

CARISCA Center for Applied Research and Innovation in Supply Chain – Africa

Policy Brief

Health Supply Chain Financing System in Ghana: Implications for Policy and **Practice**

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EXECUTIVE SUMMARY

The World Health Organization (WHO) emphasizes the necessity of sustainable health financing to achieve universal health coverage (UHC), i.e., access to the full range of quality health services for all individuals, without financial hardship. Despite Ghana's implementation of various health financing policies, the country's investment in the sector remains inadequate to achieve UHC. Against this backdrop, this policy brief, based on World Bank and Ghana Ministry of Health reports, analyzes Ghana's current healthcare financing models, highlights their shortcomings, and proposes alternative mechanisms for policy consideration. Ghana's health sector is financed mainly through government budget allocations, internally generated funds—the National Health Insurance Scheme (NHIS), private health insurance system, and out-of-pocket payments—and donor funding. While these have significantly improved healthcare guality, a substantial financing gap remains, as expenditures consistently fall short of key benchmarks such as the Abuja 2001 target. Proposed financing models for policy consideration include extending the NHIS with premium packages and revitalizing private and communitybased health insurance schemes. These initiatives seek to augment existing mechanisms, fostering a more sustainable health financing system and advancing Ghana's progress toward achieving UHC.

INTRODUCTION

In 2015, the United Nations adopted 17 Sustainable Development Goals (SDGs) (Joshi et al., 2021), including SDG 3, which aims to ensure healthy lives and wellbeing for all through universal health coverage (UHC) (Dowou et al., 2023; Karamagi et al., 2023; United Nations General Assembly, 2015; WHO, 2010). Achieving UHC requires a financing system that provides sustained access to quality health services to all persons (WHO, 2023; Dowou et al., 2023; Agyepong et al., 2016). Significant progress has been made in some regions, such as sub-Saharan Africa, which saw a 2.6% annual increase in effective coverage from 2010 to 2019 (Dowou et al., 2023; Lozano et al., 2020). Despite these strides, many countries still face financing issues. For example, it is reported that about 3.1 billion people lack access to essential health services globally (Kodali, 2023), highlighting the need for financing reforms. Relatedly, the United Nations Economic Commission for Africa (2019) reports that health spending in Africa remains insufficient to address the increasing healthcare financing needs and demands, resulting in an annual financing gap of \$66 billion.

Ghana has implemented several policy interventions to enhance its healthcare system. Key initiatives include the National Health Insurance Scheme (NHIS) established in 2003 and the Community-Based Health Planning and Services in 1999 (Issahaku et al., 2021; Ayanore et al., 2019; Bassoumah et al., 2021; Kweku et al., 2020). While these policies have improved healthcare utilization and reduced access disparities in Ghana (Issahaku et al., 2021), the country's health sector continues to face financing challenges. Primary healthcare, for instance, suffers from inadequate resources and logistical constraints, including limited supplies of healthcare inputs and infrastructure (Ministry of Health, 2023; Addi et al., 2022). Additionally, delays in claim payments from the National Health Insurance Authority (NHIA) persist (Akweongo et al., 2021). Consequently, some stakeholders have urged the Ghanaian government to develop innovative and sustainable financing mechanisms to improve the healthcare system (NHIA, 2023; Akweongo et al., 2021).

This policy brief seeks to provide insight into existing financing models and highlight funding gaps within the health supply chain in Ghana to inform health financing policy and management. It further sheds light on the extent of Ghana's reliance on donors for healthcare financing, highlighting the importance and significance of the contributions from the country's foreign development partners. While donor agencies and international partners play a crucial role in advancing the health system toward SDG 3, the implication of such dependency deserves greater reflection. Finally, the brief illuminates potential financing models that could propel a sustainable health supply chain in Ghana, offering valuable information for shaping health financing policy decisions.

