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DISSERTATION TITLE

Are African Countries Tracking Sources of Domestic Resource Mobilization (DRM) For Reproductive, Maternal, Neonatal And Child Health (RMNCH)? A Systematic Review.

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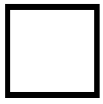

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List of Abbreviations

CHE	Current Health Expenditure
GDP	Gross Domestic Product
RH	Reproductive Health
LIC	Low Income Countries
LMIC	Low-Middle Income Countries
UMIC	Upper-Middle Income Countries
HIC	High Income Countries
LDC	Less Developed Countries
MDC	More Developed Countries
HET	Health Expenditure Tracking
WHO	World Health Organization
RMNCH	Reproductive, Maternal, Newborn, and Child Health
DRM	Domestic Resource Mobilization
IFF	Illicit Financial Flows
SSA	Sub-Saharan Africa
OECD	Organisation for Economic Co-operation and Development

GHED	Global Health Expenditure Database
ICHA	International Classification of Health Accounts
NHA	National Health Accounts
SHA	System of Health Accounts
HAPT	Health Accounts Production Tool
AFDB	African Development Bank
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
USAID	United States Agency for International Development
SDG	Sustainable Development Goals
ODA	Official Development Assistance
DT	Dependency Theory
RST	Resource Curse Theory
WHO	World Health Organization
IMF	International Monetary Fund
HMIS	Health Management Information Systems
FP	Family Planning

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Are African Countries Tracking Sources of Domestic Resource Mobilization (DRM) For Reproductive, Maternal, Neonatal And Child Health (RMNCH)? A Systematic Review.

CHAPTER 1 INTRODUCTION

African nations have some of the world's worst outcomes on Reproductive, Maternal, Neonatal and Child Health (RMNCH) indicators such as mortality rates (UNICEF, 2023), therefore strengthening the delivery of RMNCH continues to take priority on Africa's public health agenda. However, Africa's health system is generally underfunded and while it is mostly financed from out-of-pocket payments from households, government spending and external funding, research evidence shows that greater mobilization of domestic funding is the more sustainable pathway to fund RMNCH in African nations (WHO, n.d. b; Nnadozie et al., 2017; Adika, 2020; Popoola et al., 2018). For African nations to step up domestic resource mobilization (DRM) for RMNCH and deliver better health outcomes to women, they need a data-driven picture of the landscape of local funding sources for RMNCH. As seen with the more successful tracking of foreign aid, rigorous domestic resource tracking can be profitable for providing important information on the state of existing local funding sources, inform future financing strategies and address expenditure inadequacies.

Tracking DRM for RMNCH has several important impacts; it enhances accountability, evidence-based decision-making, and efficient resource utilization, ultimately leading to improved health outcomes (Atim et al., 2019; Martinez-Alvarez et al., 2022). Moreover, sustainable financing for RMNCH hinges on consistent DRM, and tracking these sources enables countries to strive for long-term sustainability. (Bernard, 2018). Generally, the availability of high-quality data is a challenge in Africa due to the weakness of national statistical systems (United Nations Economic Commission for Africa, 2020) and is evident in the deficiency of quality data on domestic funding sources for RMNCH at the local level within these nations. This lacking statistical capacity as well as financial constraints, and political factors are formidable challenges preventing African governments from investing in tracking DRM (Mann et al., 2016; Faye et al., 2020). Data-tracking for DRM starts with identifying relevant information for tracking DRM sources. The National Health Accounts (NHA) produced using the standardized System of Health Accounts (SHA) framework and the WHO Global Health Expenditure

Database offer valuable information that allows for consistent and standard comparisons of health financing data across nations, including all health-related financial flows, financing sources, disease conditions, care providers, and health functions (Rahimisadegh et al., 2022; Price et al., 2016).

Following the discourse on the existing body of knowledge, it is important to explore to what extent African nations are tracking DRM for RMNCH and how RMNCH health financing is prioritized. This study adopts a systematic review design because it will ensure a rigorous, comprehensive, and unbiased approach to evaluating how African countries are tracking local funding sources for RMNCH. In this systematic review, I hope to answer the following questions:

1. What are the capacities of African governments for tracking local funding sources for Reproductive, Maternal, Neonatal and Child Health?
2. Which are the different types of local funding sources for Reproductive, Maternal, Neonatal and Child Health being tracked across African countries?
3. What are the financing priorities concerning Reproductive, Maternal, Neonatal and Child Health across Africa?

Furthermore, I aim to 1) systematically assess the scale and coverage of tracking for different types of domestic funding sources for Reproductive, Maternal, Neonatal, and Child Health in African countries. 2) identify the various types of local funding sources for Reproductive, Maternal, Neonatal, and Child Health being tracked across different African countries. 3)To assess how funding allocations for women's health differ across African countries. With this effort, I hope to contribute fresh insights and propose new strategies for strengthening data-tracking and statistical capacities for RMNCH local financing sources. In addition, the findings of this systematic review can inform evidenced decision-making and policy design concerning DRM strategies; highlight gaps and areas for further research; and demonstrate the importance of tracking domestic financing as an advocacy tool to improve health outcomes and promote greater mobilization in African nations. The scope of the review covered all 54 African countries. Inclusion/ exclusion criteria were based on African countries with Health expenditure data available on the WHO Global Health Expenditure Database (GHED) and whose most recent National Health Accounts are accessible online.

In Chapter 2, I present an in-depth literature review that explores and contextualizes the maternalization of women's health; I elaborate on the pivotal role of RMNCH in health systems; how RMNCH is funded and challenges facing DRM for RMNCH in Africa; the standardized tools used to track relevant DRM for RMNCH information; and exploring opportunities for DRM for RMNCH for African countries. Chapter 3 is a description of my methodology- the systematic review; my data collection and data analysis methods; as well as key limitations and ethical considerations. Chapter 4 elaborates on key findings of data analysis results presented through data visualization and a narrative synthesis. In Chapter 5, I discuss implications and insights of the results under two themes- statistical capacity of African countries and RMNCH prioritization across Africa. Further discussions cover the strengths and limitations of the whole systematic review process. In Chapter 6, I reflect on the possible contributions of the review and its relevance. I also discuss the broader implications of the key findings for theory, practice, and policymaking.

CHAPTER 2 LITERATURE REVIEW

2.1 The Essentialization of Women's Health

Women's health is a complex and multidimensional field that covers various dimensions of women's lives and experiences. Historically, the focus of women's health research has been on reproductive health, ignoring other components and reducing women's health to a reproductive function (Cameron, 2010; Inhorn, 2006). In African nations, this historical bias is compounded by societal norms and gender roles that further marginalize women's health (Elliot, 2017). This emphasis on women's reproductive roles and the increasing maternalization of women's lives through the dominance of biomedical perspectives that ignore women's definition of their health concerns, can impact their health-seeking behaviour and diminish their agency and well-being (Inhorn, 2006). This narrow focus also limits the comprehensive understanding of women's health needs and challenges. Therefore, research should fill this understanding gap by advancing multidisciplinarity within women's health research.

