Health Funding Models for Maternal Health in European Countries: Challenges and Best Practices for Kenya

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Abstract

Maternal health is a cornerstone of public health, reflecting how effectively a country's health system serves its people. Yet across Europe, outcomes remain uneven despite substantial health spending, exposing persistent gaps in how funding models translate resources into equitable and quality maternal care. This study examines how five European countries, Germany, Sweden, France, Romania, and Italy, fund maternal healthcare, using the Control Knob Framework to assess which financing approaches perform best and where weaknesses persist. The research relied on a qualitative comparative case study design, 120 secondary sources that published from 2021-2023 were thematically analyzed. Sources included policy papers, government reports, datasets from the WHO and OECD, and peer-reviewed studies. The data were thematically analyzed through three lenses identified as financing architecture, governance and accountability and service delivery to identify key challenges, enablers and transferable lessons for Kenya. The results indicate that Sweden, Germany, and France have better maternal health outcomes due to an adequate and sustainable level of public investment, effective regulation, and a more equitable distribution of resources. They are able to achieve this by ensuring universal coverage of services through clear public accountability, community-based programs, and a manageable public-private financing structure. Conversely, Romania and some regions of Italy continue to function on fragmented and inadequate maternal financing, weak governance, and inequitable access to care, particularly with vulnerable populations. Overall, the way funds are organized and how they are managed significantly influences maternal health outcomes, more than the level of total spending. Systems that pool public and private financing under a clear accountability system achieve better coverage and quality services, while fragmented systems create inefficiency and inequities. In the case of Kenya, the findings point toward the potential benefit of a blended funding model, with strong regulatory oversight, clear allocation processes, and targeted investments in local regions to sustain maternal health financing, improve access, and diminish inequities.

Keywords: Maternal Health, Funding Models, Universal Health Coverage, Equity, Governance, Europe

1.0 Introduction

Maternal health remains a vital benchmark for evaluating health system performance and national development progress. Despite vast advancements in medical care and policy innovation over the past few decades, maternal health outcomes continue to vary significantly across and within countries, even among high-income regions with robust healthcare infrastructure (Crear-Perry et al., 2021). Maternal health outcomes such as maternal mortality rates, availability of skilled birth attendant coverage and postnatal care coverage differ across Europe - a region often viewed as the global beacon of universal healthcare (Majebi et al., 2024). The differences in

maternal health outcomes indicate the ways the structure and management of health funding approaches and effectiveness influence maternal health outcomes beyond the volume of health expenditure.

European countries use different funding models for maternal healthcare, including publicly financed universal systems in Nordic nations, social health insurance schemes in Germany and France, and mixed public, private systems in Italy, Romania, and Bulgaria (Tambor et al., 2021). In these systems, the relationship between how funding is distributed and maternal health outcomes is complex. For example, in some countries, there is a relatively small budget for maternal health, yet they still deliver good outcomes through targeted investment and better fund distribution. Other countries can spend more on maternal health but still struggle with significant system deficiencies and inequities among geographical areas (Bambra, 2022). Similarly, the combination of public and private funding models have created different experiences in some countries; for example, the private sector has offered value by improving transportation infrastructure for maternal services and to improve access to maternal care (Cortez & Quinlan-Davidson, 2022). In others, insufficient regulation has led to inequities, fragmented care, or high out-of-pocket payments for vulnerable groups (Sowada, 2025). These variations call for closer analysis of how financing mechanisms are operationalized and managed at both policy and service delivery levels.

While maternal health challenges in low-income regions, particularly in parts of Africa, are often more acute and receive significant global focus, a study of Europe offers critical insights. The continent presents a controlled environment with relatively similar economic capacities but highly differentiated funding systems. This allows for detailed cross-national comparisons of how health financing structures influence maternal health outcomes. Moreover, lessons from Europe may offer adaptable policy and implementation models for African countries and other developing regions currently reforming their health financing systems. (Tambor et al., 2021).The intent is not to transplant European models in wholesale, but to derive best practices and avoidable challenges that can inform context-specific solutions.