1. HEALTHCARE FINANCING MECHANISMS IN GHANA

22%

75

Ghana's healthcare system is financed through multiple mechanisms. These include taxbased financing, which encompasses budgetary allocations from the Government of Ghana and the Annual Budget Funding Amount derived from petroleum revenues. Additional funding mechanisms include internally generated funds such as the NHIS, private health insurance, community-based health insurance, and out-of-pocket payments. Further financial support is provided through donor funding and philanthropic contributions. The NHIS is the dominant mechanism for financing healthcare, while outof-pocket (OOP) payment is the least preferred. Nevertheless, the OOP payment model appears to provide the quickest funding source to sustain healthcare operations in Ghana. Additional insights based on Annear (n.d.), are provided in Figure 1.

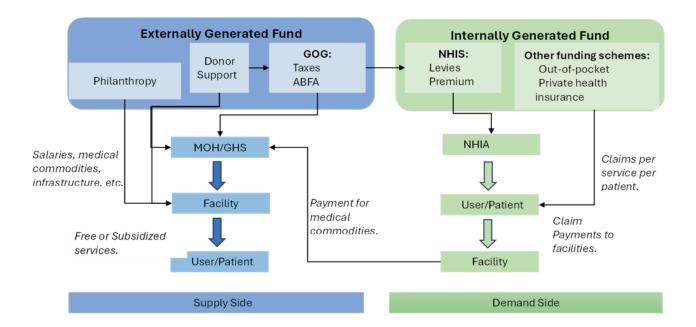


Figure 1: Health Financing Mechanisms in Ghana



Various targets are used to measure the adequacy of healthcare financing, with notable benchmarks being health expenditure as a percentage of Gross Domestic Product (GDP) and the Abuja 2001 target. The former assesses general government health spending as a percentage of GDP, reflecting a government's commitment to shielding the population from healthcare costs. The 2010 World Health Organization report indicates that countries that provide access to a set of services to their entire populations tend to have high levels of pooled funds in the region of 5–6% of GDP (WHO, 2010). Relatedly, the Commonwealth Medical Association's 2016 Colombo Declaration urged countries to allocate at least 6% of their GDP to healthcare investment. Consequently, governments are expected to spend at least 5% of GDP to make strides toward UHC, a target considered effective in holding governments accountable and achieving SDG 3 (McIntyre et al., 2017). The latter is the Abuja 2001 target, a regional target that signifies African governments' pledge to spend at least 15% of total government spending on health (Organization of African Unity, 2001).

Despite significant progress in healthcare financing over the past two decades, Ghana's health supply chain still faces a consistent financing gap relative to the existing benchmarks such as the 5% of GDP expenditure on health and the Abuja 2001 Declaration's targets. From the GDP perspective, Ghana recorded a financing gap averaging 1.08% of GDP in the health sector from 2010 to 2022 (The World Bank Report, 2024). Regarding the Abuja 2001 target, the trend indicates an average annual funding gap of 6.62%, compared to the 15% target for the same period (Ofori-Agyemang, 2023; Ministry of Health Reports, 2022, 2018, 2015, 2014). This highlights the critical need for Ghana to prioritize investments in healthcare financing to achieve these targets and reach the UHC goal. Tables 1a & 1b and Figures 2a & 2b provide details on the financing gap.

Year	Health	5% of	Gap
	Expenditure as a	GDP	
	% of GDP	Target	
2010	4.2%	5%	0.8%
2011	4.7%	5%	0.3%
2012	4.0%	5%	1.0%
2013	4.6%	5%	0.4%
2014	4.0%	5%	1.0%
2015	4.5%	5%	0.5%
2016	3.4%	5%	1.6%
2017	3.3%	5%	1.7%
2018	3.4%	5%	1.6%
2019	3.4%	5%	1.6%
2020	3.9%	5%	1.1%
2021	3.9%	5%	1.1%
2022	3.6%	5%	1.4%