2.1.1 Balancing Health Policy Priorities in Women's Health

According to Inhorn (2006), women's health is political, with power dynamics and cultural norms influencing health policies and practices. The prevalent "add women and stir" approach fails to address the root causes of gender disparities that limit women's access to resources and healthcare services leading to poor health (Inhorn (2006). In many developing countries, particularly in Africa, health policies prioritize reproductive, maternal, and child health resulting from trado-cultural values held on fertility and childbearing; as well as external pressures to meet international expectations like the Sustainable Development Goals (SDGs) (Channa & Ndunguru, 2022; Temmerman et al., 2015). Unfortunately, the prioritization of these areas often comes at the expense of a more comprehensive approach to women's health to include areas like mental health (Temkin et al., 2023; Temmerman et al., 2015). Gideon (2016) defines these root causes as power imbalances of a patriarchal system and gender conflicts within health systems. The critical context therefore involves understanding the process of policy prioritization, how they are influenced and ultimately align with the broader health needs of women. The Gender mainstreaming framework offers a way to address gender inequalities in health policy processes by advocating for the inclusion of gender analysis to inform more strategic and equitable health interventions (Morgan et al., 2016). Gender analysis achieves this by constructing an intersection of gender and health policy that resists the influence of traditional social constructs of gender within policy-making contexts and among policymakers (Jacobs & George, 2023).

2.1.2 Anthropological Perspectives and Feminist Theories

Needless to say, the anthropology discipline provides a unique lens to analyze health and disease issues within broader sociocultural, economic, and political contexts (Baroš & Cucić, 2024). In her anthropological review of women's health ethnographies, Inhorn (2006) suggested that approaching women's health through ethnographic lens creates an essential understanding of women's health different from biomedical and public health research focus. Feminist theories also advocate for a broader understanding of women's health through the impact of political and socioeconomic determinants such as poverty on their lived experiences (Ndu, 2022; O'Mahony & Donnelly, 2010). Gideon (2016) further proposes that pathways into

poor health are gendered and concurrently, gender inequalities impact health outcomes. She explains that even when women-focused programs exist, the gendered nature of the health system itself generates health policies that are not specific, perpetuate gender disparities and are not aligned to deliver on program goals (Gideon, 2016). This may further marginalize women's voices, reinforcing gendered roles and responsibilities of childbearing and rearing which are unrecognized as work (Gideon, 2016).

2.1.3 The Case for Comprehensive Investments in Women's Health Financing

Moreover, there is evidence that women's health financing decisions typically ignore the broader complex social determinants of health, such as education, gender, income, race and class disparities, and their intersectionality with health outcomes, focusing instead on easily measurable reproductive health indicators (Channa & Ndunguru, 2022; Temmerman et al., 2015). This results in a disproportionate allocation of funds to reproductive health and less to female education and economic empowerment programs (Witter et al., 2017; WHO, 2021). The human capital theory and social reproduction theory have been utilised by authors like Gimenez (2019) and Kordsmeyer, (2022) to support this faulty investment approach in reproductive health instead of the broader area of women's health; defining such investments as security for future human capital and sustained global economic productivity achieved through the reduction of maternal and child mortality rates. Conversely, Onarheim et al. (2016) and Remme et al (2020) widen this narrow lens, to offer a more substantial argument for the investment in women and girls' health as a pathway to economic productivity and sustainable development. They both report that investments in women's health interconnect with multiple outcomes such as gender equality and empowerment, human development, economic stability and improved health outcomes, such that these funds have the ripple effect of higher socioeconomic return-on-investment across these various sectors. This defines investments in women's health as the right lever to achieve more gender-transformative and multisectoral benefits beyond health. Furthermore, International donor funding for women's health often drive national health agendas to prioritize areas like maternal health that align with donor interests rather than the women's overall health needs. This is crucial for attracting donor funding in African nations, where limited resources, political instability, and weak

governance constrain national budgets and sustain dependence on international aid, often prioritizing maternal services (Toure et al., 2012; WHO Regional Office for Africa, 2012).

2.1.4 Initiatives for Advancing Women's Health

Recent efforts to address the anomaly in women's health research and improve how the health system responds and attends to women is seen in the survey by the UK Department for Health and Social Care (DHSC). The survey, which is part of the first-ever policy-backed Women's Health Strategy for England, involved 100,000 participants and explored women's health beyond reproductive health to include a wider range of health issues (GOV.UK, 2022). It is apparent that incorporating multidisciplinary perspectives beyond strict health boundaries offer critical insights into the central role of gender in healthcare and the diverse ways in which gender intersects with politics, socioeconomic and cultural dimensions, impacting health. Ultimately, addressing the foregoing challenges is crucial for advancing the understanding of women's health needs and promoting better health outcomes for women globally.

Even though this research employs the term Reproductive, Maternal, Newborn, and Child Health (RMNCH), which is a commonly used sweeping description for interventions in women's health, the critical context is situated within the broader landscape of women's overall health and well-being. This establishes the extended relevance of this research beyond its main research questions to highlight the significant gaps in addressing the comprehensive health needs of women and to contribute to ongoing discourse on gender and health.

This chapter will focus on the importance of tracking domestic financing sources for RMNCH and the state of tracking across African countries to be able to show how this reflects their statistical capacities. The chapter will be organized in the following sections- The Crucial Role of Health Systems; Key Sources of Health Financing in African Countries; Domestic Resource Mobilization; The Interplay of Data Tracking and Statistical Capacity with Governance and Development in African Countries; Challenges and Strategies for Enhancing Domestic Resource Mobilization (DRM) Tracking for Reproductive, Maternal, Neonatal and Child Health (RMNCH) in African Countries; and Concluding Notes.

2.2 The Crucial Role of Health Systems: A Focus on Reproductive, Maternal, Neonatal and Child Health

A health system comprises a complex network of interconnected components and functions that provide healthcare services within a population (Kabir et al. (2022). The development and effectiveness of health systems play a key role in promoting national prosperity by contributing to improved population health, increased productivity, and reduced healthcare costs. Nm (2012) in his documentation of the historical development of health systems, emphasizes the role of health systems in supporting socioeconomic development. Findings from citizens' science research on how communities perceive prosperity further reveal that health, as much as finances, is considered a measure of prosperity (H. Moore et al., 2022) and a robust health system made up of different functional components, not only improves health outcomes but also contributes to economic growth, social stability, and sustainable development (Kılcı, 2022).

2.2.1 The Significance of Reproductive, Maternal, Newborn, and Child Health in Health System

Reproductive, Maternal, Newborn, and Child Health (RMNCH) is a crucial component of healthcare systems, covering health service delivery to girls, women, newborns, and children from before pregnancy to childhood. The resilience of a health system can be assessed by its capacity to provide RMNCH services (McKenzie et al., 2016) and there is evidence that funding for general health systems support feeds into RMNCH activities as they make up a greater percentage of health services (Grollman et al., 2017). In addition, within the Sustainable Development Goals (SDGs), RMNCH is a prominent indicator for monitoring universal health coverage (Hogan et al., 2018). Given the significance of RMNCH services, tracking resources and effective monitoring are necessary to secure funding and support for these critical interventions, ensuring better health outcomes for women and children.