While statistical analyses have provided essential insights into maternal health indicators and spending patterns across European countries, they often fail to capture the complex institutional arrangements and contextual nuances that influence outcomes. For example, countries with similar levels of investment in maternal health can exhibit stark differences in results,

depending on how funds are allocated, managed, and integrated across public and private sectors (Onofrei et al., 2021). Much of the existing literature has relied on quantitative methods or focused narrowly on specific components of healthcare financing, such as pharmaceutical reimbursement systems (Zozaya et al., 2024) or single-country case studies (Scheefhals et al., 2024). As a result, there is limited understanding of how different funding arrangements interact with policy design, governance structures, and service delivery mechanisms to influence maternal health outcomes across countries. This study, therefore, undertakes a cross-country qualitative review to illuminate the effectiveness, integration, and challenges of various maternal health financing approaches, contributing to a richer understanding of Health Funding Models for Maternal Health in European Countries with a focus on key challenges and best practices.

2.0 Statement of the Problem

Access to quality maternal health care remains a pressing global issue, with approximately 800 women dying every day from preventable maternal complications and an estimated 2.3 million children dying in 2022 alone (UNFPA, 2025). These statistics point to the urgent need to narrow the ongoing gaps across high-and low-income countries in availability, equity, and quality of maternal health services. Health financing is the main driver of the efficiency, effective coverage, and sustainability of maternal health systems as it shapes the mobilization, allocation, and financing of health resources. Even in countries that allocate substantial financing to health such as those in Europe, (9.8% of GDP) (Gutiérrez-Hernández & Abásolo-Alessón, 2021), maternal outcomes remain uneven - countries in Europe, such as Finland, France, and the Netherlands, have always had MMR < 7/100,000 live births (Diguisto et al., 2023); however, others remain behind, even more with higher MMRs, with greater intra-regional disparities, poor utilization of resources, and lack of coordination between public and private providers (Fu & Liu, 2023). Heterogeneity of financing arrangements in Europe, ranging from social insurance to tax-funded and hybrid models, presents the continent as a good case to examine what arrangements enhance or deteriorate maternal health outcomes.

Despite the availability of robust statistical data on health spending and maternal health indicators, there remains a critical need for comparative, qualitative analyses to examine how different models of maternal health financing function in practice. By far the majority of existing literature is made up of quantitative studies that examine aggregate trends of expenditure patterns (Onofrei et al., 2021), stand-alone sectors like drug reimbursements (Zozaya et al., 2024), or

single-country examples (Scheefhals et al., 2024). While informative, these studies do not account for institutional, governance, and implementation determinants critical to explaining country differences in outcomes with similar levels of resources.

This paper addresses this gap through a qualitative secondary data analysis of policy reports, institutional documents, and scholarly literature to evaluate maternal health financing frameworks in selected European countries. The objective is to identify and compare challenges, enablers, and best practices associated with different financing systems. By determining the institutional and operational drivers of successful maternal health financing models, the study offers valuable and relevant lessons to developing countries that are striving to build up their maternal health financing systems. Lessons that are critical to advancing progress in a reduction of maternal mortality and equitable access to quality maternal care.

3.0 Objectives of the Study

The specific objectives of this study are to: -

1.0 Analyze the relationship between funding allocation and maternal health outcomes across European countries.

2.0 Examine the effectiveness of public and private funding integration in improving maternal health services.

3.0 Identify best practices and challenges in implementing health funding models for maternal health.

4.0 Literature Review

Theoretical Framework

To investigate how funding, payment, organization, regulation, and behaviour impact the performance of health systems, this study uses the Control Knobs Framework (CKF) developed by Roberts and colleagues as a helpful, action-oriented tool (Shahabi et al., 2022). The CKF provides a dynamic and practical way to evaluate and improve the performance of the health system. This framework inspires the idea that health system performance is impacted not only on the basis of resource availability, but also and perhaps more importantly, through purposeful and potentially changeable policy decisions. Specifically, the framework identifies five policy levers, or "control knobs", which are interconnected, namely: finance, payment, organization, regulation, and behaviour (persuasion) (Mishra et al., 2024). Efficiency, quality (including safety), and access (including coverage) are three intermediate performance outcomes that are influenced by turning

these knobs. These outcomes in turn influence the ultimate aims of the health system, which are enhanced health status, financial risk protection, and user pleasure (Mor, 2025). In contrast to descriptive frameworks, CKF provides policymakers with a useful manual by highlighting the causal connections between policy choices and system performance.

