Influence of Ghana's Free Maternal Healthcare on rural women's Access to and uptake of Maternal healthcare services in Ghana and lessons for Sierra Leone: A Narrative literature Review

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A thesis submitted in partial fulfilment of the requirement for the degree of Master of Science in Public Health and Health Equity

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LIST OF ABBREVIATIONS

ANC - antenatal care

CMAs - Common Management Arrangements

CHE - Current Health Expenditure

DHS - Demographic Health Survey

DHMTs – District Health management Teams

FBD - Facility-based Delivery

FHCI - Free Health Care Initiative

FMHCP - Free Maternal Healthcare Policy

GHS - Ghana Health Service

HFPM - Health Financing Progress Matrix

IMF - International Monetary Fund

INGOs - International Non-Governmental Organizations

LMICs - Low-Income and Middle-Income Countries

MMR - maternal mortality ratio

MoH -Ministry of Health

NHA- National Health Account

NHIS - National Health Insurance Scheme

QoC - Quality of Care

UHC - Universal Health Coverage

SLeHIS - Sierra Leone Health Insurance Scheme

SBA - Skilled Birth Attendance

SSA - Sub-Saharan Africa

SDG - Sustainable Development Goal

THE - Total Health Expenditure

WHO - World Health Organization

ABSTRACT

In 2008, the government of Ghana introduced the Free Maternal Healthcare Policy (FMHCP) under the National Health Insurance Scheme (NHIS) to actualize the country's Universal Health Coverage (UHC) goal. The FMHCP aimed to remove financial barriers preventing women's access to maternal and neonatal healthcare services. This narrative review was conducted to synthesize findings on the influence of Ghana's FMHCP on rural women's access to and uptake of antenatal care (ANC) and Facility-based Delivery (FBD) services in Ghana. A search was conducted in Science Direct, PubMed, Web of Science, and Google Scholar. Synthesis of the review results found increased access and uptake of ANC and FBD services among rural women in Ghana since the introduction of the FMHCP. The removal of user fees from maternal health services and free registration into NHIS were identified as major facilitators of the increase ANC and FBD uptake. However, persistent out-of-pocket (OOP) payments, health system challenges, poor quality of care, socio-economic and geographic inequalities remain as barriers for rural women's access to and uptake of ANC and FBD services. This undermines the policy's financial protection goal. Accelerating efforts to eliminates structural inequalities is key for the government of Ghana to actualization of its UHC goals by 2030.

Key words: Free maternal healthcare policy, maternal health services, utilization, rural Ghana.

Word count: 12,000

INTRODUCTION

My name is Joanna Tom-Kargbo from Sierra Leone, an MPH-HE student at the KIT Royal Institute in Amsterdam, the Netherlands (2024/2025). I am a healthcare and development professional with over sixteen years of experience working with diverse institutions in Sierra Leone and across Africa including Ghana. Over the years, I developed a deep commitment to blend healthcare programs and policy advocacy. The aim is to foster equitable healthcare systems particularly for vulnerable groups including women and girls.

Before coming to KIT, I was actively involved in empowering vulnerable communities and civil societies to hold governments and policymakers accountable for equitable healthcare service delivery, including reforms in health financing for UHC. Through my work, I have actively participated in health policies development and implementation including the Sierra Leone's Free Health Care Initiative (FHCI). As a technical committee member for both FHCI, and the Sierra Leone Health Insurance Scheme (SLeHIS), I spearheaded advocacy campaigns and initiatives aiming at empowering marginalized groups for effective policy implementation. The Sierra Leone government recently demonstrated health reform commitment through developing the national health financing strategy to pilot SLeHIS and strengthen FHCI. Despite the efforts, actual implementation remains stalled, hence the need for reactivation. My experience at KIT has further increased my understanding of the health system in Sub-Saharan Africa (SSA), the complexity and structural inequalities, finance, health system challenges faced. This has inspired me to explore, learn and engage in this important subject.

Maternal healthcare remains a critical global public health and development priority, serving as a critical indicator for health systems' effectiveness and equity worldwide(1). Globally, a substantial progress has been made in reducing maternal mortality ratio (MMR) by 40%, yet approximately 712 women still die every day, from preventable causes (2). The majority of these deaths occurred in low-income and middle-income countries (LMICs). Sub-Saharan Africa (SSA) including Ghana and Sierra Leone bears a disproportionate share of maternal health challenges. Despite the progress in reducing maternal mortality by 2.2%, for every 100,000 live births, about 390 women are estimated to die during childbirth by 2030 globally, a stark contrast to the European average of 13 deaths per 100,000 live. Interventions such as antenatal care (ANC), and

facility -based delivery (FBD) from Skilled Birth Attendants (SBA) are key to preventing these deaths (1). Critical to implementing these interventions, is the requirement for an appropriate healthcare financing mechanism to ensure equitable and quality services (3). In response, several countries in SSA, including Ghana introduced healthcare financing reforms such as national health insurance and free maternal healthcare policies. These policies aim to provide financial protection for vulnerable populations through reducing out of -pocket (OOP) payments and accelerating maternal service deliveries for UHC's goal achievement ((4,5). However, progress remains uneven, and SSA remains off-track in achieving this ambitious goal by 2030 (6). Ghana in 2008, introduced the Free Maternal Healthcare Policy (FMHCP), to provide financial protection and achieve UHC goals (7), but OOP payments among systemic barriers remains a challenge. Addressing these challenges is key for Ghana's progress toward UHC achievement.

Central to this thesis is to examine the influence of Ghana's FMHCP on rural women's access to and uptake of maternal healthcare services, and to distill lessons learned from its implementation for Sierra Leone. I chose this topic because of my long-standing interest on health equity for marginalized groups, particularly for rural women. My belief is that effective maternal health interventions are critical for achieving development goals and the role of effective and efficient financing mechanism, with its design and implementation rooted in good governance and transparency. My objective is to provide contextual policy recommendations, through this review that can support policymakers, practitioners, and advocates in designing and implementing future maternal healthcare policies and programs that are both effective and equitable, particularly for rural women in Ghana and Sierra Leone, and possibly other countries in the region.

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KEY TERMS

Maternal Services Healthcare services antenatal care (ANC), facility-based delivery (FBD), postnatal care (PNC), provided to women during pregnancy, childbirth, and postpartum period to ensure the safety of both the mother and newborn(8).

Antenatal Care Care (four or more ANC visits) that pregnant women received from healthcare providers during pregnancy.

Facility-based Delivery Care Defined as care provided to women during delivery childbirth, attended by skilled healthcare professionals, conducted in a health facility (8).

Ghana's Free Maternal Healthcare Policy (FMHCP): A policy that was introduced in 2008 under the National Health Insurance Scheme (NHIS) in Ghana, with the aim to provide financial protection for women in Ghana including rural women. The goal is to increase women's access to maternal healthcare services including ANC and FBD services for the achievement of Universal Health Coverage (UHC**).** UHC is a strategy to address health inequalities by ensuring all people have access to a full range of quality healthcare services they need without financial hardship (6).

Rural Women: Women residing in remote and deprived communities in Ghana

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DEDICATION

This thesis is dedicated to God Almighty for granting me the strength, wisdom and guidance throughout my MPH-HE program at KIT. A special dedication goes to my beloved children, Alexandra and Isaac, whose unweaving love, support and understanding sustained me, even during my absence over the past year.

BACKGROUND INFORMATION

1.1 Demographic characteristics

Ghana is located in West Africa, along the Gulf of Guinea, and on the Atlantic Ocean, bordering with Togo, Burkina Faso and Cote d'Ivoire (9). Administratively, the country is divided into 16 regions, and has over 70 ethnic groups, with the largest being the Akan, followed by the mole-Dagbania, and the Ewe, accounting for 47.3%, 18.5%, and 13.9% of the population, respectively (10). The country's total population in 2024 was estimated at approximately 34.4 million, five times increase compared to 6726,815 in 1960. Women account for 51% of the total population (11). Four regions account for 54% of the total population, including Greater Accra (17.7%), Ashanti (17.6%), Eastern (9.5%) and Central (9.3%) regions (12).

The population growth rate is projected to be 2.1% between 2010 to 2021 (9,12). The national population density is 129/km2 in 2021, with Greater Accra recording the highest (1681/km2), compared to Savana region (19/km2) (13). The population is dominated by young people (15-35 years), accounting for 38.2% of the population, followed by children (0-14) at 35% (14).

Figure 1: Administrative Map of Ghana (12)**:**

1.2 Socio-economic context

Ghana is one of the lower-middle-income-country in Africa. The government mobilizes domestic revenue through taxes which constitute 13% of the Gross Domestic Product (GDP), and the largest source of revenue (9). Between 2023 to 2024, the country experienced rapid GDP growth, increasing from 3.1% in 2023 to 5.7% in 2024 (9)**.** This was due to expansion in the industrial (mining and construction) sector, with yearly growth of 7.1%. The three main sources of economic growth in Ghana include the agriculture and manufacturing and services, with the service sector accounting for the largest source of the economy, overtaking the agricultural sector (11) . The service sector grew from 32.2% in 2015 to 48.8% in 2019, and it also remains the largest source of employment, accounting for 42% of the Ghanaians employed population (11). Banking, ICT, tourism, communication, and transport sectors are the main subsectors driving Ghana's economic growth (11).