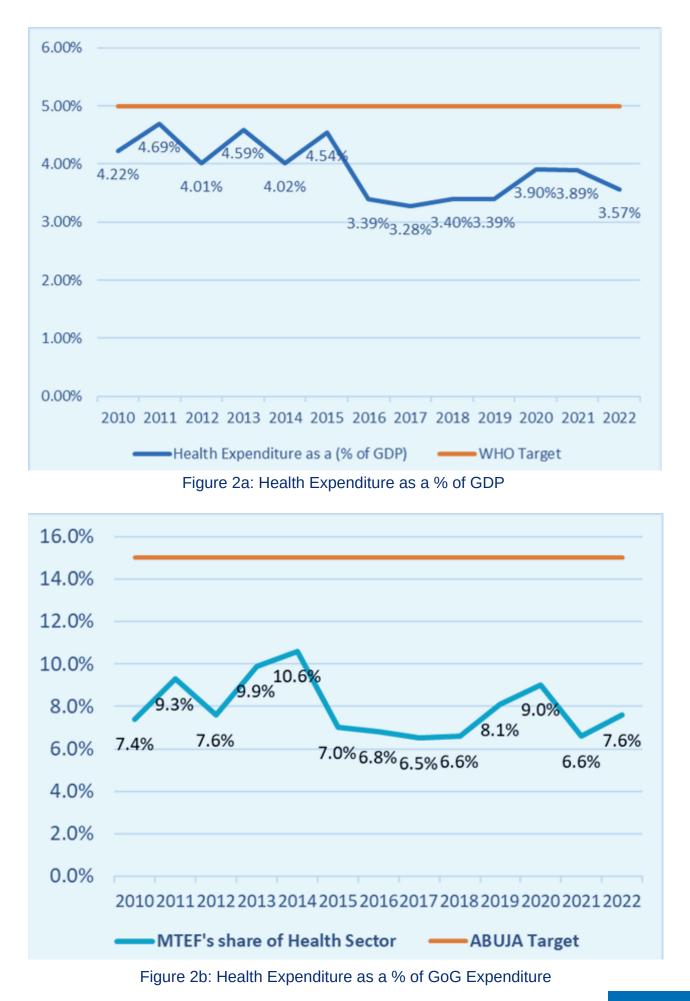
Table 1a: Health Expenditure as a % of GDP

Source: The World Bank Report, 2000-2020

Year	MTEF's Share of the Health	Abuja 2001's	Gap
	Sector	Target	
2010	7.4%	15%	7.6%
2011	9.3%	15%	5.7%
2012	7.6%	15%	7.4%
2013	9.9%	15%	5.1%
2014	10.6%	15%	4.4%
2015	7.0%	15%	8.0%
2016	6.8%	15%	8.2%
2017	6.5%	15%	8.5%
2018	6.6%	15%	8.4%
2019	8.1%	15%	6.9%
2020	9.0%	15%	6.0%
2021	6.6%	15%	8.4%
2022	7.6%	15%	7.4%

Table 1b: Health Expenditure as a % of the Gov. Expenditure

Note: MTEF- Medium-Term Expenditure Framework Source: Ofori-Agyemang, (2023), Ministry of Health Reports (2022, 2018, 2015, 2014)



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3. DONOR DEPENDENCY

Donor funding has had a significant impact on Ghana's healthcare financing over the years. Ghana's healthcare financing records indicate varying levels of support from donor agencies and development partners over the years, with an average of 16% funding support between 2010 and 2022 (see Table 2). Thus, there is a trend of reduced reliance on donor funding for healthcare from 2018-2022. Notwithstanding the considerable impact of donor funding on Ghana's healthcare sector, it is crucial to transition from donor dependency to a self-financing system considering that Ghana's status as a lower-middle-income economy limits its access to concessional financing (Mao et al., 2021). To this end, the government's policy on "Moving Ghana Beyond Aid" (World Bank, 2018) should be seen as an important initiative for achieving self-financing in the healthcare sector. However, such an ambitious initiative would not only require prudent management of resources but also innovative and sustainable funding strategies from domestic resources.