The relevance of CKF to this study lies in its strong focus on financing mechanisms and their impact on health outcomes, especially within the context of maternal health in European countries. The financing knob, which addresses how health funds are raised (e.g., through taxation, insurance premiums, or direct payments), provided a useful lens for analyzing how different funding allocations correspond with maternal health outcomes. For instance, countries such as Sweden, France, and Germany, which allocate substantial public resources and use risk-pooling mechanisms, were found to achieve lower maternal mortality ratios and higher coverage of maternal care services. On the other hand, Romania, with fragmented and underfunded systems, showed weaker outcomes, confirming CKF's proposition that financing models significantly affect access and quality.

The framework's other control knobs, payment, organization, regulation and behavior, also provided an elaborated understanding of how the coalescing of public and private funding approaches and structural arrangements facilitated access to maternal health services. For example, Germany's combining of statutory health insurance with private health insurance and regulated provider payment demonstrated how equitable payment systems and organized service arrangement can facilitate equity and sustainability in maternal health systems. On the contrary, the regionalized model in Italy and the reliance on external funding in Romania revealed challenges of implementation such as variability of access to services and regulatory deficiencies.

The behavior knob also provided valuable insights into how public trust, cultural norms and client incentives shape service utilization patterns, particularly in diverse populations. Overall, CKF was effective as an analytical framework for this inquiry, allowing this study to systematically identify best practices and challenges while also making the links explicit between policy choices and maternal health outcomes across contexts in Europe.

5.0 Empirical Literature Review

5.1 Funding Allocation and Maternal Health Outcomes

The distribution of resources across sectors affects the availability, equity, and quality of care, hence funding allocation is crucial in determining mother and child health outcomes. By

analyzing the effect of national public spending and its distribution on neonatal and child mortality, a study by Garcia et al. (2023) provides important insights into this relationship. The study, which employed an ecological methodology, examined data from 147 nations between 2012 and 2019. It employed a two-step methodology: first calculating the Generalized Propensity Score (GPS) for public spending, and then using the GPS to estimate the association between expenditure levels and mortality rates. The key outcomes analyzed were neonatal mortality rates (NeoRt) and mortality rates in children aged 28 days to five years (NeoU5Rt). Findings indicated that a 1% increase in total public spending was associated with a reduction of approximately 0.64 neonatal deaths per 1,000 live births, with similar improvements observed in under-five mortality when investments extended to non-health sectors such as sanitation, education, and social protection. While this study confirms the positive impact of increased and better-targeted public spending, it does not specifically address maternal health outcomes, nor does it explore the functioning of different health financing models. These limitations justify the current study, which focuses on Health Funding Models for Maternal Health in European Countries, critically examining how financing structures, allocation strategies, and institutional arrangements influence maternal health outcomes, and identifying challenges and best practices to inform global health financing reforms.

The paper by Bødker et al. (2021) offers thoughtful insights into maternal mortality trends in Denmark, which is known for its well-developed health care system and commitment to mother health. By linking four national health registries, death certificates, and hospital maternity ward reports, the ecological study examined maternal deaths in two periods, 1985-1994 and 2002-2017. Maternal deaths were reviewed and classified by a panel of obstetricians from 143 maternal deaths out of approximately 1.6 million live births. The authors reported that their rate of maternal mortality declined with 9% per year from 2002 to 2017, from 11.8 maternal deaths per 100,000 live births from 1985 to 1994 to 7.0 from 2002 to 2017.