Despite the progress, the multidimensional poverty index report in 2020 revealed 45.6% of the Country's population are multidimensionally poor, marked by geographic inequalities, with uneven economic and development distribution (9). Multidimensional involves both monetary and non-monetary, and includes poverty associated with money, education and infrastructure (15). The proportion of people living with less than $1.90 a day increased from 2.3 percent in 2020, to 2.9 percent in 2021 (11). The rural areas and the Northern region account for the higher levels of multidimensional poverty at 64.6%, compared to the urban areas (27%). Inadequate health insurance coverage and educational expenditure were identified as contributing factors for multidimensional poverty (11).

The unemployment rate is forecast at 2.87%, while literacy rate stands at 69.8% in 2025 (10). Gender and regional disparities remain notable; male literacy is 74.1%, compared with female literacy at 65.4%, and the Savannah region has the lowest literacy at 32.8%(10). Level of formal education is low among women in the Northern region (22%) compared to women in the Upper East (40%) and Upper West (41%). Women's income and education levels remain a critical factor influencing their access to healthcare services including maternal healthcare (16). These challenges are contributing factors for women's limited understanding of health seeking behavior, particularly rural women (4,7).

1.3 Health context

The healthcare systems operate at three levels in Ghana; the primary (peripheral), secondary and tertiary levels with defined referral pathways (17). Ghana's Ministry of Health (MoH) has the overall responsibility to ensure equitable health service delivery to all Ghanian citizens. In 1996 the Ghana Health Service (GHS) was established under the MoH to implement government health policies and manage public health service delivery at the national, regional, district, and sub-district levels (18). At the district levels, the District Health management Teams (DHMTs) oversee health administration through the supervision of the GHS and MoH (18). Two teaching hospitals, located in Accra and Kumasi serve as the highest points for referral cases during complications including those related to pregnancies (18). Despite these structures, health service delivery remains unevenly distributed in Ghana, with concentration of facilities and personnel in urban

centers, particularly in the North and South, leaving the rural areas under-resourced, impacting access to basic and quality health services (18,19).

Maternal mortality rates have generally decreased in Ghana from 499 (2000) to 263 (2022) deaths per 100,000 live births. Under five mortality rates also reduced from 60 (2014), to 56 (2017) deaths per 1000 live births, and a neonatal mortality rate slightly reduced from 29 (2014) to 27 (2017) deaths per 1000 live births (20). Despite the reduction, regional disaggregated data showed an increase in some regions. The regional disparities in access to quality maternal, newborn and child and adolescent health services remain significant contributing factors to early childhood and maternal mortality particularly in populated regions like Ashanti, recording higher under-fives and neonatal deaths at 79 and 52 deaths per 1000 live births respectively (20) . Factors responsible for maternal mortality include high unmet need for family planning, gender inequalities, child marriage, adolescent pregnancy, urban -rural disparities in skilled attendance, with more skilled birth attendants (SBAs) in the urban (90.6%) compared to (68.9%) rural areas. Immunization coverage among under-fives is marked by regional differences despite the positive changes observed (20).

Maternal health service delivery is provided through the National Health Insurance Scheme (NHIS), operated by the NHIS Authority (NHIA). The NHIA provides overall management of NHIS services including accreditation of facilities and claim management. Both GHS and NHIS are governed by the Ministry of Health (21,22) .

1.4 Healthcare financing

Ghana has made notable progress in health sector investment over the past two decades, with both Total Health Expenditure (THE) and Current Health Expenditure (CHE) increasing between 2018 and 2022, from GHS 9.9billion to GHS 23.1billion, GHS 1.5billion to GHS 22.6 billion, respectively (17). Despite these gains, overall spending remains below the World Health Organization (WHO) recommendations for achieving robust primary health care (PHC) and universal health coverage (UHC) standards. The major funding sources for healthcare in Ghana are from the government (53.3%), followed by households (26.2%), donors (16.1%) and private cooperatives (4.5%) (17). The CHE per capita stood at approximately US$86.4, far below WHO's

recommended minimum US$863 for PHC services. This gap highlights ongoing challenges in meeting essential health needs and scaling up service quality. About 98% of THE is allocated to CHE, with only 2% directed toward capital investment. This limited capital spending restricts the health system's ability to upgrade infrastructure and modernize equipment, potentially affecting service quality and long-term system resilience. Domestic General Government health expenditure (GGHE-D) accounts for 2.19% of GDP, indicating weak prioritization of public health compared to international standards. Ghana's CHE represented 4.13% of GDP in 2022, which is lower than the average LMICs (5.4%) and the global average (10.35%) (17).

2.1 Problem Statement

Ghana has made significant progress in maternal healthcare, with Maternal Mortality rates (MMR) reducing by 47% from 2000 and 2022 (20). Compared with other West African countries, Ghana outperformed many of its peers (23) (24) (25). For instance, Sierra Leone's MMR remains as high as 717 deaths per 100,000 live births (26). Despite Ghana's progress, the country still remains behind the Sustainable Development Goals (SDGs) targets of fewer than 70 deaths per 100,000 live births (27) (28) mainly due to health system failure to adequately address the growing needs of maternal health care services including ANC and FBD services for the population, particularly poor and marginalized rural women who are in dare need for these service. Specifically, Persistent under-resourcing of health facilities, health systems, geographic and socio-economic inequalities, weak governance systems, and poor quality of care particularly for marginalized and rural population remains among the structural barriers hampering progress in accessing maternal services in Ghana, (6,29). The Covid-19 pandemic further disrupted essential maternal health service worsening these inequalities amid the financial challenges (6).

Gaps in quality of care (QoC) including facility readiness, respectful maternity care, and skilled staff availability, continue to undermine maternal and child health outcomes in Ghana, especially in rural areas (5,30). Central to reducing Maternal morbidity and mortality is universal access to quality, evidence-based maternal healthcare services, including antenatal care (ANC), skilled birth attendance (SBA), and facility -based services during pregnancy and childbearing (1). Achieving this not only require improved clinical services but also effective, health financing mechanisms to ensure coverage and financial protection for all women (3).

To address these challenges and improve maternal health outcomes, Ghana in 2008, introduced the Free Maternal Healthcare Policy (FMHCP), with implementation and management under the National Health Insurance Scheme (NHIS) leadership. The policy aimed at providing financial protection for vulnerable groups and improving access to maternal health services to achieve UHC goals (7). However, out-of-pocket payments persist, and remain high among FMHCP beneficiaries, particularly for rural women, limiting access to essential maternal health services

like ANC and facility-based delivery, distorting service delivery, and undermining the policy objective (7), Challenges like inadequate funding, weak oversight and management, late release of funds to healthcare facilities, limited transparency and accountability mechanisms remains a challenge, impacting slow progress in the policy implementation, and effective maternal health outcomes. The share of these burdens remains inequal with rural women, far from health facilities, from poor background and less education facing higher marginalization in benefiting from the needed maternal services.

Despite the implementation of Ghana's Free Maternal Healthcare Policy (FMHP) aimed at removing financial barriers to maternal health services, rural women continue to face significant barrier in accessing and utilizing these services. While some progress has been made at the national level, there is limited understanding of how effectively the FMHP has improved maternal health outcomes specifically for rural women. This gap in evidence poses a challenge for countries like Sierra Leone, which are exploring similar policy interventions to address high maternal mortality. Therefore, there is a need to examine the influence of Ghana's FMHP on rural women's access to and uptake of maternal healthcare services, to inform contextually relevant lessons for Sierra Leone. Addressing these bottlenecks is critical for Ghana to actualize it UHC and SDG goals. Despite several studies looking at the effect of FMHCP on maternal health services access among rural women in Ghana. However, there exists gaps on collated and generalizable evidence to inform equitable intervention for improved access.

2.2 Justification

Facility-based delivery services and ANC are widely recognized as key proxies for health system's capacity to reduce maternal morbidity and mortality (31,32). Evidence consistently links four or more ANC visits and facility-based deliveries with improved maternal health outcomes (31,32). Ghana's Free Maternal Healthcare Policy (FMHP), introduced to eliminate financial barriers and improve access to these services, offers a potentially replicable model for similar contexts such as Sierra Leone. However, while the policy has shown some national-level success, its effectiveness in rural areas, where women are often most vulnerable, remains uneven and

under-researched. Understanding the specific barriers and enablers that affect rural women's uptake of maternal healthcare under the FMHP is essential to evaluating the policy's true impact.

Despite the several studies having evaluated the FMHCP influence on maternal service uptake in rural Ghana, findings remain fragmented. A consolidated review is essential to assess how the FMHCP implementation has influenced ANC attendance and facility-based delivery in rural areas, and to identify key contributing factors. This study is justified by the need to generate evidence that not only informs improvements to Ghana's existing maternal health strategy but also offers practical insights for Sierra Leone as it seeks to design and implement equitable maternal health interventions.

Ghana provides a compelling comparative case in this context, which can be translated and inform reforms in Sierra Leona, which is still at the infancy stage of implementing a free maternity policy. Sierra Leone has one of the highest MMR (717 per 100,000 live births) in SSA. In 2010, the government introduced the Free Health Care Initiative (FHCI) for pregnant women, lactating mothers and under-five children, removing cost from all maternal and child health services(33). Following the FHCI, the 2018 national UHC policy was developed aimed at making health care universally accessible for the entire population especially vulnerable groups. Most recently, the government developed a national health financing strategy to establish and pilot the Sierra Leone National Health Insurance Scheme (SLeHIS). However, the SLeHIS remains largely conceptual and yet to be implemented.