2.2.2 The State of Reproductive, Maternal, Newborn, and Child Health within Africa's Health System

African nations are mostly described as developing economies with most being low income (LICs) and low-middle income (LMICs) countries, having low scores on almost all development indicators including maternal and child mortality (United Nations, n.d; United Nations, 2014); where 70% of global maternal deaths in 2020 were attributed to sub-Saharan Africa alone

(UNICEF, 2023). This is illustrated in Figure 1 below with countries like South Sudan, Chad, and Nigeria having extremely high maternal mortality ratios.

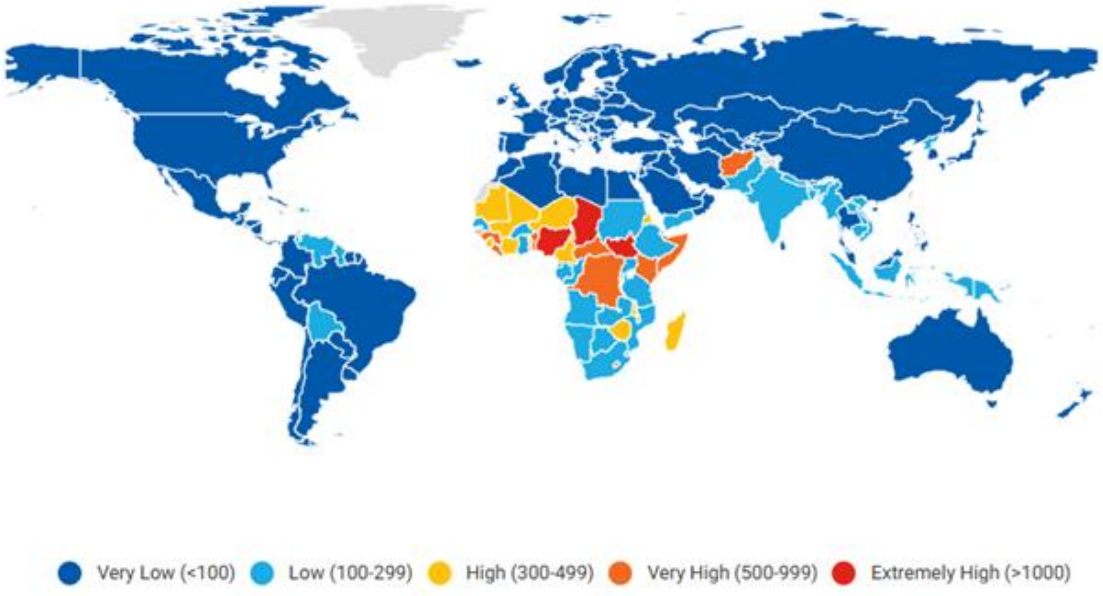

Figure 1: Maternal Mortality Ratio (maternal deaths per 100,000 live births)

Sources: UNICEF, 2023

Investing in RMNCH services inadvertently supports the strengthening of health systems which can in turn enhance the delivery of quality RMNCH healthcare services, and reduce social inequalities (WHO African Region, 2022).

2.3 Key Sources of Health Financing in African Countries: A Focus on Reproductive, Maternal, Newborn, and Child Health

Several sources of RMNCH funding exist in most African nations but the top 3 sources are Out-of-pocket (OOPs) payments, followed by Government or public spending and then International aid or external funding (WHO, n.d; Pitt et al., 2021). Figure 2 illustrates this and further shows that in 2021, only few African countries, like Liberia (50%), were able to mobilize other significant domestic sources of health financing.

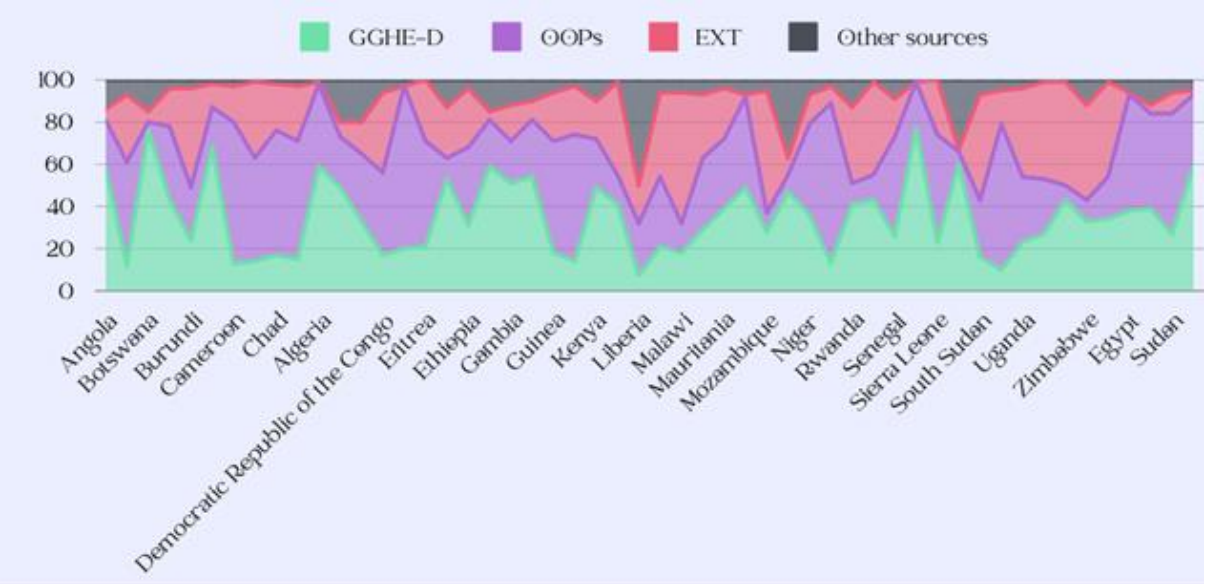

Figure 2: Domestic General Government Health Expenditure (GGHE-D), Out-Of-Pocket (OOPs) and External Health Expenditure (EXT) and other sources of domestic health financing as percentages of Current Health Expenditure (CHE%) across African countries in 2021.

Source: WHO Global Health Expenditure Database (GHED)

2.3.1 Out-Of-Pocket (OOPs) Payments

Out-of-pocket (OOPs) payments happen when there is insufficient government or private insurance to cover the full cost of the health good or service and patients directly pay to cover these costs (Organisation for Economic Co-operation and Development (OECD iLibrary, n.d). Unfortunately, OOPs fund the health system of many African countries, where they can be as high as 80% of the current health expenditure (WHO Regional Office for Africa, 2021). OOPs are widely recognized across literature as regressive and inequitable because they place disproportionate financial burdens on poorer households (Kruk et al., 2018; Mills et al., 2012) who often lack formal employment benefits, including health insurance, making them more vulnerable to the financial impact of illness (Chuma & Maina, 2012; Akazili et al., 2011). Without public provision of healthcare, these households are forced to pay directly for healthcare services, which can be expensive. Thus, in many African countries, where health insurance and government health spending are limited, OOPs are a significant barrier to accessing healthcare including RMNCH, often leading to catastrophic health spending and impoverishment (Chuma & Maina, 2012; Wagstaff et al., 2018).