Year	Donor Fund	Total Health Expenditure	Percentage of Donor Funding				
2010	318.6	1,416.0	23%				
2011	408.5	1,805.3	23%				
2012	624.0	2,287.5	27%				
2013	194.5	3,529.4	6%				
2014	781.3	3,353.7	23%				
2015	798.1	3,153.6	25%				
2016	933.2	3,366.7	28%				
2017	1,039.5	5,510.9	19%				
2018	548.0	5,763.0	10%				
2019	47.3	6,580.1	1%				
2020	859.6	7,371.1	12%				
2021	1,137.2	10,825.6	11%				
2022	4.3	6,508.7	0.001%				
Source: Ministry of Health Report, 2010-2022							

Table 2: Trend of Donor Funding 2010-2022

4. WHAT NEEDS TO BE DONE AND HOW

Many African countries are prioritizing health through investments and reforms to achieve UHC. Key policies include the 2001 Abuja Declaration, the 2006 Addis-Ababa Declaration, and the 2008 Ouagadougou Declaration. Ghana exemplifies these efforts by improving its healthcare financing models and reducing out-of-pocket payments via the NHIS. Despite notable progress, Ghana remains below the Abuja 2001 target, necessitating an increase in the health sector investments. To this end, exploring other health financing models to augment the existing ones is imperative.

Two of such financing models have been proposed for policy consideration

The first model involves diversifying the NHIS by incorporating various categories of premium packages to cover special diseases not currently covered under the existing NHIS and to improve the financial resource pool if implemented. The suggested categories of packages include basic, comfort, and premium. The basic package offers good benefits with low premiums. This package (already covered under the existing NHIS model) offers mandatory coverage for all. The comfort package offers enhanced benefits with moderate premiums. The package covers medical cases and conditions not included in the basic package. The premium package offers special benefits with special premiums. It covers special medical cases and treatment not included in the basic package. The extended packages may be managed either solely by the government through the Ghana Health Service and National Health Insurance Authority or by a special arrangement through a partnership with the private sector. This model potentially represents a more inclusive and responsive healthcare financing that is flexible and sensitive to a broader spectrum of healthcare needs.

The second healthcare financing model proposed highlights the need to resuscitate private, community, and religion-based health insurance systems. The emphasis here is on improving the efficiency within the private health insurance space to boost revenue generation and foster the pooling of financial resources. The integration of the diverse premium package of NHIS and the rejuvenation of private health insurance systems are envisioned as strategic and innovative steps that can accommodate the dynamic nature of healthcare needs to drive resilient and sustainable healthcare financing systems.

The proposed financing models have potential implementation challenges such as affordability, perceived discrimination, and complexities in managing the diverse packages within the NHIS. The government, particularly the Ministry of Health and Ghana Health Service, may have to engage with health sector leaders, pharmaceutical operators, insurers, experts, and civil society to address these inherent challenges. Clear regulations and public awareness would be essential.

5. IMPLICATIONS FOR POLICY

Ghana's health supply chain financing gaps present crucial practical and policy implications for the country's healthcare financing system.

First, the health financing gap in Ghana from 2010 to 2022 underscores the need for pragmatic interventions and policy adjustments if Ghana is to achieve the UHC goal by 2030. In practice, this requires the government to fulfil its commitment to the Abuja 2001 target by gradually increasing health sector budget allocations to meet or exceed the target. Also, it is crucial to shift from over-reliance on out-of-pocket (OOP) payments to more innovative and sustainable healthcare financing methods to reduce the health financing gap in Ghana. As indicated by the WHO (2022), reducing catastrophic out-of-pocket payments is essential for achieving UHC.

Second, measures to enhance transparency and accountability should be strengthened to ensure that allocated funds are used effectively and reach their intended beneficiaries. Moreover, the critical role of the NHIS as the most reliable funding model for Ghana's health supply chain financing is emphasized. Policy decisions need to prioritize the sustainability and enhancement of the NHIS financing model in the country. This requires continued efforts from the policy side and relevant establishments to increase enrollment to expand coverage, improve premium collection strategies, and make sufficient and efficient allocation of funds to healthcare providers. It will also require the healthcare policy-making authorities to address operational inefficiencies by leveraging accounting information systems and state-of-the-art technology-based solutions, such as the Ghana Integrated Logistics Management Information System (GhILMIS), to build a resilient health financing regime.