These findings further confirm the persistently low levels of maternal mortality in Nordic countries, that have established good health systems, universal prenatal care, and institutionalized procedures for risk management, respectively. Although the study does not provide an explicit examination of how associated outcomes or the health funding models, specifically, financed improvements in health systems in nations, it raises questions of whether certain financial investments may have impacted maternal mortality. Though it is suggested that systemic and clinical improvements contributed to the decline, such investments may be unclear. This appraisal

points to the need for further inquiry, for example the study on Health Funding Models for Maternal Health in European Countries, which examines how different health funding models of financing maternal health mortality, and not just system quality, influences the subsequent reduction of maternal mortality in their respective environment.

5.2 Public and Private Funding Integration

Numerous studies have demonstrated how integrated public-private health finance strategies affect maternal health outcomes; Germany is frequently mentioned as a prime example. Germany's statutory health insurance system, which is mostly financed by contributions from both employers and employees and is augmented by regulated private insurance, was examined in recent research by Mini (2024). The study revealed that this dual financing structure provides comprehensive and near-universal access to maternal health services, contributing to positive outcomes such as high prenatal care utilization and low maternal mortality rates. However, the study also identified persistent challenges in effectively integrating care across public and private providers, which can lead to fragmentation in service delivery. Despite these challenges, the German model offers important lessons for balancing equity, efficiency, and sustainability in health financing. It emphasizes the need for coordinated governance mechanisms and robust regulatory frameworks to align the incentives of diverse stakeholders. These insights are particularly relevant for countries seeking to optimize their maternal health systems through hybrid financing models that combine the strengths of public funding with private sector innovation.

In a similar vein, Pierre and or (2023) examined the distinctive public-private combination of healthcare financing and delivery in France, a nation known for its adaptable and effective healthcare system. Their research demonstrated how France's model, which is based on the values of solidarity, plurality, and liberalism, promotes access, patient choice, and good health outcomes by combining substantial public funding with regulated private insurance and independent providers. Nonetheless, the system continues to struggle with issues like growing expenses, disjointed service delivery, and socioeconomic differences in care access. Regulatory measures and financial incentives have been used to mitigate these issues, particularly by aligning private sector operations with public health goals. These findings, along with those from Germany’s dual insurance model, offer valuable insights into how integrated public-private financing can improve maternal health service access and system responsiveness.

These studies underscore the potential of blended funding approaches to bridge service delivery gaps, enhance coverage, and maintain quality in maternal healthcare. However, their primarily focus on system-level performance metrics and do not always address how governance structures, equity concerns, or regional disparities influence the effectiveness of such funding models. Moreover, most existing literature remains fragmented, lacking comparative analysis across countries that use varying combinations of tax-based, insurance, and hybrid financing models. The current study, seeks to fill this gap by offering a qualitative comparative analysis of health financing systems across Europe. By examining how different models function in practice, this study aims to generate policy-relevant insights that not only account for outcomes, but also the institutional dynamics, coordination mechanisms, and implementation challenges that shape maternal health financing. This is particularly relevant for low-and middle-income countries seeking to design context-appropriate, equitable, and sustainable financing strategies to reduce maternal mortality and enhance care quality.

5.3 Best Practices and Challenges in Implementing Health Funding Models for Maternal Health

Socioeconomic disparities have significant implications for the distribution of health and access to maternal health service, often translating into disparities in health outcomes, across places as well as within places. Addressing socioeconomic disparities and tailoring them appropriately so that fairer distribution of service delivery might occur is a major challenge in advancing maternal health finance models. For example, Petre et al. (2023) highlight the case of Romania where inadequate public funding, an insufficient medical labour force, and inefficiencies in health service delivery obstruct access to quality maternal health in vulnerable, marginalized and rural populations. While the study highlights the overall condition of the health system, it does not link funding models to maternal health outcomes or explore options for socioeconomic gap closure, indicating a lack of purposeful funding efforts.

Similar to this, Paňzková et al. (2024) looked at maternity care policy for migrant women throughout Europe and discovered that national migration regimes combined with more general socioeconomic gaps created access disparities. Maternal health care, particularly for low-income migrant women, are typically less comprehensive in nations with severe income disparity or stringent immigration laws. The impact of subnational socioeconomic circumstances on funding

decisions and service delivery, particularly in places with limited resources, is not fully captured by their research, though.