2.3.2 Government Spending

Government or public spending on health refers to the financial resources allocated by public authorities for the delivery of healthcare services and initiatives (WHO, 2018). This funding is important for ensuring access to quality healthcare services and improving health outcomes and WHO recommends that it should be the biggest source of health financing in a country (WHO, 2018). The differences in government health spending among countries, are greater than for other funding sources- High Income country (HIC) governments contribute about 80% of total health expenditure which is less than 30% in LIC governments many of which are African (WHO, 2018). Figure 3 shows that in Upper-Middle-Income Countries (UMICs), the highest source of per capita health spending growth was increased government spending, while in LMICs and Sub-Saharan Africa, it was driven by external funding, specifically Development Assistance for Health (DAH). Annual growth rates in per capita health spending are the percentage change in the amount of money spent on healthcare per person in a population over a year and it tracks how much health spending per individual increases or decreases each year (WHO, n.d)

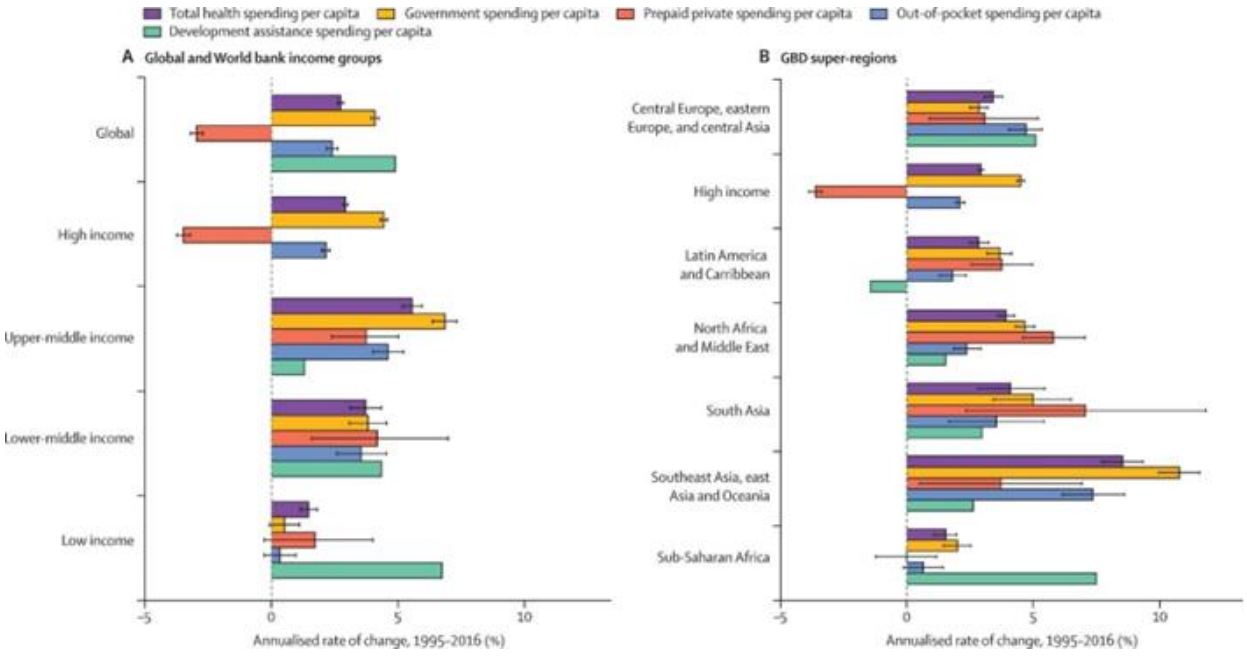

Figure 3: Annualised rate of change in health spending per capita by source, by World Bank income group (A) and GBD super-region (B), 1995–2016

Source: Fan & Savedoff, 2014

Several studies (Micah et al., 2019; Boachie et al., 2018) emphasize the vital role of government expenditure in improving health outcomes and addressing healthcare challenges across sub-Saharan Africa. Yet, no African Union (AU) member country, apart from South Africa and Cabo Verde, has achieved the prescribed minimum of 15% health sector budget allocation to buffer government health spending, proposed by the Abuja Declaration of 2021 (World Health Organization, 2010). Tandon et al. (2020), reports that higher government healthcare spending is attainable through three primary methods: expanding the overall economy, which is the most significant factor over the long term; raising more revenue by increasing taxes to enlarge government expenditure; and reallocating the budget to prioritize the health sector, thereby increasing the share of funds dedicated to healthcare. However, increasing healthcare financing is counter-productive when there is inefficient management of resources. Studies show that strengthening health financing systems involves not only increasing financial resources but also unifying policies, improving efficiency and resource management for better sustainability and quality of services (Kabir et al., 2024; Rooijen et al., 2018). Moreover, Ahmad & Koya (2020) identify mismanagement of resources as the root of corruption in healthcare which can lead to increased costs, reduced access to care, and worsen inequalities in health outcomes. Resource management is particularly important in LICs and LMICs as found in Africa, where poor governance, inefficiency and paucity of funds lead to including inadequate healthcare (Molina et al. (2016). Addressing inefficient resource allocation and its resultant corruption, not just financing, is therefore crucial to ensure equitable access to healthcare.

2.3.3 International Aid

International aid, also known as External funding, includes the flow of financial and non-financial resources, or assistance from one country or organization to another and come in various forms such as grants, loans, technical assistance, and goods or services (Thapa, 2020). OECD defines foreign aid as Official Development Assistance (ODA) and states that countries eligible to receive ODA are determined by their Gross National Income (GNI) per capita, which excludes G8 members and European Union countries and covers LICs, LMICs and UMICs (OECD), n.d). Figure 4 below illustrates that the USA has for many years been the single largest donor towards RMNCH globally, giving about $900m in 2020 alone while the total global flow of aid to RMNCH was just under $5b . While Sub-Saharan Africa, with Nigeria and Ethiopia in

the lead, received the largest proportion of global development assistance for RMNCH in 2018, totaling $2.8 billion which also equals 7.1% of the total development assistance for health in 2018. (IHME, 2020).