Third, through the Ministry of Health and Ghana Health Service, the government needs to explore strategies to diversify funding sources to enhance financial resource pooling and secure sustainable health financing systems. To this end, incorporating additional premium packages into the existing NHIS and revitalizing private, community, and religious-based health insurance schemes merit policy consideration and attention. Finally, while recognizing the importance of funding support from donors, and the need for continuous collaboration with foreign development partners, achieving sustainable progress toward SDG 3 requires a crucial shift toward self-financing. In this regard, the government is encouraged to give effect to the "Ghana Beyond Aid" agenda through deliberate investments in the health sector.

REFERENCES

Addi, B., Doe, B., & Oduro-Ofori, E. (2022). Towards quality primary health care: the dilemma of community-based health planning and services (CHPS) in health service provision in Ghana. *Journal of Health Organization and Management*, 36(4), 482-502.

Agyepong, I. A., Abankwah, D. N. Y., Abroso, A., Chun, C., Dodoo, J. N. O., Lee, S., ... & Asenso-Boadi, F. (2016). The "Universal" in UHC and Ghana's National Health Insurance Scheme: Policy and implementation challenges and dilemmas of a lower middle-income country. *BMC Health Services Research*, 16(1), 1-14.

Akweongo, P., Chatio, S. T., Owusu, R., Salari, P., Tedisio, F., & Aikins, M. (2021). How does it affect service delivery under the National Health Insurance Scheme in Ghana? Health providers and insurance managers perspective on submission and reimbursement of claims. *PLoS One*, 16(3), e0247397.

Annear, P. (n.d.). *Principles of health care financing*. Available at: <u>https://www.futurelearn.com/info/courses/health-systems-strengthening/0/steps/57273</u>.

Ayanore, M. A., Pavlova, M., Kugbey, N., Fusheini, A., Tetteh, J., Ayanore, A. A., ... & Groot, W. (2019). Health insurance coverage, type of payment for health insurance, and reasons for not being insured under the National Health Insurance Scheme in Ghana. *Health Economics Review*, 9, 1-15.

Bassoumah, B., Adam, A. M., & Adokiya, M. N. (2021). Challenges to the utilization of Community-based Health Planning and Services: The views of stakeholders in Yendi Municipality, Ghana. *BMC Health Services Research*, 21(1), 1-9.

Dowou, R. K., Amu, H., Saah, F. I., Adeagbo, O., & Bain, L. E. (2023). Increased investment in Universal Health Coverage in Sub–Saharan Africa is crucial to attain the Sustainable Development Goal 3 targets on maternal and child health. *Archives of Public Health*, 81(1), 34.

Issahaku, Y., Thoumi, A., Abiiro, G. A., Ogbouji, O., & Nonvignon, J. (2021). Is valuebased payment for healthcare feasible under Ghana's National Health Insurance Scheme? *Health Research Policy and Systems*, 19(1), 1-14.

Joshi, A., Morales, L. G., Klarman, S., Stellato, A., Helton, A., Lovell, S., & Haczek, A. (2021). A knowledge organization system for the United Nations sustainable development goals. In *The Semantic Web: 18th International Conference, ESWC 2021, Virtual Event, June 6–10, 2021, Proceedings 18* (pp. 548-564). Springer International Publishing.

Karamagi, H. C., Njuguna, D., Kidane, S. N., Djossou, H., Kipruto, H. K., Seydi, A. B. W., ... & Nganda, B. M. (2023). Financing health system elements in Africa: A scoping review. *PLos One*, 18(9), e0291371.

Kodali, P. B. (2023). Achieving universal health coverage in low-and middle-income countries: Challenges for policy post-pandemic and beyond. *Risk Management and Healthcare Policy*, 607-621.