Best practices from countries such as Sweden, Germany, and France illustrate the effectiveness of equitable, needs-based funding allocation, strong governance, and community-informed planning. These approaches integrate social equity principles into healthcare financing, helping to bridge socio-economic gaps and improve maternal health outcomes. Conversely, countries like Romania and parts of Italy face challenges including fragmented governance, underfunding, and regional inequalities that hinder the successful implementation of maternal health funding models. This study builds on these insights by emphasizing the need for funding models that are sensitive to socio-economic contexts at both national and local levels. It underscores the importance of designing and implementing maternal health funding strategies that prioritize equity, target marginalized populations, and strengthen health system resilience. Such context-specific approaches are essential for overcoming existing challenges and promoting inclusive, sustainable improvements in maternal health across diverse socio-economic settings.

6.0 Methodology

This study employs a qualitative comparative case study design to examine health funding models for maternal health across five European countries, Sweden, Germany, France, Spain, and Italy, while being conducted from Kenya. These countries were selected to represent diverse healthcare funding approaches and maternal health outcomes, capturing variations in public-private integration, national policy frameworks, and resource allocation. The comparative approach enables identification of effective strategies and persistent challenges in maternal health financing that may provide insights for Kenya and other contexts seeking to strengthen maternal health systems (Scheefhals et al., 2024). By analyzing European maternal health funding models, the study identifies challenges and best practices. These insights could inform strategies to improve maternal health financing, equity, and service delivery in Kenya.

As this study is qualitative and relies exclusively on secondary data, no human participants were directly involved. Peer-reviewed journal publications, government policy documents, OECD and WHO health spending datasets, and official reports on maternal health outcomes comprise the approximately 120 documents that constitute the sample size. Key terms such as "maternal health financing," "maternal mortality," "prenatal care," "postnatal care," "health expenditure Europe," and "maternal health policy" were used in systematic searches to find sources. To ensure relevance,

represent post-COVID-19 changes in maternal health financing, and capture current policy adjustments, only papers published between 2021 and 2023 were included (Zozaya et al., 2024). According to Mthuli et al. (2022), this definition of sample size is consistent with qualitative document review standards, where the breadth of analysis is based on the depth and breadth of sources rather than the number of participants.

The analysis focusses on important metrics such as service coverage, access to maternal health services, maternal mortality rates, and budget allocation per capita. The study can identify trends in the ways that finance models affect maternal health outcomes by qualitatively assessing these indicators. Maternal mortality rates are lower and access to prenatal and postnatal care is better in nations like Germany and France that have combined public and private funding (Varbanova et al., 2024). On the other hand, areas with little or dispersed funding, such as portions of Spain and Italy, experience gaps in coverage and unequal service delivery (Scheefhals et al., 2024). This comparative method makes it possible to identify structural issues as well as effective financial measures in a variety of economic and policy environments.

This document review approach ensures a systematic synthesis of diverse evidence, capturing multiple perspectives on funding effectiveness, policy implementation, and health system outcomes. Ethical considerations were strictly observed, with all secondary sources properly cited and used according to academic standards. No human subjects were directly involved, and therefore, as per St. Paul's University ethical guidelines, formal IRB approval was not required. By analyzing European funding models from a Kenyan research context, the study generates insights that can inform policymakers in Kenya and beyond on strategies to enhance maternal health funding, equity, and service quality (Zozaya et al., 2024). This methodology produces rigorous, policy-relevant findings while adhering to ethical standards appropriate for secondary data research.

7.0 Findings and Discussions

7.1 Funding Allocation and Maternal Health Outcomes

This study found that maternal health outcomes are strongly shaped by the level, consistency, and equity of national funding allocations. Countries that prioritize maternal health through robust public investment, integrated service delivery systems, and targeted support to vulnerable groups report significantly better maternal health indicators. The analysis of selected

European countries affirms that differences in maternal mortality ratios (MMRs) are closely tied to how governments allocate and manage maternal health funding.