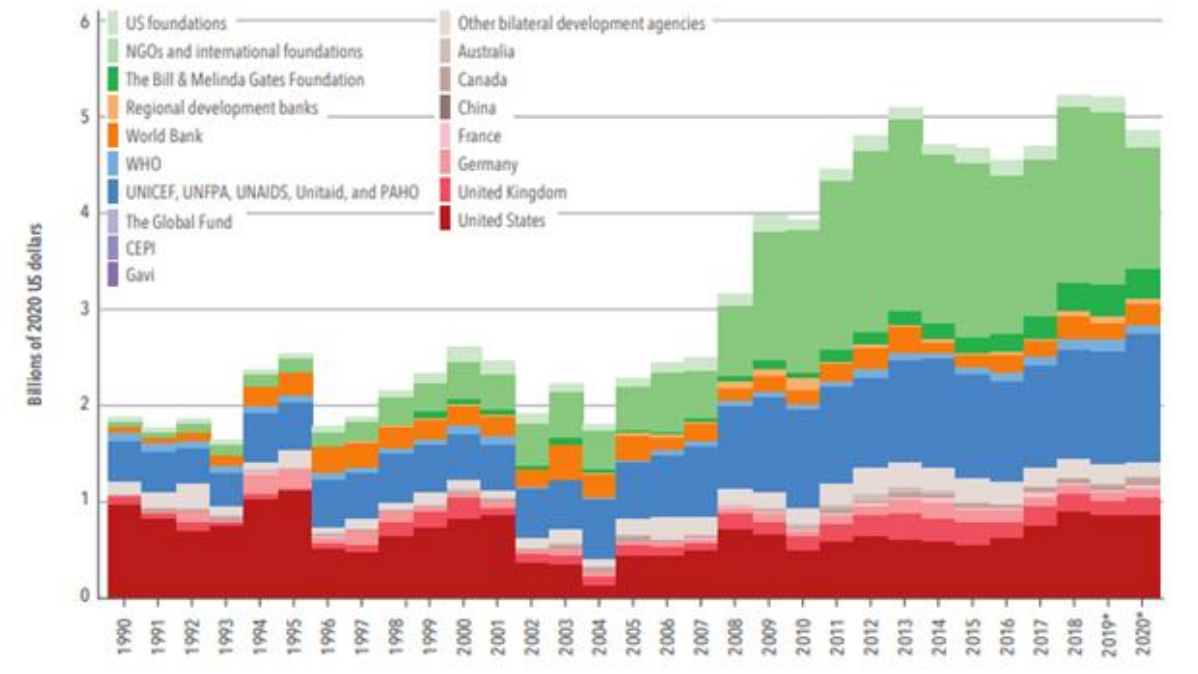

Figure 4: Development Assistance For Reproductive And Maternal Health By Channel Of Assistance, 1990–2020

Source: Institute for Health Metrics and Evaluation (IHME), (2020)

Gap analysis used to inform aid policies highlights that ODA must meet the specific criteria of administering aid with the main objective to promote economic development and welfare of recipient countries; and be concessional, including grants and soft loans (OECD, n.d). In addition, factors considered in aid allocation by donors include presence of humanitarian crises, development needs of recipient countries, geopolitical priorities of donors and the necessity of strategic alliances (OECD, n.d; GOV.UK, 2015). Conversely, despite the purported correlation between foreign aid and the economic development of recipient countries, there continues to be accusations of corruption, dependency, market distortion, funding fragmentation, volatility, high administrative costs for recipient governments and predatory donor behavior sustained by aid; limiting both the impact of aid on health and the sustainability of progress already achieved (Martínez-Álvarez et al., 2017; Thapa, 2020;

Templin & Bendavid, 2020; Finckenstein, 2021). Such negative impacts continue to fuel the lingering dispute between donors and academics on how much development aid really helps or hurts developing countries (Lawson, 2013) with many experts, including Economic Nobel Prize winners Angus Deaton, Esther Duflo and Abhijit Banerjee arguing that development aid is mostly harmful but harmonization of aid efforts can result in increased efficiency and effectiveness for delivering global development (Finckenstein, 2021; Lawson, 2013).

The question then is, seeing these negative impacts of foreign aid, why does it persist? The Dependency theory (DT) and Resource Curse Theory (RST) can be employed for better understanding. The Dependence theory regards capitalism as a world-system driven by neoliberalism where the ability of less developed countries (LDC) to exit from low into higher productive capacities is grossly weakened due to sustained resource extraction, cheap labor, trade and foreign aid from more developed countries (MDC) (Kabonga, 2016; Kiely, 2017; Sithole, 2014). The resource curse theory posits that mineral and fuel abundance in less developed countries (LDCs) tends to pervert social, economic, political and developmental outcomes by encouraging corruption and mismanagement leading to weakened governance and institutions, as well as possibly igniting conflict (Ross, 2018). These governments tend to direct efforts to exploiting resource in place of investing in inclusive development (Ross, 2018).

However, the RST inadvertently blames LDCs for their underdevelopment, overlooking the exploitative global economic hierarchy described by the DT which fosters unhealthy reliance on resource flows such as foreign aid from MDCs to LDCs (Ayelazuno, 2014). These theories frame why foreign aid, despite its negative impacts, continues to persist by showing that instead of fostering development, aid can reinforce economic dependency and further prevent locally sustained growth in recipient nations.

2.3.4 Other Sources of Health Financing

Concerning other forms of local funding for RMNCH in Africa, Faye et al., (2020) mentions the importance of more local financing sources beyond OOPs and government spending to strengthen the delivery of RMNCH services for improved outcomes across the continent.

Loans are a common alternative for health financing in African nations (Kentikelenis, 2018; Alexander et al, 2017) and there is evidence that their impact on RMNCH is complex and often negative. Pandolfelli et al (2014) report increase in maternal and infant mortality rates in

African countries that take loans from International Monetary Fund (IMF) to finance RMNCH. This may be because loans from international financial institutions, enable their influence in health financing strategies in African nations and are linked to severe structural adjustment programs to ensure debt service costs are covered, which restrict funding to healthcare and can have significant implications for health outcomes (Kentikelenis, 2018; Alexander et al, 2017).

There is also overwhelming evidence from research supporting the critical role of various types of health insurance as a health financing source for alleviating financial burdens and vulnerability of households who make OOPs for healthcare. Cuong (2011) reported that health insurance interventions led to a decrease in OOPs by 36% to 45% and this aligns with Thành et al. (2021) who reported a 21% reduction in OOPs. Interestingly, Figure 5 highlights that African nations have some of the worst global statistics for health insurance coverage, a situation reflected in the high reportage of OOPs.

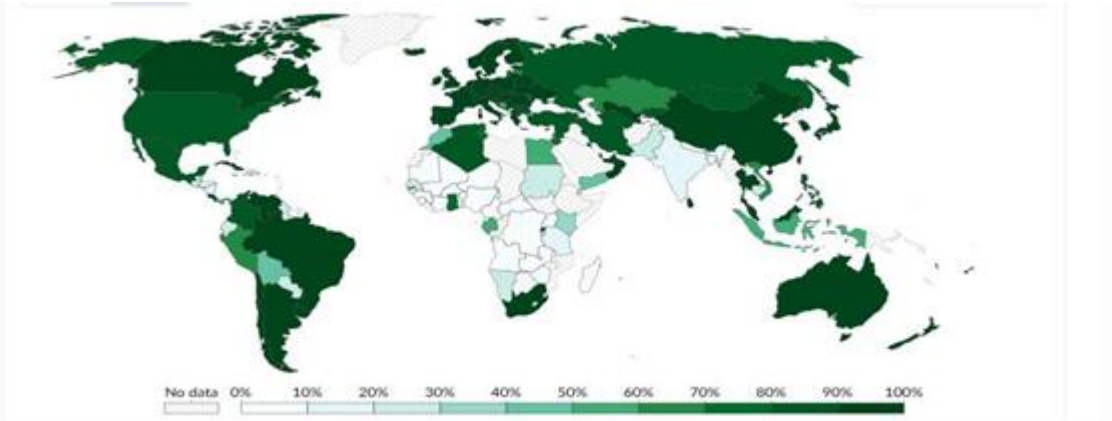

Figure 5: 2011 Estimate Of Health Insurance Coverage As A Percentage Of Total Health Population

Source: Our World In Data (OWID) (n.d) based on ILO (2014) and OECD (2017) [original data].