The implementation of Sierra Leone's FHCI has been accompanied by a limited body of scientific research, both for individual studies and synthesized evidence remain scarce and fragmented. This evidence gaps are likely to hinder effective documentation of lessons to support policy review and strengthen implementation. Ghana's experience offers valuable lesson for Sierra Leone as it prepares to operationalize its SLeHIS. Over two decades, Ghana has implemented both NHIS and FMHCP, generating insights into their successes, limitations and evolving challenges. Documenting these lessons is especially timely , given Sierra Leone's current policy trajectory. Drawing on Ghana's experience, especially for rural settings, can help inform policy adjustment and avoid common pitfalls. Similar to the lessons learned from Ghana and applied to

the South African context, policy makers in Sierra Leone would benefit from the takeaways regarding the challenges and successes in implementing its planned NHIS policy (34).

Therefore, this review aims to examines Ghana's FMHCP effect on rural women's access to and update of ANC and facility-based deliveries, identifies the contributing factors and proposes strategies to strengthen the policy effectiveness in Ghana, while distilling transferable insights for Sierra Leone.

2.3 Research Question

By synthesizing evidence from peer-reviewed articles and grey literature on the topic, this review answers the question; how has Ghana's FMHCP under the NHIS influenced rural women's access to and uptake of ANC and FBD services and what practical lessons can be drawn from Ghana's experience for Sierra Leone*?*

2.4 Objectives

2.4.1 Main Objective

To conduct a narrative review examining the influence of Ghana's Free Maternal Healthcare Policy (FMHCP) on rural women's access to and uptake of maternal health services, propose strategies for policy recommendations, and identify transferable insights applicable to Sierra Leone in implementing similar policy.

2.4.2 Specific Study Objectives

1. To understand the financing structure of Ghana's FMHCP in promoting rural women's access to, and uptake of antenatal care and facility-based delivery services.
2. To assess the implementation of Ghana's FMHCP for antenatal care and facility-based delivery services for rural women.
3. To examine the influence of the FMHCP on rural women's access to and uptake of ANC and FBD services in Ghana and the contributing factors.
4. To draw on practical lessons from Ghana's FMHCP implementation that applicable for Sierra Leone in implementing similar maternal health policies.

5. To propose recommendations for Ghana Government (NHIA, GHS, and MoHS) to improve the FMHCP implementation for equitable maternal service delivery (particularly ANC and FBD services), and especially for rural women.

METHODS AND ANALYTICAL FRAMEWORK

3.1 Study setting

This review focus on rural Ghana by analyzing studies conducted on the influence of Ghana's FMHCP on rural women's access and uptake of ANC and FBD services. Majority of Ghana's population (43.3%) including women of reproductive age resides in rural areas but continue to face challenges in access to maternal services mainly due to their socio-economic and demographic conditions (10,35).

3.2 Study design

Narrative literature review design was used. Narrative review is a type of literature review offering qualitative descriptive synthesis of available literature on a given subject. It is more flexible in structure in terms of study selection and analysis. Its aim is to summarize, interpret and contextualize result of previous studies to provide a broader understanding of the trends, gaps and implications of a given subject (36) .

A narrative review was chosen for this study because it enables an in-depth, contextual exploration of policy impacts across varied rural settings, drawing from both academic and grey literature to uncover patterns, gaps, and practical insights that a more rigid, systematic approach might overlook—particularly important for informing policy adaptation in Sierra Leone. In the synthesis of the results, the adapted version of the WHO Health Financing Progress Matrix (HFPM) framework (37).

3.3 Study population, concept and context

The study reviewed literature that target rural women of reproductive age (15 to 45 years), who had their babies during the FMHCP implementation as the primary study population, to assess how the FMHCP policy under the NHIS influenced their access and uptake of ANC and facility -

based delivery services. This group is relevant for understanding how the policy influenced women's access to and utilization of ANC and FBD services during pregnancy and childbirths. Also, this group of women are the direct beneficiaries of the Ghana's FMHCP. Secondary participants included healthcare professionals, policy makers and development actors who are contributors to policy development and implementation.

The concept was Ghana's free maternal healthcare policy (FMCHP), under the NHIS, and the context was the Ghanian healthcare system especially in the rural setting. This culminate in the question, "what is the influence of Ghana's FMHCP under the NHIS on rural women access to, and uptake of ANC and facility-based delivery services"?

3.4 Search strategy

An electronic search for relevant peer-reviewed literature was conducted in Science Direct, PubMed, and Web of Science. Additionally, grey literature and technical reports were also searched from Google Scholar and relevant websites (WHO, Ghana's health service, NHIA, and Ministry of Health) which ensured access to diverse literature. Also, cross-referencing of relevant references from the identified literature was also done which helped in identifying additional literature.

The search terms included a combination of keywords in the topic: "Ghana" AND ("Free maternal health policy " OR "free delivery" OR "FMHCP") AND ("maternal health service*" OR " antenatal care OR "ANC" OR " facility-based delivery*" OR "Institutional delivery"). See annex 2 with summary of the search strategy.

3.5 Eligibility criteria

Articles based on Ghana's Free Maternal Healthcare Policy (FMHCP), introduced in 2008 under the NHIS, looking at effect of the FHMCP on rural women's access to, and uptake of ANC and FBD services including their coverage, quality and equity. These outcomes are critical indicators for assessing the influence of maternal healthcare service delivery outcomes. Relevant literature published from 2008, the period from the inception of the FMHCP to the most present (2024) were included. the article had to be published in English. Additionally, the review also included literature on maternal health services in Ghana with specific focus on analyzing rural-urban

women's access to and uptake of ANC and Facility-based delivery services. Commentaries and abstracts, those focusing on general health care performance with no mention of ANC and FBD, and those conducted in urban areas of Ghana were excluded.

Table 1: Study Eligibility criteria

Criteria	Inclusion	Exclusion
Timeline	2008-2024	Before 2008
Geography	Studies focusing rural Ghana, as well as rural-urban	Studies outside Ghana
Focus Areas	Effect of Ghana's Free Maternal Healthcare Policy (FMHP) on rural women's access to and uptake of ANC and FBD services	Topic outside ANC and FBD service.
Type	peer-reviewed articles (qualitative, quantitative, mixed methods) and grey literature (MNCH related health reports and surveys)	Opinion Pieces
Language	English	Non-English

3.6 Screening

The search results were downloaded into Microsoft Excel. First, the articles were screened by title and abstract, excluding those that did not meet the study eligibility criteria. The full articles of those that remained were downloaded and read. Those that met the inclusion criteria were included in the literature review.

3.7 Data extraction

A data extraction template was prepared based on the study analytical framework and study objectives. Information on the study including first author, year, study design, study population and sample size was extracted. other information included the study outcomes; factors associated with outcomes and the results. For reports on policy implementation and the policy itself, information on the policy guidelines, its implementation and barriers and facilitators were extracted.

3.8 Analytical framework

This review adapted the WHO Health Financing Progress Matrix (HFPM), illustrated in figure one as the main analytical tool to systematically examine the influence of Ghana's Free Maternal Healthcare Policy (FMHCP) on rural women's access to and uptake of ANC and facility-based delivery service (38). HFPM is a qualitative framework that tracks a country's progress in healthcare policy financing and aligning financing structures with the intermediate and final universal health coverage (UHC) goals in relation to service delivery. The HFPM framework evaluates the core function of healthcare financing systems - revenue generation, pooling, purchasing with the benefit package as a pivotal component and the role of governance in creating resources for service delivery. It assesses equity, efficiency and transparency as the intermediate UHC goal and their contribution to service utilization, financial protection and quality of care as the final UHC goals (38). The framework provides a clear and focused way to connect Ghana's FMHCP financing with role in achieving UHC. It highlights the intermediate factors that influence progress toward UHC and outlines a pathway to reaching the final health goals, offering a more targeted approach than models like Gilson policy Triangular Framework (39)The review also generated transferable learning from Ghana's experience for Sierra Leone, mainly informed by the analysis done for Ghana using the framework. Operationalization of the Framework is linked to the study objectives as indicated in **Table 2.**