As of 2021, current health expenditure (CHE) per capita in purchasing power parity (PPP) among five countries in the WHO European Region varied widely. Germany allocated $8,011 per capita, followed by France ($6,517) and Sweden ($6,438). Italy's spending stood at $4,291, while Romania significantly trailed with $963.

Higher health expenditure has consistently correlated with improved maternal health outcomes. Countries like Germany and France, with substantial current health expenditure (CHE), likely provided comprehensive maternal health services, including enhanced access to prenatal care and skilled healthcare professionals. This robust investment in healthcare infrastructure enables these nations to implement effective programs that support maternal health. In contrast, Romania's low expenditure suggests significant challenges in delivering adequate maternal health services, which could result in higher maternal morbidity and mortality rates. This disparity underscores the critical role of funding in shaping health outcomes and highlights the need for sustained investment in healthcare systems.

To further illustrate these patterns, Table 1 offers a focused comparative analysis of healthcare spending levels alongside maternal health outcomes. This table expands on the correlation between financial investment and health performance, demonstrating how strategic investments, or the lack thereof, can translate into real-world implications for maternal health. From Table 1 above, countries such as Sweden, Germany, and France, which dedicate substantial public resources to maternal health, achieve notably low MMRs (4.5, 7, and 8 respectively). These investments are not just in volume but are strategically directed toward universal access, antenatal/postnatal services, and equity-focused initiatives. These findings support the study's assertion that high levels of maternal health investment, particularly when publicly managed, contribute to improved outcomes and reduced disparities.

Table 1: ***Comparative Analysis of Maternal Health Investment and Outcomes in Selected Countries (2021)***

Country	Maternal Health Investment	Health Expenditure (% of GDP, 2021)	Maternal Mortality Ratio (per 100,000 live births)	Key Observations
Sweden	Public investment; 86% public share of health spending	11.20%	4.5 (2020)	Strong outcomes, equity focus; regional workforce shortages persist

Germany	€12M to UNFPA (2024–2027); €42.5M to UNFPA core in 2024	~11.7%	7 (2020 est.)	International leader in funding; integration of insurance systems
France	€700M annually for PMI; €10M to Muskoka Fund	~11.3%	8 (2020)	Universal antenatal/postnatal care; urban-rural disparities
Italy	Regional tax-funded system; 75% public share	9.40%	10 (2020)	Good coverage; funding gaps and regional inequality persist
Romania	Public insurance + EU grants; limited maternal spending	~6.5% (est.)	19 (2020)	Underfunding and rural service gaps; reliance on EU programs

Conversely, Italy and Romania, despite being part of the same regional bloc, demonstrate weaker maternal health performance. Italy, with its decentralized, regionally administered system, shows variability in service quality, especially in southern and rural areas. This aligns with the study's observation that fragmented health governance can weaken the impact of national health funding, even where expenditure levels are moderate. Romania, with the lowest estimated health spending and highest MMR (19), exemplifies the consequences of chronic underfunding, overreliance on external grants, and limited maternal-specific investment, particularly in underserved regions. This further supports the study's finding that geographic and structural inequities in funding allocation are closely associated with higher maternal risk.

These country-level observations are supported by literature cited in this study. For example, Karaman et al. (2020) confirm that increased healthcare spending improves maternal and infant outcomes across OECD countries. Similarly, Petre et al. (2023) found that rural areas face significant infrastructure and staffing deficits due to lower per capita allocations, while Pařízková et al. (2024) highlight how systemic underfunding disproportionately affects migrant and marginalized women.

Overall, the study confirms that maternal health funding allocation is not merely a financial decision, but a determinant of survival, equity, and quality of care. Countries that combine high, sustained, and equitably distributed investments, such as Sweden and France, achieve better maternal health outcomes. In contrast, underfunded or unevenly structured systems, such as those in Romania and to some extent Italy, struggle with persistent maternal health disparities.