Table 1 however highlights local funding sources highlighted in literature, including innovative financing, proposed and implemented across Africa.

Other local sources of RMNCH funding in African countries from literature	Description	Authors
Health Insurance Schemes	Includes community-based, social health insurance and national health insurance, health savings accounts (HSA),	Shimeles, A. 2010; Fenny et al., 2021; Nevondwe & Odeku, 2014; Odeyemi, 2014
Public-Private Partnerships (PPPs)	Covers government and private sector collaborations to finance and deliver RMNCH services by leveraging private sector efficiency and resources.	Hellowell, 2019; Kula & Fryatt, 2014
Social Impact Bonds (SIBs)	Private investors provide upfront capital for health interventions, which is repaid by government upon the achievement of specific outcomes.	Abdullah et al. 2019; Dieteren et al., 2023
Mobile health payment platforms	Enable communities to raise funds for RMNCH services and facilitate payments for healthcare through mobile technology for example a mobile health payment system in Kenya allowed users to save and pay for healthcare services, improving access to RMNCH care	Abajobir et al., 2021; International Labour Organization, 2020.
Taxes and Levies	Includes 'sin' taxes that are imposed on goods considered harmful to health, such as tobacco, alcohol, and sugary beverages.	Witter et al., 2016; Goodchild et al., 2016; Brikci, 2023
Social Investments	Conditional cash transfer (CCT), vouchers and subsidies	Brikci, 2023; Terefe & Teera, 2018

Table 1: Other local sources of RMNCH funding in African countries from literature

Source: Several authors

2.4 Domestic Resource Mobilization: Theories and Strategies for Achieving Sustainable Health Financing in African Countries

Domestic Resource Mobilization (DRM) is a crucial aspect of a country's economic development that involves internal fundraising for the financing of its initiatives, instead of relying on international aid or loans (Popoola et al., 2018). DRM has been shown to significantly contribute to sustainable growth and development and maintain progress in nations, especially in sectors like health, where external support may decrease (Berman et al., 2018; Franks et al., 2018). Even though WHO recommends that DRM should be the main source of sustainable health financing (WHO, n.d. b), many African nations are still reliant on

OOPs and aid to fund health services making funding for these services unstable and insufficient (Mbachu et al., 2023).

Literature emphasizes the critical need to enhance DRM in Africa (Bolch et al., 2017; Nnadozie et al., 2017) and other regions and the 2015 Africa Capacity Report analysis found that capacity challenges in DRM are mostly due to poor tax management and revenue collection, minimal savings, poor financial inclusion, and significant illicit financial flows (IFFs) (The African Capacity Building Foundation, 2015). This is supported by UN Trade and Development (UNCTAD) (2020) which opined that the direct consequences of illicit financial flows (IFFs) on development in Africa are mostly seen in reduced levels of DRM and the significance of increasing tax revenue lies in its potential to check IFFs and reclaim misappropriated assets.

According to Stenberg et al. (2010) DRM strategies for health ensure more sustainable and predictable funding for healthcare services, helping countries work towards achieving universal health coverage and improving the overall health outcomes of their populations. They include broadening the general tax base to expand the sources of government revenue to allocate more funds to the health sector; imposing taxes or levies on specific consumption goods or sectors like tobacco and alcohol; imposing levies on major financial transactions; targeted levies on mobile phone usage; and increased taxation on large organizations (WHO, 2010; Stenberg et al., 2010). That said, these strategies may tend to overlook differences in local contexts between MDC and LDCs like African countries, where many are unable to efficiently use resources to optimize health gains (Babalola & Moodley, 2020).

This disregard of local context can precipitate DRM success in developed countries yet failed attempts in developing countries. The importance of prioritizing local contexts for developing and implementing strategies can be examined through the Localization concept in international development which emphasizes tailoring strategies to local contexts and engaging local stakeholders directly, instead of depending on international intermediaries, to create more effective and inclusive interventions (Firchow & Wingender, 2023; Frennesson et al., 2022). Consequently, the developmental process of implementing strategies within the specific local contexts and constraints of African countries is more effective than the 'copy-and-paste' approach commonly promoted in international development (Asante et al., 2020; Olaniyi et al., 2021). Therefore, to truly identify key strategies for increasing DRM for health in African countries, it is essential to consider evidence-based country-specific approaches.

Manzi et al. (2017) found that more relevant DRM strategies include resource management capacity building and support for healthcare personnel, and this was implemented as mentorship and coaching interventions in five African countries- Ghana, Mozambique, Rwanda, Tanzania, and Zambia. More specifically, Gabon, Ghana and Rwanda have extended healthcare access to both formal and informal sectors by supplementing general budget expenditures with health insurance schemes funded through taxes (WHO Regional Office for Africa; 2021).

With only 13 years remaining until 2030, African countries face an urgent need to actively transition to more government spending while reducing reliance on OOPs and external financing (WHO Regional Office for Africa; 2021). Asides from taking ownership of health financing through sustainable DRM policies and reforms relevant to their local contexts, African governments must consider the centrality of progressive economic development to achieving sectoral reforms including the health sector. Tandon et al., (2020) report that although achieving more efficient DRM can result in higher government healthcare spending, it may also be realized if the economy were to increase in size (the most sustainable means) or if more taxes were collected increasing government revenue, or if the budget allocation to health were increased. The framing of how this health financing shift happens when an economy grows is offered by the Health Financing Transition Theory (HFT). The HFT posits that as national incomes rise, there is an increase in health expenditure levels, simultaneous with an increase in the government share of health spending and a reduction in external financing and OOPs for health (Tandon & Reddy, 2021). In elaborating on the HFT, Fan & Savedoff (2014) explain that as countries advance developmentally, mechanisms for mobilizing health financing evolve to emphasize domestic public financing of healthcare services. Figure 6 supports the premise made in the HFT and shows that between 1995 to 2016, there was an acceleration in the relationship between a measure of economic growth, Gross Domestic Product (GDP) and health spending globally. Figure 7 also supports the HFT and presents how health financing tends to increase with economic development.