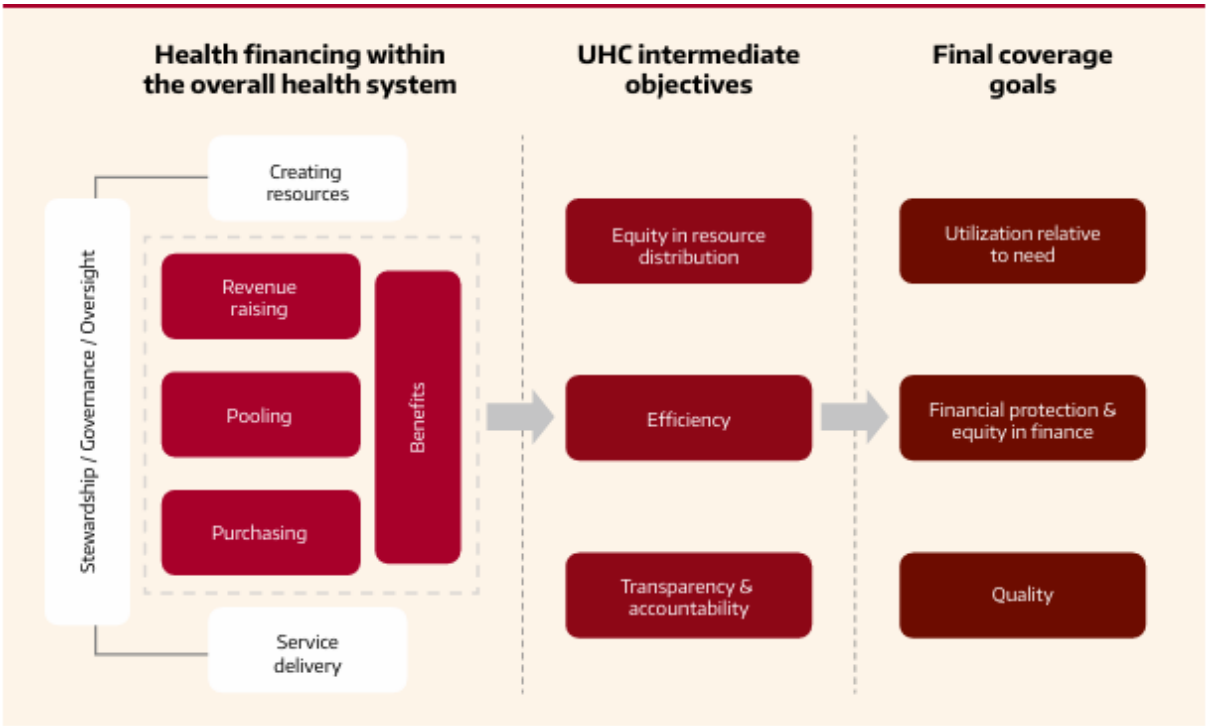

Figure 2: Analytical Framework (Adapted from the WHO Health Financing Progress Matrix (HFPM): (38)

Table 2: Operationalization of the study Analytical Framework (Adapted from the WHO HFPM framework)

No.	Review Objectives	HFPM Domain(s)	Operationalization (Data and Indicators)	Data Sources
1	To understand the financing structure of Ghana's FMHCP in promoting rural women's access to, and uptake of ANC and FBD services.	**Health Financing within the overall health system** The policy Revenue mobilization, pooling, Purchasing, to provide services in the benefit package	Description of the policy (formulation and stakeholders' involvement) Identify how resources are generated to fund the FMHCP, how generated funds are pooled, who purchased and who provide the services described in the basic package.	Ghana's FHMCP related documents – NHIA report, National health account Peer reviewed articles
2	To assess Ghana's FMHCP implementation in relation to equity, efficiency and accountability in delivering antenatal care and facility-based delivery services for rural women.	**UHC intermediate Objectives (policy implementation)** Equity in resource distribution Efficiency Transparency and Accountability	Equity (how equitable are the resources and services distributed among the population (rural) Efficiency in delivery FMHCP service and health system administration Transparent and accountability to target beneficiaries (policy decision, communication).	Grey Literature Peer reviews
3	To examine the influence of the FMHCP on rural women's access to and uptake of ANC and FBD services in Ghana and the contributing factors.	**Final Coverage Goal** Service utilization related to need financial protection and equity in finance, and quality	ANC attendance rate, FBD coverage rates Financial protection (reduction in out-of-pocket expenditure) Quality care provided (timeliness, responsiveness, safety, effectiveness, efficiency, and equity)	National reports Nation Surveys Peer reviewed articles
4	To draw on practical lessons from Ghana's FMHCP implementation that applicable for Sierra Leone in implementing similar maternal health policies.	The policy Revenue mobilization, pooling, Purchasing, to provide services in the benefit package	Lessons drawn from Ghana's experience will be based on the relevance and application to Sierra Leone context and will be guided by the HFPM framework. These lessons whether regarding revenue mobilization, pooling arrangements, purchasing strategies or benefit design will be explicitly linked to the current gaps in Sierra Leone's FHCI and proposed how SLeHIS opportunities could be shaped to maximize impact.	Peer reviewed articles National reports Nation Surveys
5	To propose recommendations for Ghana Government (NHIA, GHS, and MoHS) to improve the FMHCP implementation for equitable maternal service delivery (particularly ANC and FBD services), and especially for rural women.	All Domains	The insights synthesized from each HFPM domain will form the evidence base for practical, tailored recommendations to Ghanian policy makers including the NHIA, GHS, MoH, aimed at strengthening FMHCP delivery especially for rural women to advance UHC goal.	Peer reviewed articles

RESULTS

This section presents the synthesized findings of a narrative literature review examining the effect of Ghana's Free Maternal Health Care Policy (FMHCP), under the National Health Insurance Scheme (NHIS) on rural women's access to ANC and Facility-based delivery services. The findings are organized thematically and guided by the WHO HFPM framework to align closely with the study's specific objectives. The results are presented across four themes:

4.1 The Ghana's FMHCP, governance and financing mechanism (revenue, pooling and strategic purchasing), and benefit package.

4.1.1 The FMHC Policy formulation

Ghana's Free Maternal Healthcare Policy (FMHCP) was introduced in 2008 under the NHIS. The objective was to eliminate financial barriers for pregnant women and increase access to maternal health services for pregnant women (7,40). The policy was initiated in April 2008 when the MoH Minister declared high maternal mortality in Ghana, a national emergency, calling for urgent action in addressing the crisis. The call by the Minister was driven by empirical evidence that was presented during the health summit in Ghana, revealing an increased in institutional maternal mortality between 2006 and 2007, from 187 deaths to 224 deaths per 100,000, and a decrease in the percentage of supervised institutional deliveries from 44.5% to 35.1% in the same year(40). Initially, there was suspension of the maternal user fee exemption policy introduced in 2003, but implementation stopped in 2006, and this was associated with increase in maternal deaths and decrease in facility deliveries (40).

Following the Minister's declaration, a ministerial task force was established to formulate framework for reducing maternal mortality with defined indicators (40). The key actors involved with the 2008 FMHC policy development and implementation include the former president -John Agyekum Kufuor (policy agenda directors), the Minister of Health (policy approvers), MoHS officials and health agencies such as GHS and NHIA, International Non-Governmental Organization (INGOs), bilateral and multilateral donors (policy advisors); and the general public and health professional bodies like the Ghana medical Association, and Pharmaceutical Society

of Ghana (policy advocates -they provided technical expertise (40). By 27th June 2008, the policy and guidelines to provide free maternal health care for all pregnant women was designed by the MOH, officials of the GHS, Ghana Registered Midwives Association, and the NHIA. It was implemented through the NHIA from 1st July 2008 (40). All women with proof of pregnancy are allowed under the FMHCP free registration with the NHIS, which automatically qualifies them for free access to maternal health services including ANC and facility-based delivery services at the NHIS accredited facilities (7).

4.1.2: Governance and oversight structure of the FMHCP

The implementation of FMHCP was integrated within the National Health insurance Scheme (NHIS) to streamline service delivery (40). The NHIA oversees the implementation of the NHIS, with key responsibilities including accreditation to health facilities and providers delivering services to NHIS members, registering and supervising private insurance schemes and managing their service contracts, ensuring the collection of premiums, and payment of reimbursement claims (41). Under 2012 ACT, the District Manual Health Insurance Schemes (DMHIS) are integrated into a unified scheme managed by the NHIA. DMHIS continues to manage strategic functions of the scheme at local levels including enrollment, budget preparation, and providers claims processing (42,43). The Ministry of Health manages the NHIA, providing strategic policy direction and administrative oversight, while the District Mutual Health Insurance Schemes DMHIS undertake operational functions such as enrollment, budget preparation, and providers claims processing (42). However, challenges have been noted including technical capacity, shortage of funding, and possible political influence as obstacles hindering the effectiveness of the HNIA and service delivery especially for rural areas (43–45). Koduah et al, pointed out that the contracting of the NHIA was through lobbying hence claims of corruption and award to incompetent providers (40).

Additionally, the development of Ghana's 2022-2025 Common Management Arrangements (CMAs) was to ensure alignment of NHIS with other policies and for coordinating stakeholders' (national and international) collaboration to minimize duplication and strengthen health sector governance through setting regulations (46). The CMA also highlights strategies for efficiency and sustainability of the NHIS scheme including addressing challenges related to claims

reimbursement, standardization of treatment guidelines, and essential medicine list to improve cost containment and prevent healthcare facilities from an unjust refusal for reimbursement for services and drugs (46)

4.1.3: Financing mechanism of the FMHCP

i. Revenue Generation

Funding for healthcare from the government (53.3%), households through OOP (26.2%), donors (16.1%) and private cooperatives at 4.5% (17). In 2022, the government contributed approximately 67.6% of funding to specifically reproductive health services including ANC and facility-based delivery services (17,24). Approximately 80% of public health funding is largely driven by taxes and donor support**,** and government allocations for FMHCP estimated to be nearly five times the seed grant received from donors(47).

The FMHCP is funded through the NHIS, which is primarily financed through Value added tax (VAT) levy, with an allocation of 2.5% from the total VAT, contribution from Social Security funds, and government budget allocations channeled through the NHIS (4). About 72.8% of NHIS revenue comes from the VAT levy, 17.4% from Social Security contributions, with premiums from the informal sector and other sources such as dividends of investment made by the NHIA council and donation making up smaller proportions of the funding (43) .

Despite these funding streams, evidence indicated persistent underfunding of the NHIS pointing at NHIS limited capacity in mobilizing and effectively managing funds (42,44). The NHIA reported a US$302.89 million shortfall in revenue mobilization from 2017 to 2020.