7.2 Public and Private Funding Integration

The integration of public and private funding in healthcare systems has been shown to significantly enhance the delivery and equity of maternal health services, as evidenced by Sweden's predominantly public-funded model. With more than 90% of healthcare financed through public sources, Sweden has established a system where antenatal and postnatal care are universally accessible and free at the point of service (Muwonge et al., 2025). This strong public investment underpins Sweden's maternal mortality ratio of just 4.5 per 100,000 live births, among the lowest globally. A recent study by Blomqvist and Winblad (2024) affirmed that Sweden's commitment to healthcare equity, manifested in policies that prioritize maternal health regardless of income or region, has been central to these positive outcomes. The study highlighted that although regional workforce shortages remain a challenge, particularly in rural areas, the integrated system's robust infrastructure and comprehensive coverage continue to deliver high-quality maternal care. The findings of the present study reinforce that Sweden's public-private integration model provides an effective framework for ensuring maternal health services are both comprehensive and equitable, supporting the Control Knob Framework's assumptions about how financing and organizational structures directly influence health system performance.

Germany exemplifies the benefits of integrating public funding with private health insurance in achieving effective and equitable maternal health outcomes. The country's statutory health insurance system is primarily funded through payroll contributions from both employers and employees, while regulated private insurance offers complementary coverage for those who opt out of the public system. This dual financing structure ensures nearly universal access to maternal health services, reducing financial barriers and enhancing continuity of care. For example, recent data indicate that Germany's maternal mortality ratio is approximately 7 per 100,000 live births, one of the lowest in Europe, underscoring the success of its integrated model. A study by Mini (2024) found that this system facilitates high utilization of prenatal and postnatal services, with minimal out-of-pocket costs for beneficiaries. Moreover, Germany's commitment to global maternal health, evidenced by its €12 million allocation to UNFPA for 2024–2027, reflects its robust public health ethos. The findings of the present study confirm that integration of public and private financing in Germany allows for a seamless healthcare experience, where women receive comprehensive maternal care without significant financial burden, thus validating

the assumptions of the Control Knob Framework regarding the effectiveness of financing and payment mechanisms in improving health system performance.

In France, the government demonstrates a strong commitment to maternal health through its substantial annual investment of €700 million dedicated to maternal and child health services (Genieys & Hassenteufel, 2024). This funding supports a system that blends public financing with regulated private healthcare options, ensuring universal access to antenatal and postnatal care for women across the country. However, despite the overall effectiveness of this integrated model, research such as Afni (2023) has highlighted persistent urban-rural disparities, indicating that populations in remote or underserved areas may still face challenges in accessing timely and quality maternal care. Similarly, Italy operates a regionalized, tax-funded system with a 75% public share, offering broad maternal health coverage (Giulio de Belvis et al., 2022). Yet, regional inequalities and funding inconsistencies continue to affect the uniformity and quality of services, particularly in southern regions. The findings of this study confirm that while both France and Italy benefit from integrated financing models, strategic incorporation of private funding and stronger regulatory oversight could enhance equity and improve maternal health outcomes, especially in areas where access remains uneven, aligning with the Control Knob Framework's emphasis on the roles of financing, regulation, and organizational design in achieving system-wide effectiveness.

In Romania, the reliance on public insurance and EU grants for maternal health services highlights the challenges of underfunding. With an estimated health expenditure of only 6.5% of GDP, the country faces significant gaps in maternal health services, particularly in rural areas. Studies suggest that integrating private funding could alleviate some of these challenges by providing additional resources and improving access to care (Petre et al., 2023).

In conclusion, the integration of public and private funding in maternal health services has been shown to improve access, quality, and overall health outcomes. Countries like Sweden, Germany, and France demonstrate the effectiveness of this model, while Italy and Romania highlight the potential benefits that could be realized through better integration and increased investment in maternal health.

7.3 Best Practices and Challenges in Implementing Health Funding Models for Maternal Health.

The comparative analysis of maternal health funding models across Sweden, Germany, France, Romania, and Italy reveals distinct approaches that influence service delivery and equity.

