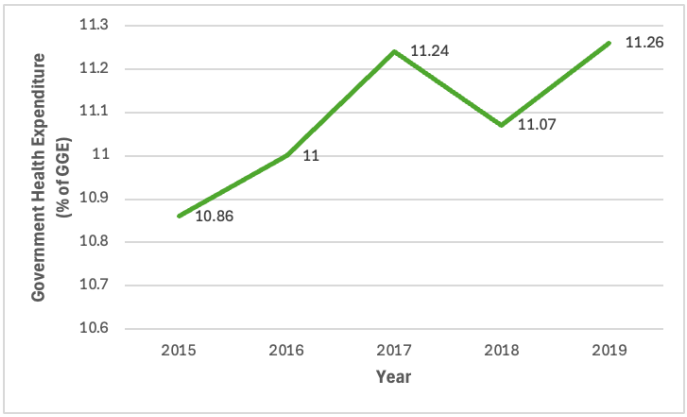
Appendices

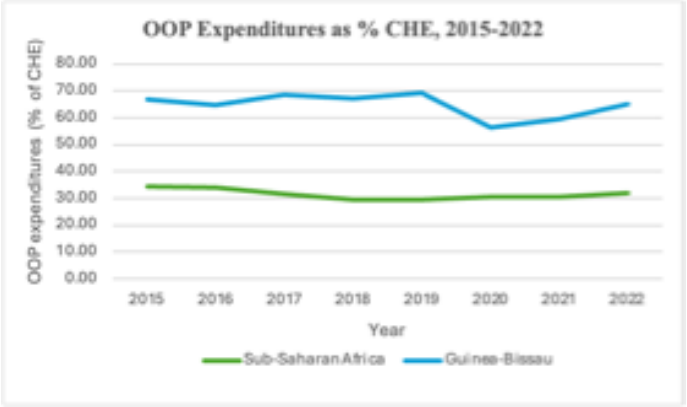
Appendix 1 – Tables and Figures

Figure A1. Government Health Expenditure as a percentage of General Government Expenditure (GGE), 2015–2019



Source: World Bank (2025). Author's elaboration.

Figure A2. OOP Expenditures as a percentage of CHE, 2015-2022



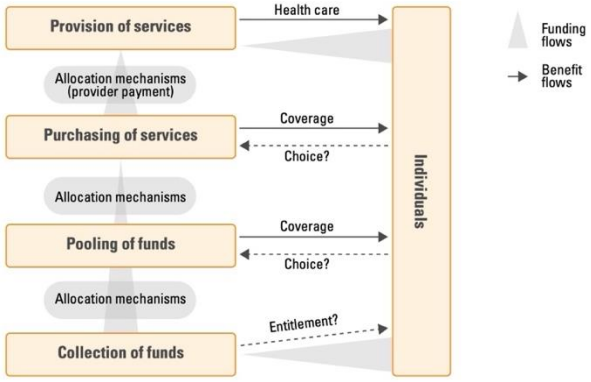
Source: World Bank (2025). Author's elaboration.

Figure A3. Asia Pacific Observatory - Framework for comparing health

Study category	Study examples from the Asia Pacific Observatory	Main methods	Focus of studies
National health systems	"Health Systems in Transition" reviews	Case-study comparisons using standardized format, literature review, statistical databases, performance indicators, key informants	Differences/similarities, distinctive features, benchmarking, rankings
Population groups	People with chronic conditions or disabilities and older people	Statistics (define, measure, compare), performance indicators, literature review, surveys, key informants and focus groups	Incidence, prevalence, health status, service use, health outcomes
Health system functions and components	Financing, e.g. provider payments; service delivery, e.g. quality of care	Description, statistics, causative relationships, key informants	Inputs and processes, and criteria such as efficiency access
Institutions	Public hospital governance, health technology assessment agencies	Case-studies using multiple methods	Organizational structures, different responses to similar issues
Health policy	Dual professional practice	Literature review, policy analysis, policy dialogue workshops	Problem definition, values, policy development, implementation, outcomes
Programmes	Primary health-care responses to noncommunicable diseases	Description and statistics, systematic literature review, key informants	Structure, distribution, procedures, outcomes
Health system theory	Out-of-pocket payments	Hypothesis testing	Health service access, equity and effectiveness outcomes

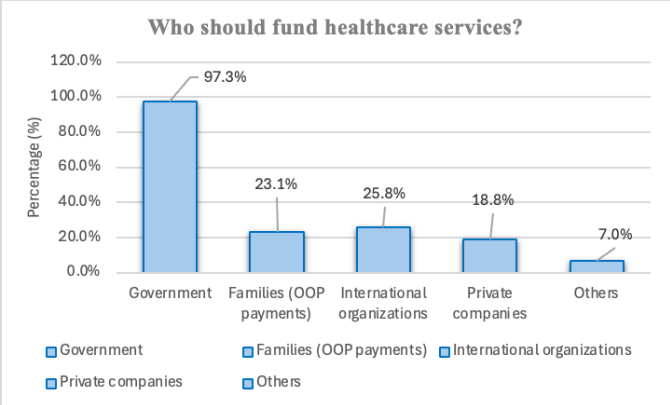
Source: Adapted from Healy et al. (2018)