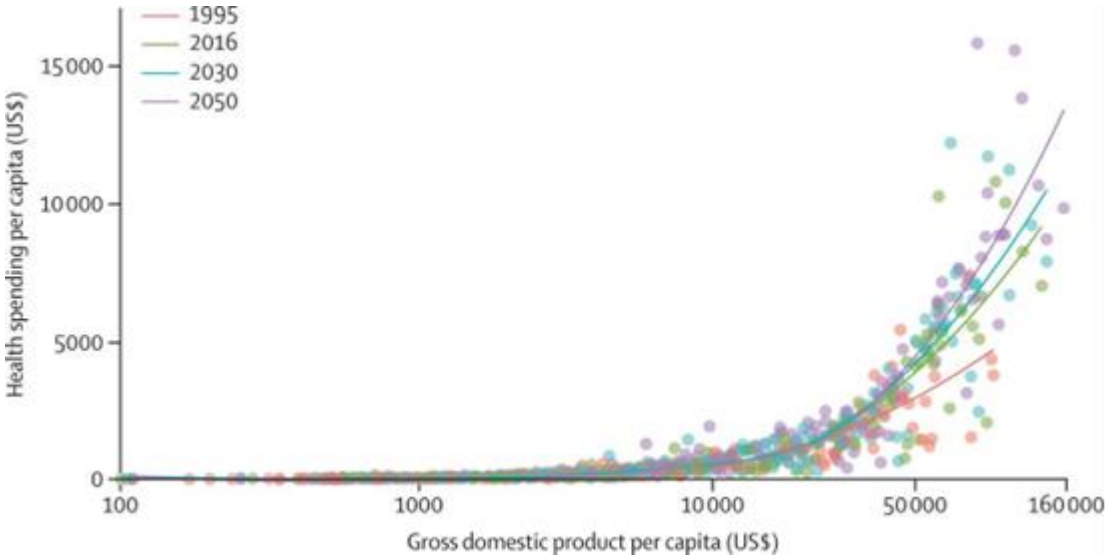

Figure 6: Health Spending Per Capita By Gross Domestic Product Per Capita, For 1995, 2016, 2030, And 2050

Source: Fan & Savedoff, 2014

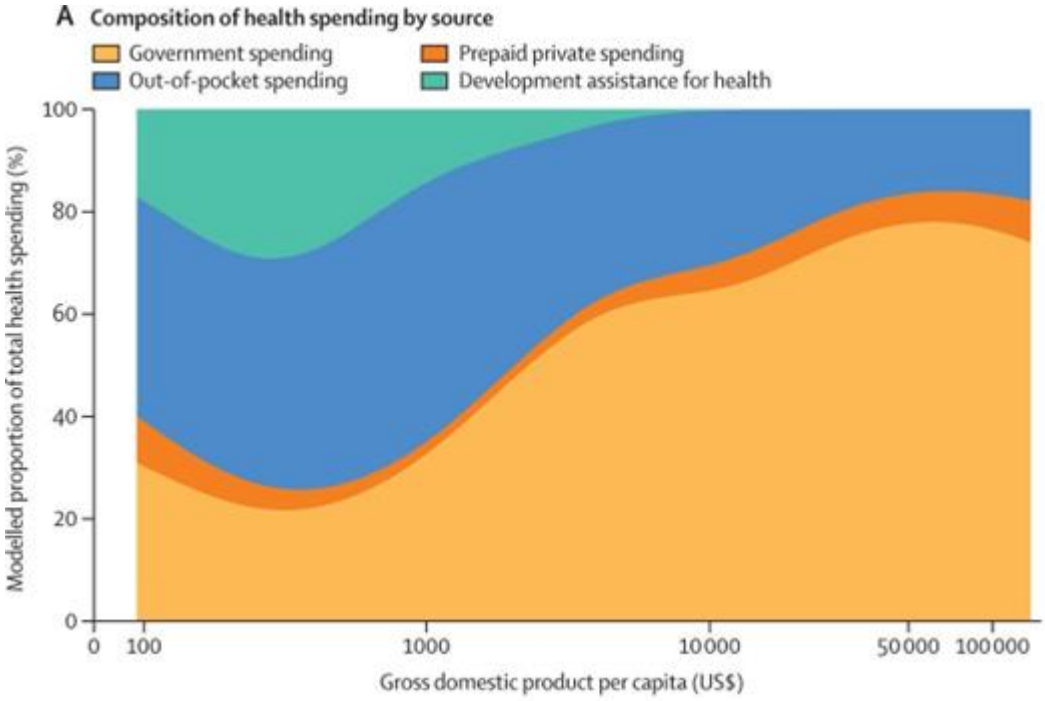

Figure 7: Economic Development And The Composition Of Health Spending By Source And Proportion Of Health Spending From The Government In 2016

Source: Fan & Savedoff, 2014

2.5 The Interplay of Data Tracking and Statistical Capacity with Governance and Development in African Countries.

Data collection and tracking form the building blocks of statistical capacity, a crucial indicator of state capacity, that is, a governments' ability to effectively design and implement meaningful policies to overcome challenges and sustain their sovereign existence (Khemani, 2019). Statistical capacity is critical infrastructure for achieving change in health systems; for instance, reliable data on health indicators such as access to RMNCH services are useful for designing targeted interventions for affected women (Khemani, 2019). Many African countries lack vigorous statistical systems underscoring broader issues of administrative inefficiency and poor governance (Bartolomeos, 2018; Mo Ibrahim Foundation & Paris 2!, 2020). These deficiencies in statistical capacity often lead to misinformed policy decisions for meeting citizens' needs, which perpetuate cycles of poor governance and inefficiency (Hoogeveen J. & Nguyen N.T.V, n.d)

As inputs for statistical capacity, tracking of quality data is essential for several reasons including evidence-based policy-making by governments, efficient allocation of resources to ensure the most vulnerable populations are reached and for monitoring and evaluation of the progress of programs and processes (Imani-Nasab et al., 2017). Tracking in research encompasses the methodical continuous observation of a subject and collecting data of its observed characteristics and patterns over a period, while the analysis of the tracked data can elicit insights on the subject which is critical for forecasting, identifying disparities and associations and making informed decisions (Turner et al., 2000). Furthermore, the quality of data is dependent on the quality of tracking and high-quality data and monitoring frameworks result from high quality research (GOV.UK, 2020). Despite evidence of inadequate research rigor across Africa, leading to dependence on foreign agencies for statistical reporting (Bartolomeos, 2018), Guleid et al (2021) and Milat et al (2011) propose that this is perpetuated by a lack of robust funding for building African research and statistical capacity and governments' unwillingness to uptake research findings, even when available.

The World Bank's Statistical Capacity Index is widely used to measure country statistical capacity and assesses methodology, data sources, periodicity and timeliness (Pullinger et al.,

2021). Pullinger et al. (2021) found strong correlation between low Statistical Capacity scores on the index and poor outcomes in other development indicators such as human capital, governance, poverty, and inequality. This was evidenced during the COVID-19 pandemic which revealed the vulnerability of Africa's statistical capacity in the collection and management of basic demographics and economic information (Lindsey, 2022).

The AU/OECD 2023 collaborative report found that weak data-tracking in African nations is a key obstacle to domestic resource mobilization (DRM) impacting investments and sustainable development across all sectors, including health. (Commission, A.U & OECD, 2023). The project-based approach of foreign donors that focuses on short- term specific outcomes preventing long-term development by failing to build lasting infrastructure also damages the statistical capacity of African nations, worsening dependence on foreign aid, and leaving countries struggling to sustain progress when funding ends (Chasukwa & Banik, 2019; Dietrich, 2013). Consequently, it has become even more critical to build infrastructures that can strengthen local capacity for data tracking within African nations. Such data-tracking infrastructure refers to tools, systems and technologies that collect, analyze, and report health-related data (Waheed et al., 2023). Examples are health information systems, accounting and statistical software, cloud storage, data governance protocols, trained personnel and technical expertise. This infrastructure is critical for ensuring that health policies are based on actionable, timely and high-quality data (Eatman & Strosnider, 2017).