A study by Isaac Adisah-Atta (2017) revealed lower proportion (35%) among Ghanaians who were willing to pay higher taxes for health care due to their perception of government under performance and trustworthiness, less prioritization of citizens' healthcare, and corruption in the offices of the president and among tax officials (48). At the district level, an estimate of less than 4% of recurrent costs for managing the NHIS was collected as insurance premium by the DMHIS (4). Prior to government taking leadership as a major funder for the FMHCP, the initial funding for the policy implementation was from the GDP 42.5 million, committed by the United Kingdom's Department for International Development (DFID) (4,40). It was further reported that the

Ministry of Finance and Economic Planning, at the time pronouncement had no specific funding allocated for the policy implementation (40).

ii. Risk Pooling

Funding for Ghana's FMHCP implementation is integrated within the centralized NHIS framework(7,21,49). Portion of the earmarked 2.5% VAT levy funds is dedicated fund the comprehensive maternal healthcare package for pregnant women including ANC and FDB services (21). The NHIS manages and disburses the allocated funds to accredited service providers (50). The 2003 health insurance act of Ghana established the NHIS fund to subside cost for the provision of health care services to members of the DMHIS to administer the NHIS at district level (50). However, the DMHIS operation was put to a stop by the NHA insurance bill of 2012, with lack of clarity on the role of the NHIF(4).

iii. Strategic purchasing and provider payment method

Ghana operates a single-payer health insurance system under the NHIS, established by the National Health Insurance Act of 2012 (Act 852), superseding the previous Act 650(7,20,42). Maternal health services under the Ghana's FMHCP are purchased through the NHIA(21,41). The NHIA operates at the national and subnational levels, deploying the DHIMS and health facilities including community health posts to administer the scheme (20,43,51).

Since the FMHCP inception in 2008, the NHIA has accredited more than 5,000 health facilities across 160 district offices nationwide, encompassing both public and private providers authorized to deliver maternal health services such as ANC and FBD services (20). The NHIA holds responsibility for provider accreditation, contract management and regulatory oversight, premium collection, and reimbursement claim payments (41). Under the FMHCP, accredited providers deliver direct maternal services to registered pregnant women and subsequently submit claims to the NHIA for reimbursement through a claim mechanism. In turn, the NHIA reviews and processes these claims and facilitates payment services rendered(42,52).

Figure 3 summarized the flow of funds within the NHIS financing structure, directing to how resources are generated, pooled and allocated to support FMHCP and other health services in Ghana (42).

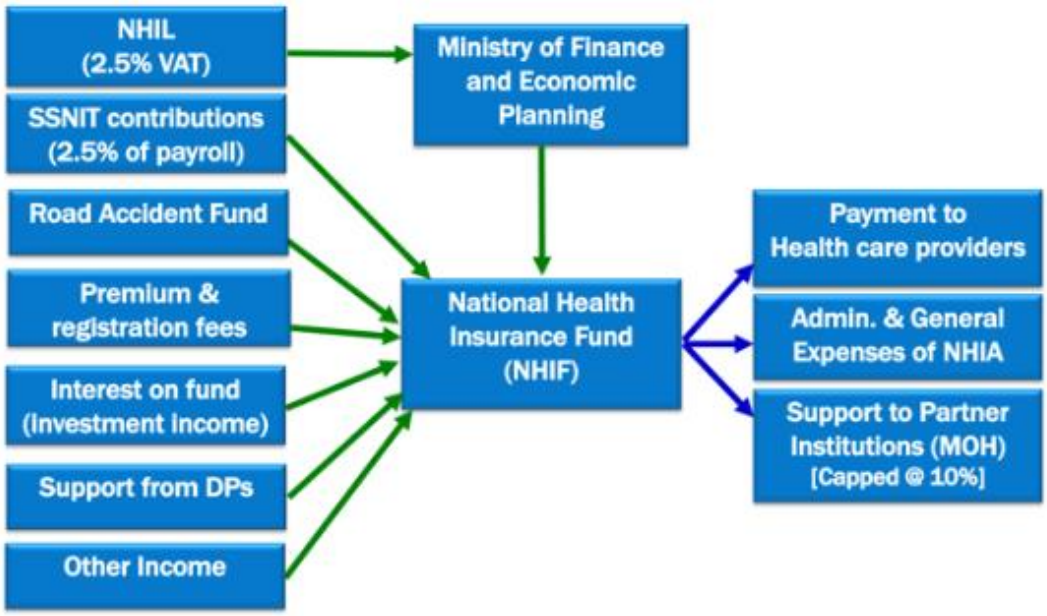

Figure 3: Flow, and spending Areas of Funds to NHIS. Sources: from the Joint Learning Network **(42)**

However, delays in claims reimbursement to health facilities were noted to be a key challenge causing interruption in service delivery.(45,53,54). A 2019 study revealed only 35% of NHIS claims were paid within 90 days, with rural facilities particularly affected due to limited financial capacity to sustain timely and quality care (55). Another study found delayed reimbursement to providers to undermine the scheme's sustainability among four local government areas in the Southern and Northern regions of Ghana (45). Some facilities reported frequent stockouts, reduce staff motivation, and periodic interruption in services, which discourage rural women from seeking facility -based care (18,45). To address these challenges, the NHIS has established an electronic claim submission and payment system, aimed at reducing corruption, allowing timely claim settlement, promote timely and effective services, and promote financial transparency and sustainability, but challenges like high OOP payments persist especially among rural women (56,57).

4.1.4 Benefit Package of the FMHCP

Five broad services were prescribed within the FMHCP benefit package that were to be provided for pregnant women and under five children in Ghana. These services include antennal care, with a benefit of medicines and two ultrasounds, delivery services for pregnant women (including normal delivery, assisted delivery, episiotomies and caesarean section), Postnatal care for new mothers to receive services and medicines for two postpartum services, complementary services for infants during the first three months, and any general benefits under the NHIS for both mother and child (17).

In addition, the policy makes provision for pregnant women to register with the NHIS at a free cost, excluded payment for premium fees services for new registration or renewal of membership, and for processing fees from their pregnancy and postpartum period. To qualify, free access to maternal health services including ANC and facility-based delivery services at the NHIS accredited facilities, women should have a valid NHSI card, and pregnant proof test are done for newly registered women(7). In converse, some studies identified pregnant women that still pay unofficial costs through OOP payment for services prescribed under the policy due to their unavailability at the facility at the time of healthcare seeking (44). The broadness of the package, along with under-resourcing was identified among the challenge limiting the delivery of the full package(44). However, this fund is not explicitly for maternal services but also covers other vulnerable groups such as children under 18 years, and older people, aged 70 years and above (22,42,58).

4.2 The FMHCP Implementation – equity in resource allocation, efficiency, and transparency

4.2.1 Equity in resource allocation

Studies have reported disparities in resource allocation and utilization for the FMHCP implementation, with a disproportionate impact on rural communities (35,47,51,54,59). The 2022 NHIS allocation of maternal health funds to rural health facilities was reported at only 28%,

despite them accounting for 45% of Ghana's population. Approximately, 60% of midwives are concentrated in the urban(60). Studies have shown that the PHC facilities faced persistent under-resourcing leading to shortages in drugs and supplies, health workers, electricity and water supplies (44,61).

4.2.2 Efficiency

The integration of the FMHCP funding and implementation into wider NHIS, standardization of benefit package, the pooled funds from earmarked VAT and other sources, strategic purchasing and oversight role of the NHIS were identified as strategies that promote efficiency, which contributed to the progress achieved in the FMHCP implementation (44,51,54,62) . However, in practice, challenges were noted. These include complexity in the NHIS preventing women from enrolling, limited priority for maternal health services, high OOP payments, broad benefit package, under-resources of facilities, and delays in claim processing(44,51,54,63,64). For example, the earmarked fund for FMHCP implementation within the NHIS is inclusive of other vulnerable groups, and higher registration recorded among children under 18 (over 40%), compared to other groups in 2022, (22).

The trend in RH spending per capita terms (amount allocated to women in fertility (age) indicated an increased since 2018 in Ghana, while maternal services provided by government healthcare facilities remain as low as 40% (24). The percentage of capital spending increased from GHS 332.86 in 2021 to GHS 395.29 in 2022, but the US dollar equivalent declined from US$55.38 to US$46.07 (17) . The National Health Account (2022) indicates a decrease in the share of reproductive health programs from the total CHE, from 15.8% in 2019 to 10.5% in 2020, and was associated to the Covid-19, which shifted government priority focus (11). Actual health care expenditure is more directed towards curative services, personnel and operational costs was estimated at 40-60%, compared to spending on preventive care remaining as low at 8-16.7% (17).

4.2.3 Transparency and accountability

Several accountability and transparency issues were identified in this review from the FMHCP policy initiation and implementation (4,40,50,65). These include limited involvement of FMHCP beneficiaries and service providers, impacting their limited awareness on the policy contents,

unclear process in contracting of NHIS, complexity in disbursement processes, corruption in claim processes, forcing beneficiaries to pay unjustly (4,40,50,57,65). Dalinjon et al., Twum, et al, reported delayed claims reimbursements to have association with transparency which include insufficient reports from providers, delayed and lack of funding for PHC healthcare facilities, and forceful and unfair charges for maternal services covered under the FHMCP benefit package (44) (44,61). This was partly due to complex claim processes in the NHIS reimbursement processes(55). Another study reported a lack of awareness of the policy benefit package among health providers and policy beneficiaries leading to informal charges and over-charging for service delivery (45,53,60,66). Conversely, in Twum et al., study more women reported to have increase knowledge on the FMHCP, citing that it is free in all accredited facilities (59) .