Sweden's tax-funded universal system ensures free maternal care and emphasizes primary care integration but faces challenges with regional staff shortages and service delays. The findings are as summarized in Table 2 below:

Table 2 - ***Comparative Health Funding Models for Maternal Health in Selected European Countries***

Country	Funding Model	Key Features	Strengths	Challenges
Sweden	Tax-funded universal system	Healthcare financed through general taxation; free maternal care; strong primary care focus	Universal access; integrated services; equity in care	Regional disparities in staff availability; service delays
Germany	Statutory health insurance + private insurance	Mandatory public insurance with employer/employee contributions; private insurance supplements coverage	Broad coverage; choice of providers; comprehensive maternal services	Inequities due to insurance status; complexity in care coordination
France	National Health Insurance with private supplementary insurance	Public insurance funds majority; private insurers cover additional costs; plurality of public/private providers	High quality care; patient choice; low out-of-pocket expenses	System complexity; urban-rural access gaps; rising costs
Romania	Public insurance + EU funding grants	Public insurance dominant; reliance on EU funds for maternal health programs; mixed public/private providers	Targeted EU support improves some services	Chronic underfunding; rural access issues; workforce shortages
Italy	Regional tax-funded healthcare system	Decentralized system with regional management; universal coverage; public and private providers coexist	Strong regional health autonomy; free maternal care	Regional disparities; administrative fragmentation; funding inequities

From Table 1, Germany combines statutory and private insurance, offering broad coverage and provider choice, yet struggles with inequities linked to insurance status and care coordination complexities. France's national health insurance supplemented by private coverage delivers high-quality care and patient choice but contends with urban-rural access disparities and rising costs. Romania's system, heavily reliant on public insurance and EU funding, benefits from targeted programs but suffers from chronic underfunding, workforce shortages, and poor rural access. Italy's decentralized, regionally managed tax-funded model provides universal coverage but is hindered by administrative fragmentation and regional funding inequities.

These findings align with previous studies but also expose critical gaps. Petre et al. (2023) highlighted how rural Romanian counties receive disproportionately low health allocations, resulting in poor infrastructure and limited maternal care access, confirming challenges seen in

Romania's funding and workforce shortages. Pařízková et al. (2024) found migrant women in economically disadvantaged regions face significant financial and systemic barriers, especially where political support for inclusive policies is lacking, mirroring disparities in countries like Germany and France despite their overall system strengths. While public-private integration expands coverage in some countries, it often increases complexity and perpetuates inequalities for vulnerable groups. Conversely, universal tax-funded models promote equity but struggle with regional disparities and inefficiencies. Romania's reliance on EU funds underscores systemic fragility. Overall, this comparison underscores the need for funding models that ensure equitable resource distribution, strengthen workforce capacity, and develop inclusive policies addressing vulnerable populations to improve maternal health outcomes across diverse contexts.

8.0 Summary and Conclusions

This study offers new insights into the effectiveness of health funding models for maternal health across European countries, emphasizing the critical role of equitable resource distribution. It uniquely highlights how integrated funding approaches, combining public and private investments, can significantly enhance maternal health services and outcomes. By contrasting the experiences of countries like Sweden, Germany, and France with those of Italy and Romania, the study illustrates the impact of funding structures on maternal health indicators. This comparative analysis underscores the necessity of sustained public investment and the importance of targeted support for vulnerable populations to achieve better maternal health outcomes.

Developing countries, particularly in Africa such as Kenya, can learn valuable lessons from these findings regarding health funding models. The study emphasizes that effective maternal health funding is not only about the amount allocated but also about ensuring that investments are equitable and integrated. Kenya could benefit from adopting mixed funding models that leverage both public resources and private sector contributions to improve access and quality of maternal health services. Furthermore, by focusing on strengthening healthcare infrastructure and workforce capacity in underserved areas, Kenya can work towards reducing maternal health disparities. Prioritizing inclusive policies that ensure resources reach marginalized populations is essential for enhancing maternal health outcomes and achieving broader public health goals.

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