Figure A4. Kutzin's health financing framework



Source: Adapted from Papanicolas et al. (2022)

Figure A5. Question 13, number of responses breakdown



Source: Author's elaboration based on questionnaire data (2025)

Figure A6. Question 17, number of responses breakdown

Table VIII1. External Health Expenditure (EXT) as a percentage of CHE for Sub-Saharan Africa and low-income African countries, 2015-2022

Year	Sub-Saharan Africa	Burundi	Mozambique	Somalia	Guinea-Bissau	Rwanda
2015	12,37	28,00	54,68	58,44	23,46	42,75
2016	12,57	37,90	59,14	49,57	26,69	43,75

2017	12,28	39,94	62,11	54,12	21,17	39,48
2018	12,73	43,07	62,47	50,65	22,94	39,47
2019	13,89	51,33	61,31	48,26	20,53	33,82
2020	13,82	56,59	51,92	43,90	27,43	35,83
2021	13,40	47,28	57,28	46,17	23,40	35,99
2022	13,52	53,16	54,20	50,45	18,23	42,92

Source: World Bank (2025). Author's elaboration.

Table IX2. Rwanda's Domestic General Government Health Expenditure (GGHE-D) as a percentage of GGE and CHE, 2015-2022

Year	GGHE-D as % GGE	GGHE-D as % of CHE
2015	7,91	31,65
2016	8,88	32,08
2017	8,88	35,01
2018	8,88	35,21
2019	8,93	40,19
2020	9,04	40,42
2021	9,47	40,98
2022	9,47	35,66

Source: World Bank (2025). Author's elaboration.

Table X3. Rwanda's External Health Expenditure (EXT) as a percentage of GGE, 2015-2022

Year	EXT as % of CHE
2015	42,75
2016	43,75
2017	39,48
2018	39,47
2019	33,82
2020	35,83
2021	35,99
2022	42,92

Source: World Bank (2025). Author's elaboration.

Table XI4. Guinea-Bissau's Domestic General Government Health Expenditure (GGHE-D) as a percentage of GGE and CHE, 2015-2022

Year	GGHE-D as % of GGE	GGHE-D as % of CHE
2015	2,50	6,61
2016	2,36	5,82
2017	2,75	7,12
2018	2,59	6,94
2019	2,44	6,40
2020	4,80	13,30
2021	4,55	13,92
2022	5,16	13,55

Source: World Bank (2025). Author's elaboration.

Table XII5. Guinea-Bissau's External Health Expenditure (EXT) as a percentage of GGE, 2015-2022

Year	EXT as % of CHE
2015	23,46
2016	26,69
2017	21,17
2018	22,94
2019	20,53
2020	27,43
2021	23,40
2022	18,23

Source: World Bank (2025). Author's elaboration.

Table XIII6. Personal profile of respondents (citizenship, age, residence, education, employment status), n = 186

Variable	Category	Frequency (n)	Percentage (%)

Citizenship	Guinean	181	97.3
	Non-Guinean	5	2.7
Gender	Female	82	44.1
	Male	104	55.9
Age group	18-24	39	21
	25-34	57	30.6
	35-44	26	14
	45-54	32	17.2
	55-64	24	12.9
	65+	8	4.3
Current residence	Outside Guinea-Bissau	95	51.1
	In Guinea-Bissau	91	48.9
Education	No formal education	0	0
	Primary education (1st to 9th grade)	0	0
	Secondary education (7th to 12th grade)	15	8.1
	Vocational / Technical training	13	7
	Higer education (bachelor's degree or equivalent)	94	50.5
	Postgraduate or master's degree	59	31.7
	Doctorate (PhD)	5	2.7
Employment Status	Unemployed	7	3.8
	Student	44	23.7
	Employed (salaried work)	116	62.4
	Self-employed	19	10.2

Source: Author's elaboration based on questionnaire data (2025)

Table XIV7. Summary of Responses to Closed-Ended Questionnaire Questions

Question	Yes / Agree	Partially Agree	No / Disagree	No Opinion

Q10. Do Guinean families bear excessive out-of-pocket health costs (e.g., consultations, medicines)?	148	26	10	2
Q11. Has the government done enough to improve the health system?	7	-	163	16
Q12. Has political instability negatively impacted public health?	182	1	3	-
Q13. Is involving the local population in setting public health priorities important?	182	-	4	-
Q16. Is international aid essential for the functioning of Guinea-Bissau's health system?	104	69	13	-
Q18. Are health funds used transparently?	7	53	126	-
Q19. Are internationally funded health projects sustainable after donor support ends?	9	75	102	-

Source: Author's elaboration based on questionnaire data (2025)

Table XV8. Categories of Respondents' Organizations in the Health System of Guinea-Bissau