Kweku, M., Amu, H., Awolu, A., Adjuik, M., Ayanore, M. A., Manu, E., ... & Gyapong, J. O. (2020). Community-based health planning and services plus programme in Ghana: a qualitative study with stakeholders in two systems learning districts on improving the implementation of primary health care. *PLoS One*, 15(1), e0226808.

Lozano, R., Fullman, N., Mumford, J. E., Knight, M., Barthelemy, C. M., Abbafati, C., ... & Cárdenas, R. (2020). Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*, 396 (10258), 1250-1284.

Mao, W., McDade, K. K., Huffstetler, H. E., Dodoo, J., Abankwah, D. N. Y., Coleman, N., ... & Yamey, G. (2021). Transitioning from donor aid for health: perspectives of national stakeholders in Ghana. *BMJ Global Health*, 6(1), e003896.

Mcintyre, D., Meheus, F., & Røttingen, J. A. (2017). What level of domestic government health expenditure should we aspire to for universal health coverage? *Health Economics, Policy and Law*, 12(2), 125-137.

Ministry of Health. (2022). 2021 Holistic Assessment Report. *Ministry of Health*, April, 56. <u>https://www.moh.gov.gh/wpcontent/uploads/2022/08/2021-Holistic-Assessment-</u><u>Report_v1.7.3.pdf</u>.

Ministry of Health (2018). Holistic Assessment of 2017 Health Sector Programme of Work. Available at: <u>https://www.moh.gov.gh/wp-content/uploads/2018/09/2017-Holistic-Assessment-Report_Final_09.08.2018.pdf</u>

Ministry of Health (2015). *Holistic Assessment of the Health Sector Programme of Work* 2015. Available at: <u>https://moh.gov.gh/wp-content/uploads/2016/02/Holistic-Assessment-2015.pdf</u>

Ministry of Health. (2014). *Holistic Assessment of the Health Sector Programme of Work* 2014. Available at: <u>https://www.moh.gov.gh/wp-content/uploads/2016/02/2014-Holistic-Assessment-Report.pdf</u>.

National Health Insurance Authority (2023). *NHIA participants in the 2023 Health Summit*. Available at: <u>https://www.nhis.gov.gh/News/nhia-participants-in-the-2023-health-summit-5491</u>.

Ofori-Agyemang, E. (2023). 2022 Holistic Assessment of the Health Sector Introduction Holistic assessment process Outline Sector performance by objectives Challenges Conclusions. Ministry of Health, June. <u>https://www.moh.gov.gh/wpcontent/uploads/2023/06/2022-Holistic-Assessment-Presentation_05.06.23.pdf</u>

Organization of African Unity (2001). *Abuja declaration on HIV/AIDS, tuberculosis and other related infectious diseases*. Available at: https://au.int > 32894-file-2001-abuja-declaration

United Nations. Economic Commission for Africa (2019-02). *Healthcare and economic growth in Africa. Addis Ababa.* © UN. ECA. <u>https://hdl.handle.net/10855/43118</u>.

United Nations General Assembly (2015). *Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1* (2015), <u>http://undocs.org/A/RES/70/1</u>

World Bank Report (2024). *Current health expenditure (% of GDP)*. Available at: <u>Current health expenditure (% of GDP) | Data (worldbank.org)</u>

World Health Organization (2023). *Co-creating solutions through multi-sectoral approach for sustainable health financing in Ghana.* Available at <u>https://www.afro.who.int/countries/ghana/news/co-creating-solutions-through-multi-</u> <u>sectoral-approach-sustainable-health-financing-ghana</u>.

World Health Organization (2022). *Reducing out-of-pocket health expenditure is a panacea to universal health coverage*. Available at: <u>https://www.afro.who.int/news/reducing-out-pocket-health-expenditure-panacea-universal-health-coverage</u>

World Health Organization (2010). *The World Health Report: Health systems financing: The path to universal coverage*. <u>https://iris.who.int/handle/10665/44371</u>.

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