4.3. Influences of Ghana's FMHCP on service utilization coverage, financial protection and quality of care

4.3.1 Coverage in ANC and FBD services

The national trend in ANC and FBD coverage rates between 2008 to 2022 indicated an increase in ANC attendance (4 visits and above) from 76% to 88%, and Facility-based delivery rates also improved from 59% to 86% respectively (20). Evidence from this review show a similar pattern with a substantial increase in ANC and FBD service coverage among rural women since the introduction of the FMHCP (7,28,35,44,51,63,67,68). For example, a study revealed a 97% increase in ANC attendance (four ANC visits plus), and a 87% increase in facility deliveries among women in rural regions of Ghana (51). Another study by Agbanyo et al., suggested that the FMHC policy impacted improvement in facility-based delivery rates among rural women from 46% to 71% (7). The removal of user fees for maternal health services, free enrollment into the NHIS, and perception of quality of care influenced by respectful maternity care, facility readiness, and staff availability played a vital role in uptake and continuity of maternal health service use (16,21,30).

Despite significant challenges such as out-of-pocket payments, under-resource health facilities, and socio-economic inequalities, enrollment into the NHIS persistent, impacting access to and utilization of ANC and FBD services particularly for rural women, were identified under the FMHCP implementation (7,28,35,44,51,63,67,68).

4.3.2: Financial protection

This review identified persistent out-of-pocket (OOP) payments as barriers to rural women's access to ANC and FBD services under the FMHCP (60,64,69) (64,69). Delays in NHIS claim processes and reimbursement, adjustments of claims by healthcare providers, under-resource allocation to PHC facilities were reported to be factors associated with the high OOP payments. In a study conducted by Dabala et al., majority of women (71%) in a focus group discussion (FGD), in the Kassema-Nanka municipality, confirmed that maternal services offered by the FMHCP were not entirely free. They had to pay charges for drug that were either not cover under the policy or are covered under the policy but out of stock at the time of their visits, and other informal charges like hygiene products (69). While analysis from Dalingjong et al. estimated overall mean cost for OOP payment during pregnancy at US$8.60 (64). Women who are covered by the NHIS paid less (USD 7.5) compared to USD 7.9 for uninsured women (64) . About 65% and 22% of women used their savings and sold assets to meet the OOP cost respectively(64). In some instances, healthcare providers were forced to charge OOP fees for services that were not predicted under the FMHCP due to shortage of these services (53,60). Other studies revealed that OOP payment was made during birth emergencies, and cesarean sections are not entirely covered by NHIS (62,70). Women, particularly from poor settings, who cannot afford to pay these out of pocket expenses were most times missed out on accessing the appropriate maternal health care as they had to forgo care in health facilities(64).

4.3.3 Equity and women's access to ANC and FBD healthcare

Enrollment into the NHIS was found to be unequal and a barrier preventing access and utilization of ANC and FBD rural women from care for rural women (21,59,67). For example, the Upper Western region (least urbanized and poorest region) registered only 0.47 million NHIS subscribers, compared to the Ashant region (the second largest urbanized and rich region in Ghana), with 2.2 million NHIS membership (58). The 2022 NHIS annual report estimated the NHIS coverage rate to be 54.5% of the entire target population (49). Recent data from the 2022 demographic and Health Survey (GDHS) reported 62% enrollment rates for women aged 15-49 in the NHIS (41). Rural women with insurance coverage were more likely to access ANC and FBD services in healthcare facilities than the uninsured pregnant women (21,59,67). Twum et al found

in their study that insured pregnant women were 5.3 times more likely to have facility-based delivery than women without insurance covered (51)**.** Studies identified women's wealth, educational levels, marital status and social cohesion to be factors influencing women's chances to be insured.

Less educated pregnant women (no or primary school levels) had a reduced chance to benefit from the FMHCP package including ANC and FBD services than pregnant women with higher education (secondary or tertiary level) (7,71). Likewise, rich pregnant women continue to have higher opportunity to benefit from the FMHCP than poorer pregnant women. Kofini et al., found women from rich background to be 2.05 times more to utilize ANC and FBD service than poorer women. Evidence from the study revealed that, only 20% of women in the poorest quintile were insured, and 38% were under the NHIS, compared with 44% in the rich quintile (28). Women in skilled jobs and manual jobs were 5.3 and 3.4 times likely to be insured than unemployment women. Rural women who were married were found to have increased NHIS enrollment rate, have higher ANC attendance and FBD compared to unmarried women (35).

Social influence and strong community-based health programs have positive effects on four ANC visits, and increased FBD services utilization. Women who are exposed to social influence and community-based health programs were 2.62 times more to attend four ANC visits and utilize FBD services than their counterpart after controlling for socio-economic and geographic factors(16)(20)**.** Long distance to NHIS registered health facilities impacted motivation among rural women from accessing maternal health care due to long distance (30,71). Women with first pregnancy, and without valid NHIS cards, had prevented them from enrolling during their first attempt to seek ANC and FBD services (30,63). Evidence identified under-resourcing of the insufficient infrastructure, frequent drug shortage, inadequate equipment, electricity, water and ambulances as obstacles impeding rural women's access to and uptake of ANC and FBD service in Ghana under the FMHCP implementation (44,61). **C**hallenges such as limited awareness of the FMHCP content, insufficient training, lack of motivation among frontline healthcare providers were reported to impacting effective FMHCP implementation in rural Ghana (54,60).

4.3.4 Quality of care

Studies identified facility readiness, availability of skilled staff, respectful maternal care, and timely provision of services has quality of care concern despite the positive effect of the FMHCP on ANC and FBD coverage (5,30,71). Research reported women's perception and experience with lack of privacy, poor condition at the health facilities, long distance to health facilities, and long waiting time as barriers to rural women accessing ANC and FBD services(18,30). For example, a mixed study by Dalingjong et al. (2018), examining the readiness of 14 health facilities in rural Ghana, found insufficiency in services such as clean water (14%), electricity (36%), availability of ambulance for emergency referrals at 7%, and about 89% of women reported experiencing lack of privacy(18). However, 77% said they were satisfied with the quality mainly attributed to them accessing midwives' services during follow up home visit (18). However, another study reported women satisfaction with overall health care, citing good interpersonal relationships, reasonable waiting times, and clean facilities as factors (44).

4.4 Learned from Ghana: Similarities and differences observed between Ghana and Sierra Leone's FMHC policies: Lessons

This section analyzed the similarities and differences between Ghana's FMHCP and Sierra Leone's FHCI adapting the guide from the WHO HFPM framework. The analysis focuses on the policy formulation process and governance, health financing structures, and key health system challenges. This informs the review to draw a practical lesson from Ghana's experience in implementing the FMHCP applicable for Sierra Leone.

4.4.1 Similarities between Ghana and Sierra Leone free maternal health policies

Both Ghana and Sierra Leone government demonstrated strong political commitment to maternal health reforms, introducing free maternal Healthcare Policies around a decade ago. Ghana in 2008 (Free Maternal Healthcare Policy), and Sierra Leones' Free Health Care Initiative (FHCI), launched in 2010 (33,63). The policies' formulation processes also saw similar patterns, with the policies been initiated through presidential declarations, followed by strategies' development and implementation, largely influenced by development partners and donor communities. The Initial funding for the free maternal policies in both countries was supported significantly funded through by international donors, notably, UK's DFID (40,72). The overall goals highlighted in the

policies aim at reducing maternal mortality through the remover of user fees to improving access to maternal health services including antenatal care (ANC), and facility-based deliveries (FBD), and to achieve UHC goals(4,72).

4.4.2 Difference between Ghana and Sierra Leone free maternal health policies

Ghana is classified as a lower-middle income country, with ongoing socio-economic challenges including the COVID-19 pandemic, impacting the country's progress to achieve it FMHCP goal despite the progress (43,48,73) . For Sierra Leone, as a low-income country, facing persistent health emergencies such as Eb Ebola outbreaks, flooding, and COVID 19), that significantly affect health system performance and stability (25,74,75). Ghana's FMHCP is integrated into the well-established NHIS and builds upon previous maternal healthcare initiatives as a scaled-up policy from dating back to 1990s(7,40). By contrast, the Sierra Leone FHCI was launched more recently as a standalone policy specifically focused on maternal and child care without existing insurance framework (33,72).

In Ghana, health remains a central government priority despite systemic challenges. The FHMCP has dedicated earmarked funding (VAT), and SSNIT contribution pooled centrally with the NHIS with strategic purchasing management by the scheme (22). Conversely, Sierra Leone 's government priorities have shifted over time, with current focus on education and food security, rather than healthcare. Its FHCI is primarily financed through government health budget allocations supplemented by donor funds, OOP payment, and contribution from various INGOs, faith-based and private providers, resulting in fragmentation (37,76).