Category	Organization	Number of respondents
Governmental Bodies (Public Internal Financing)	○ NHDP – Management Unit ○ Directorate of Reproductive Health Services ○ Directorate General of Treasury and Public Accounting ○ Former Government ○ Government ○ Ministry of Finance ○ Ministry of Public Health ○ Ministry of Environment ○ Ministry of Tourism and Handicrafts ○ Presidency of the Council of Ministers	27
International and Multilateral Organizations	○ WHO ○ BAD ○ UM (including UNDP) ○ ASECNA ○ UNFPA ○ Global Fund (through CCM)	15
International NGOs and Bilateral Cooperation	○ Saúde Sabi Tene ○ PLAN International ○ Solidarity Action NGO (also known as Amigos Solidários Los Hermanos) ○ AIDA ○ Sightsavers ○ Embassy of Portugal in Guinea-Bissau	7
	○ Simão Mendes Hospital ○ Raoul Follereau Hospital	

Healthcare Institutions	○ São José de Bor Paediatric Hospital (HPSJB) - Renato Grandi ○ Saluspharma SARL ○ CECOME	6
Civil Society, Religious Associations and Community Movements	○ Assembleia de Deus Church ○ International Ministry of True Christian Worshippers and Center for Chronic Disease Healing ○ National Civil Society Movement for Peace, Democracy, and Development (MOVIMENTO) ○ ACOBES	3
Research, Development and Technological Institutions	○ Zenysis Technologies ○ Institute for Global Health and Development (IGHD) ○ ANTARES Vision Group	4

Appendix 2 – Questionnaire

1. És cidadã/cidadão guineense?
   - Sim
   - Não

2. Faixa etária?
   - 18-24 anos
   - 25-34 anos
   - 35-44 anos
   - 45-54 anos
   - 55-64 anos
   - 65 anos ou mais

3. Género
   - Feminino
   - Masculino
   - Prefiro não dizer

4. Onde reside atualmente?
   - Na Guiné-Bissau
   - For a da Guiné-Bissau

5. Nível de Escolaridade
   - Nenhum / Não frequentei a escola
   - Ensino básico (1.º a 9.º ano)
   - Ensino secundário (7.º a 12.º ano)
   - Formação profissional / técnica
   - Ensino superior (licenciatura ou equivalente)
   - Pós-graduação ou mestrado
   - Doutoramento

6. Situação Profissional
   - Desempregado
   - Estudante
   - Trabalhador por conta de outrem
   - Trabalhador por conta própria

7. Trabalha atualmente em alguma organização que intervém ou apoia o sistema de saúde na Guiné-Bissau (ex: governo, ONG, organização internacional, entidade religiosa, etc.)?
   - Sim
   - Não

8. Se respondeu "Sim", por favor indique o nome da organização.

9. Tem conhecimento sobre o funcionamento do sistema de saúde na Guiné-Bissau?
   - Muito acessível
   - Pouco acessível
   - Nada acessível

10. Considera que as famílias guineenses suportam demasiados custos diretos com saúde (ex: consultas, medicamentos), tendo em conta a sua situação financeira?
    - Concordo totalmente
    - Concordo parcialmente
    - Discordo
    - Não sei

11. Acha que o governo tem feito o suficiente para melhorar o sistema de saúde?
    - Sim
    - Não sei
    - Não

12. Na sua opinião, a instabilidade política tem tido impacto negativo na saúde pública?
    - Sim
    - Não sei
    - Não

13. Considera importante envolver a população local na definição das prioridades da saúde pública?
    - Sim
    - Não

14. Qual é a sua opinião sobre a criação de um sistema de seguros de saúde acessível na Guiné-Bissau (onde cada cidadão contribuiria com um valor mínimo, que lhe daria acesso garantido aos cuidados de saúde)?
    - Seria uma boa solução para melhorar o acesso à saúde
    - Só funcionaria se o governo fosse transparente e colaborasse com a população
    - Não confio que funcionaria bem na Guiné-Bissau
    - Não compreendo bem como funcionaria
    - Outra opinião

Se respondeu "Outra opinião", por favor especifique:

15. Na sua opinião, quem deveria financiar os serviços de saúde? (pode escolher mais do que uma opção):
    - Estado
    - Famílias (pagamento direto)
    - Organizações Internacionais
    - Empresas privadas

- Outros

Se respondeu "Outros", por favor especifique:

16. Considera que a ajuda internacional é indispensável para o funcionamento do sistema de saúde na Guiné-Bissau?
    - Sim
    - Parcialmente
    - Não

17. Como avalia a atuação das organizações internacionais na área da saúde na Guiné-Bissau?
    - Atuam de forma coordenada com o governo e organizações locais, respeitando as reais necessidades do país
    - Prestam ajuda, mas com pouca coordenação e pouco conhecimento das necessidades locais
    - Seguem principalmente os seus próprios interesses e prioridades, sem grande colaboração com os atores nacionais
    - Não tenho opinião formada sobre o tema

18. Considera que os fundos de saúde são usados de forma transparente?
    - Sim
    - Parcialmente
    - Não

19. Considera que os projetos financiados por ajuda internacional são sustentáveis após o fim do apoio dos doadores?
    - Sim
    - Parcialmente
    - Não

20. O que acha que deveria ser feito para melhorar o sistema de saúde na Guiné-Bissau? (resposta aberta)