Ghana' s FMHCP offers a defined and broad maternal health care benefit package integrated within the NHIS, that covers ANC, deliveries and related maternal services. Sierra Leone provides a broad, but less formally defined package covering maternal and child health. Service purchasing and delivery in Ghana is centralized under the NHIS which manages providers accreditation, contracts and claims (22). In Sierra Loene, purchasing and service delivery responsibilities are split among multiple actors including the MoHS, private and faith-based facilities reflecting more fragmented system (77).

Both countries face substantial challenges, with Ghana experiencing delays in NHIS reimbursements, drug stockout, and informal payments especially in rural areas, although its system is more institutionalized. Sierra Leone suffers long standing infrastructural deficits, human resource shortages, and financial instability exacerbated by epidemics (45,75,78,79). Although literature documenting barriers to effective policy implementation, however, on Sierra Leone's FHCI remains scarce, these systemic issues are likely to be associated with quality, access and sustainability of the FHCI as witness in Ghana (72,80). Ghana experienced a rise in MMRs between 2006 and 2007, mainly due to a halt in the implementation of its maternal health fee exemption policy due to funding and other challenges (40). A large body of evidence including peered reviewed and grey literature exist in Ghana, assessing the effect of the policy on maternal health services, while a shortfall remains for Sierra Leone (28,51,64).

This comparative analysis underscores how Ghana's mature, insurance -based system, facilitates more centralized financing and purchasing, while Sierra Leone's newer fragmented approach struggles with the compounded effects of health emergencies and limited infrastructure. Both highlight critical areas for strengthening maternal health policies to improve equitable access and quality outcomes.

Table 3: Differences in Ghana and Sierra Leone's Free Maternal Healthcare Policies (created from this study -reference included in the narrative section above)

Policy Domain	Differences	
	Ghana	Sierra Leone
Country context	Lower-middle-income country	Low income country
Policy Nature	FMHCP built on existing policy integrated within NHIS.	New, standalone policy introduced with no prior NHIS
Government Priority	Health remains a central focus	Changes in government experience; current focus education and food security.
Financing mechanisms	Earmarked (VAT) fund that is pooled, and purchasing centralized through NHIS.	Financed, pooled and purchase mechanisms are through multiple fragmented systems.
Benefit package	Defined, broad, and integrated NHIS	Broad and undefined.
Service Delivery and Purchasing	Centralized management through NHIS, overseeing purchasing and claims.	Services purchased through multiple providers.
Health system Challenges	Delayed NHIS reimbursements, drug stockout, informal and OOP payments.	Long standing infrastructure, human resource shortages and high OOP. Impacting quality and access challenges.
Evidence-based	A large body of evidence exists assessing facilitators and barriers	Gaps exist in literature which may affect progress in FHCI implementation.

DISCUSSION

This discussion section interprets the main findings from the literature review on Ghana's Free Maternal Healthcare Policy (FMHCCP), under the NHIS on rural women's access and uptake of antenatal care and facility-based delivery services and the implications, with the aim of drawing lessons for Sierra Leone. The discussion is presented in sections, with each section linking to the study's objectives. It aims to demonstrate the interlinkages between health financing and UHC coverage goal as illustrated by the HFPM framework. The discussion will start by looking like the final goal of the FMHCP and it influence on ANC and FBD, and the role of the policy financing arrangement and the UHC intermediate objectives pathways. Lessons from Ghana's experience will be documented in this section for Sierra Leone's FHCI and future SLeHIS. For each section findings are summarized, put in context of existing literature, and their implications for policy, practice, and future research are discussed. Some of the references from the findings were also cited.

5.1 Discussion

The implementation of Ghana's FMHCP) had a significant improvement in both antennal care (ANC) and facility -based delivery (FBD)service utilization among rural women. (41,44,51,67) . These improvements were primarily attributed the removal of user fees and free NHIS enrollment for all pregnant women. This indicate that cost was the likely barrier for the under-utilization of ANC and FBD services in the previous years before the pronouncement of the policy, especially for poor rural women. The reflect a similar trend that occurred in Ghana between 2006 and 2007 when the country experience high MMRs due to ending the free maternal fees exemption policy (40). Findings from this strongly imply that the Ghana's FMHCP was associated with the increase in ANC and FBD utilization among rural women in Ghana. This improvement was confirmed by rural women in Ghana citing the removal of fees for maternal health services (ANC and FBD) aided their attendance and utilization. The broad entitlements to free ANC and delivery services were perceived to be encouraging among women that were previously deterred by costs. Another incentive for increased utilization could possibly be associated with the blanket accreditation of public and private facilities (over 5000) regardless of compliance with quality standards (xx). This

pattern was demonstrated in many LMICs countries like Kenya, Tanzania, Rwanda, and Sierra Leone where free maternal health policy was introduced, reporting similar positive relationships between such policies and increased in maternal services (72,81,82).

Unfortunately, low utilization of maternal services by pregnant rural women. The low utilization was associated with inaccessibility and perceived quality of care offered by the FMHCP facilities challenges due to long distance and financial barriers, under-served health facilities (30,63). These findings show that the free policy's influence was not uniform for all rural women in Ghana. In comparison, by Ansu-Mensah et al., demonstrates increase utilization of maternal services across countries like Kenya, Tanzania, Uganda at the earlier stage, but barriers such as under-resourced facilities, providers' workload, impacted pregnant women's access to maternal services under their respective free maternal policies (5).

Resources are facilitators for health system effectiveness(45). In contrast, this review revealed that resources including funding, human resources and infrastructure allocated for the implementation of the FMHCP in Ghana were inadequate and unevenly distributed. The rural facilities remain were grossly under-resourced under the FMHCP implementation (44). This was demonstrated by shortage in drugs and supplies, reduced staffing, inadequate capacity and electricity (44,45). Additionally, funds allocated for FMCHP implementation were not commensurate with the cost of the services offered by the accredited health facilities and the benefit package prescribed (22,43). This gap highlights inadequate capacity within the FMHCP facilities to deliver the appropriate care to pregnant women. Insufficient funding means under-resourced health facilities especially at the PHC levels, on which disadvantages rural women, depend on for public health services. This gap has serious implications not only for access but also quality and outcome of women's health. It also means that even the care provided does not quarantine timely, and effective services. Similar trends of inadequate funding to such program as the FMHCP have been noted in the LMICs (83,84).

Delays in NHIS reimbursement were also noted, may further worsen unavailability of the limited supplies in health facilities. A study by Meda et al., also documented persistent stock outs at the

free healthcare health facilities, creating interruptions in the supply chain management in Burkina Faso (85,86) .

The review noted that low utilization of ANC and FBD services by women under the policy in health facilities may be likely due to hidden and unofficial costs they paid for maternal health care service (64,69). This shows that poor women from rural communities who live far away from health facilities may decide not to participate in the use of the policy because of cost like transport and other related items for which they might not be in the position to pay. Despite the Ghana's FMHCP covered a comprehensive benefit package, in some facilities, women received incomplete services due to unavailability. This means women been forced to incurred extra cost for services not available. As such, they are forced to spend from unplanned budget or lack access to care for those who cannot afford to pay the costs. Hidden cost has been noted elsewhere (Nigeria, Burkina Faso, Sierra Leone, Tanzania), leading women to seek alternative care or risk forgoing health services. Findings from this review suggest low utilization of ANC and FBD among rural women in Ghana to be impacted by quality of care (30).

Perceived quality of care is a significant obstacle to maternal healthcare service utilization and can influence women's decision on timing and places to seek health care due to challenges discussed earlier such as under-staffing and inadequate infrastructure (30,87). This signified delayed and insufficient care as noted in another context (5)

5.2 Key Lessons from Ghana's FMHCP implementation for Sierra Leone

Four key lessons were identified and documented from Ghana's FMHCP implementation that could be relevant and applicable for Sierra Leone in strengthening it FHCI policy through leveraging the SLeHIS opportunity. These include; 1) Localization of revenue mobilization, 2), Centralization of pooling, purchasing and providers' payments 4) Accountability Mechanisms, and 5), Investment in Primary healthcare facilities.

5.2.1 Localization Revenue Mobilization

Ghana's FMHCP primarily relies on locally diversified funding contribution through the NHIS (e.g. earmarked VAT revenue), which promised sustainability. Sierra Leone can adopt a similar strategy by leveraging SLeHIS to mobilize diversified domestic resources rather than relying heavily on

donor funds risking sustainability, while tax-based financing encourages government ownership and long-term financing stability. Sierra Leone should also ensure ring-fencing of maternal health funds to protect their use amid competing demands (Dalingjong et al., 2018, Sierra Leone FHCI framework).

5.2.2 Centralized Pooling, Purchasing, and Providers' Payment

Centralized and Transparent pooling of Risk can enhance equity but needs rural targeting: Leveraging on Ghana consolidated single national risk pooling strategy, which enabled cross-subsidization, offering financial protection for vulnerable group, Sierra Leone should explore and implement equity-sensitive allocation strategy and ensure SLeHIS covers poor women especially those in informal sector and hard -to-reach areas to avoid exclusion. Strategic Purchasing tied to timely disbursements is vital for efficient service provision. The government of Sierra Leone can build operational efficiency by investing in SLeHIS capacity and digitalized claims processes to promote prompt and transparent claims settlement, provider motivation and maintain quality.

5.2.3 Accountability Mechanisms

Strong Governance and meaningful Stakeholder Engagement can Promote Transparency and accountability. Ghana faced criticism and bottleneck in FMHCP implementation due to limited engagement with key actors (communities, women and frontline workers)from the policy design. Sierra Leone can avoid these pitfalls by ensuring active and meaningful involvement of local authorities, policy implementers, and beneficiaries. Furthermore, clear communication of entitlements and accessibility feedback mechanisms will empower rural women on their rights and reduce informal charges.

5.2.4 Investment in Primary healthcare facilities

Ghana's experience on how under-resourced rural facilities can undermine service utilization is not new to Sierra Leone. As such, under the SLeHIS, the need for Sierra Leone to concurrently investments in health infrastructure, human and logistics (e.g. staff trainings, uninterrupted drugs and supplies, transportation) are critical for the FHCI strengthening and sustainability. Moreover, designing and strengthening complementary strategies such as community education and outreach campaigns, and targeted enrollment drives within SLeHIS are key to addressing

inequalities (education, wealth disparities), and ensuring marginalized rural women effectively access services (including ANC and FBD).

In summary, Sierra Leone FHCI can substantially benefit by adopting Ghana's key lessons particularly in financing diversification and protection, strategic purchasing, governance and transparency, and quality improvement while tailoring equity strategy to the country's current context (large rural population and informal economy). The SLeHIS presents a promising opportunity institutionalized these reforms sustainably, streamline resource flow and boost access to maternal services for vulnerable rural women under the FHCI.

While Ghana's experiences provide valuable insights, Sierra Leone being a small country with eight million population, a post-conflict context with repeated emergencies, and a fragile health system requires careful adaptation these lessons. As such, resource constraint and administrative capacity must be realistically factored into the policy reform design and implementation

5.3 Application and Experience with the WHO HFPM Framework

The WHO HFPM framework used in this study provided a clear and focused structure for analyzing and presenting findings on how Ghana's FMHCP influenced the utilization of ANC and FBD services among rural women.

By applying this framework, it provided a clear relationship between health financing and UHC goals' achievement, and the required pathways, which was the central focus for this study. In essence, a well-defined financing mechanism anchored within strong governance structure is fundamentally important for the achievement of UHC goals (which include Service utilization, financial protection and quality). It also offered a coherent implementation pathway; emphasizing equity, efficiency, transparency and accountability as critical elements for reaching these final goals. In my experience applying the framework, it greatly facilitated the organization and presentation of the study findings, and as well helped in drawing actionable recommendations for Ghana and learning relevant to Sierra Leone. For instance, efficiency issues often arise in revenue generation or strategic purchasing, and transparency cuts across all domains rather than exist in isolation. This iterative overlap required a more fluid approach when analyzing and discussing the findings.

Overall, despite this complexity, the framework was valuable not only for structuring my thesis but also for informing my future engagement in health financing reform analysis.

5.4 Strength and limitations

This study is the first to use a comprehensive approach to extensively identified and synthesized findings from literatures on the effect of Ghana's FMCH policy on rural women's access to, and uptake of ANC and facility-based delivery services. Focusing on the rural settings in presenting comprehensive evidence is critical and align with the UHC and SDG goal of universality and living no one behind. Also, drawing on learning from Ghana for Sierra Leone and other countries in similar context as Ghana was useful in contributing to strengthen UHC policies across the region.

The study identified some limitations during the review process. The limitation to extensively identified non-published literature since the review method was primarily through database searches. Also, there is a likelihood for biases such as recall, and selection biases from studies that conducted interviews with women retrospectively. Also, there is potential for risk for some studies to generalized findings in the context of Ghana due to selection and interview biases.

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This literature review suggested evidence that the Ghana Free Maternal Healthcare Policy that was introduced under the NHIS had influenced and improved rural women's access to, and uptake of antennal care and facility-based delivery services. Despite, this improvement cannot be celebrated as some systemic barriers such as health, socio-economic and geographic exist, exacerbating inequalities especially for rural women, thus, threatening progress for the policy objectives. Thus, addressing these challenges is key to UHC and SDGs' achievement.

6.2 Recommendations

To fully actualize the objectives of the Ghana's FMHCP and ensure equitable access to quality maternal services particularly for rural women, the government of Ghana, the NHIA, and MoH should intensify efforts to address systemic barriers across financing, service delivery and community engagement by implementing the following measures. Strengthen and expand Domestic resources mobilization

6.2.1 Strengthen and expand domestic resources mobilization

Sustainable financing is critical to enhance the NHIS fund pools, further reduce donor-dependency, improve the reliability of timely facility reimbursements and uninterrupted service provision under the FMHCP. Increasing the existing VAT allocation to NHIS from 2.5% to 3.5% would provide significant boost to domestic funding capacities. Additionally, the government should explore earmarking other fiscal spaces such as "sin taxes" on tobacco and alcohol, and levies from major cooperatives like extractives and petroleum sectors.

6.2.2. Improve Efficiency by addressing bottlenecks in claims management

To improve efficiency in the delivery of the FMHCP, the HNIS should further strengthen the mechanism to address bottlenecks causing delays in claims processing and reimbursement. Government and MoH of Ghana should ensure adequate capacity within the NHIS including allocation of adequate resources and ensuring strong oversight in spending (88,89) .

6.2.3 Address out-of-pocket spending and auxiliary costs

A multi-pronged strategy is necessary, to address the structural barriers within the health system to ensure timely and full reimbursement of claims to facilities, which will enable them to absorb these auxiliary costs without shifting them to the FHMCP beneficiaries. Consideration should be given to expanding the benefit package of funding mechanisms to cover transportation subsidies or essential supplies, reflecting lessons from other successful schemes (56,57).

6.2.3 Enhance health education, community awareness, and accountability mechanisms

Scaling up culturally appropriate, targeted health education campaigns can empower pregnant women to claim their benefit effectively. Also, establishing robust community-based accountability platforms such as health facility scorecards or client feedback forum can improve transparency and foster responsive service delivery by holding providers and policy makers accountable for responsive maternal service delivery.

6.2.4. Further research

Research bodies should further explore the effectiveness and efficiency of Ghana's FMHCP on maternal health services including ANC and FBD by highlighting the progress and challenges to further inform impactful intervention. Also, a comprehensive review exploring the effect of rural and urban inequalities will help to address the gaps and improve services.

There is need for research to monitoring and evaluate the implementation of the Sierra Leone FMHCP to assess progress and provide evidence on its impact. This will be useful for policy makers in informing corrective and improvement measures.

6.2.5 Recommendation for Sierra Leone Government and MoHS

As Sierra Leone plans to implement its SLeNHIS, the government and MoHS should prioritize the integrating the existing FHCI into the SLeHIS framework. This integration is crucial for ensuing funding sustainability and enabling cross-subsidization to improve maternal health services, especially for rural women. Strengthening local resource mobilization mechanisms will reduce donor-dependency and enhance financial sustainability. Establishing a dedicated purchasing agency or mechanism, alongside building institutional capacity, and clearly defining managerial responsibilities, will be key to transparently managing the FHCI benefit package. These steps will

help achieve universal, high-quality maternal health care and advance Sierra Leone's progress toward UHC goal.

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ANNEXES

Annex 1: Declaration for Use of Generative AI (GenAI)

Check the box that applies to your completion of this assignment:

☐ I confirm that **I have not used** any generative AI tools to complete this assignment.

☒ I confirm that **I have used** generative AI tool(s) in accordance with the ***"Guidelines for the use of Generative AI for KIT Institute Master's and Short course participants".*** Below, I have listed the GenAI tools used and for what specific purpose:

Generative AI tool used	Purpose of use
1. Chat GPT (Free version)	Brainstorming on my thesis topic
2. MS word document Editor	For organizing my work including the creation of tables of contents
3. Mendeley Software tool	For referencing

Signed:

Joanna Tom-Kargbo

Annexes 2: Influence of Ghana's Free Maternal Healthcare on rural women's Access to and uptake of Maternal healthcare services in

STRATEGY	**DETAILED APPROACH**	
Understanding the global, regional and country context on the status of ANC and FBD and Free health financing mechanisms	All published and grey literature including report from the WHO on the maternal health services and health financing at the global, regional and Ghana.	
Analyzing the influence of Ghana's FMHCP on ANC and FBD services	All published and grey literature including report from the WHO and Ghana, focusing on the influence of Ghana's Free Maternal Healthcare on rural women's Access to and uptake of Maternal healthcare services in Ghana	
Literature included	Articles based on Ghana's Free Maternal Healthcare Policy (FMHCP), introduced in 2008 under the NHIS, looking at influence of the FHMCP on rural women's access to, and uptake of ANC and FBD services including their coverage, quality and equity	
Language	English	
Dates	2008-2025	
Literature excluded	Literature outside the inclusion criteria	
Databases	PubMed, Science Direct, Web of Science and Google Search Engine	
Search terms	Free maternal healthcare policy, maternal health services, utilization, rural Ghana	
HEALTH Concern	**KEY AREAS**	**GEOGRAPHICAL COVERAGE**
		Globally
		LMICs'
		WHO African Region including Sierra Leone
Free Maternal Healthcare Policy **AND**	Health Financing within the overall health system • Policy formulation and role of Actors • Revenue mobilization • Risk Pooling • Purchasing • benefit package	

Maternal health (ANC and FBD) services AND Utilization		Rural Ghana
	Policy Implementation (Intermediate UHC Objectives)	
	• Equity resource distribution	
	• Efficiency	
	• Transparency and Accountability	
	Final UHC Goals	
	• ANC coverage	
	• FBD coverage	
	• Equity	
	• Quality of Care	