Accurate data on DRM sources supports evidence-based decision-making, allowing policymakers to address gaps and allocate resources according to the actual needs of RMNCH programs, leading to more effective interventions and improved health outcomes (WHO, 2017; Martinez-Alvarez et al., 2017). Also, transparent data on funding sources can be leveraged for advocacy efforts, empowering stakeholders to advocate for increased investment to achieve sustainability in RMNCH (Atim et al., 2019).

Data-tracking for DRM starts with identifying relevant information for tracking DRM sources and Health accounts offer valuable information over specific periods for tracking financial flows and expenditure within the health system, including components like financing sources, care providers, and health functions (Rahimisadegh et al., 2022). Crucial standardized tools for developing and comparing such health accounts include National Health Accounts (NHA), A System of Health Accounts (SHA), International Classification of Health Accounts (ICHA),

Health Accounts Production Tool (HAPT) and the WHO Global Health Expenditure Database (GHED). Even though levels of implementation vary across nations, these tools are critical and fundamental for tracking and producing high quality health expenditure data.

2.5.1 A System of Health Accounts (SHA)

A System of Health Accounts (SHA), introduced in 2000 and updated in 2011, was developed by the OECD, and adopted by the WHO. It is a standardized and international methodology for the comprehensive tracking, collection, processing, and dissemination of health financing data and flows, including sources, expenditure, allocation and management (OECD et al., 2011). It uses a complex nomenclature and classification of expenditures to give in-depth insights into how health resources are allocated; and allows for standard comparisons of health financing data over time between nations, including all health-related financial flows, such as government spending, OOPs, and private sector contributions (OECD et al., 2011). The SHA, to varying extents, has been implemented by 148 countries as at 2018 (Rosen et al., 2018) .

2.5.2 International Classification for Health Accounts (ICHA) Codes

The International Classification for Health Accounts (ICHA) uses codes that define key classifications for healthcare systems and financing mechanisms across countries within the System of Health Accounts (OECD et al., 2011). The ICHA codes are essential for understanding and classifying health expenditures and by providing a common language via standardized codes, they allow for consistent reporting, comparability and analysis of health financing trends globally (Bui et al., 2015; Rabiej, 2020). Understanding ICHA codes is particularly vital for policymakers and researchers to track and analyze specific areas for improvement in health financing systems and make appropriate policy decisions (OECD et al., 2011). The types of ICHA codes are included in Appendces.

2.5.3 National Health Accounts (NHAs)

National Health Accounts (NHAs) are country-specific applications of the internationally accepted SHA framework, offering insights into health systems' performance by tracking

resource flows from sources to uses. (OECD, 2011). By utilizing NHA data, governments can assess the performance of their health systems, identify areas for improvement, and strengthen evidence-based healthcare policymaking (Schneider,2021). The NHA employs primary data sources including government budgets, household and enterprise surveys and insurer claims as well as secondary data sources (WHO et al., 2011). Then, based on the SHA and using the ICHA codes, the NHA is used to present data collected to show flow of financing sources (fund providers), financing agents (recipients and users of funds to exchange for health activities), care providers (personnel who receive money to deliver health activities), functions (various forms of health goods and services) and health system inputs (elements put in to operationalize the health systems such as health personnel, medical products and technologies, utilities) (WHO, 2003).

2.5.4 Health Accounts Production Tool (HAPT)

The Health Accounts Production Tool (HAPT) is a valuable instrument for generating and managing health accounts data. It is a structured framework for the compilation and organization of health expenditure information, promoting transparency and institutional accountability within health systems (Nathan et al., 2020). The HAPT software automates the generation of health financial data and is integrated into Health Management Information Systems (HMIS) at various data source points where it streamlines the process of data entry, analysis, and production of results for developing NHAs (Global Health Data, n.d). The tool generates reports using charts and visuals, offering insights into health budgets (Teles et al., 2017).

2.5.5 WHO Global Health Expenditure Database (GHED)

The WHO Global Health Expenditure Database (GHED) is a comprehensive repository of health-related information and data from countries globally, providing access to diverse health indicators, statistics, and reports that contribute to research, global health monitoring and evidence-based decision-making; serving as an important resource for policymakers, researchers, and healthcare professionals (WHO, n.d a; Hosseinpoor et al., 2015). The GHED relies on NHA data submitted by countries using the HAPT and is updated annually through a collaborative process managed by the WHO (WHO, n.d a). This process incorporates substantial input and feedback from individual countries, international agencies and various

experts (WHO, n.d a). The GHED, as an international standard for statistical reporting, is crucial for producing inter-operable and comparable official statistics, even though it is complex and remains the most reliable source of internationally comparable data on health expenditures for countries (Price et al., 2016). The significant disparities in the financial, technical, and technological capacities of country statistical agencies (Bizier at al., 2022) has necessitated statistical reporting databases such as the GHED to promote the adoption of the SHA 2011, the ICHA codes and the HAPT tool as statistical reporting standards. However, the GHED is not without its attendant problems. While the GHED offers valuable insights on global trends, there are issues around timeliness and significant delays of health data reporting in sub-Saharan Africa with the most recent analysis being about two years old (Lacroix & Long, 2024). This is mainly because NHAs are complex, human and capital resource-intensive, resulting in delayed reporting (WHO, 2023b; Lacroix & Long, 2024). Since 2022, WHO has aimed to reduce release lags to one year, a goal mostly achieved by HICs and UMICs with fewer LICs and LMICs, which are more prevalent in Africa (Lacroix & Long, 2024).

2.5.6 The Advocacy for National Health Accounts (NHAs) as the Preferred Health Expenditure Tracking Tool

Other tools for health resource tracking that can track a country's spending across health priority areas are Public Expenditure Reviews (PER) and Public Expenditure Tracking Surveys (PETS) (Rosen et al., 2018; Vilcu et al., 2020)**.** However, the NHA has been documented extensively across literature to be the best Health Expenditure Tracking (HET) tool because as Table 2 illustrates, both the PER-Health and PETS-Health rely solely on the premise that the health sector is being mostly funded by the government while the scope of the NHA encompasses all sources of health expenditures. Furthermore, Table 3 details literature on the critical advantages of NHAs over other methods of health expenditure data-tracking.

	Tool	Scope	Purpose
Tools for Tracking Non-Disease-Specific Health Spending	**PER-Health** (Public Expenditure Review for Health)	Publicly managed expenditures and financing flows	Evaluates the efficiency, effectiveness, equity, and sustainability of spending managed by the government against pre-defined parameters.
	PETS-Health (Public Expenditure Tracking Survey for Health)	Publicly managed expenditures, from central level to service providers	Assesses spending that is publicly managed for effective service delivery. Identifies sources of leakage and bottlenecks between the source of spending and the end user.
	Health Accounts/ SHA 2011 (System of Health Accounts 2011)	All health expenditures	Tracks total health system expenditures across three dimensions that describe how funds are mobilized, managed, and used to purchase and deliver health goods and services.

Table 2: Health Expenditure Tracking Tool Objectives and Use

Source: Rosen et al., (2018)

Advantages of National Health Accounts over other Health Expenditure Tracking (HET) Tools	References
Can be adapted to provide unique local contexts of existing health financing infrastructure and data availability of each country, which is more relevant for national policy-making; unlike surveys or financial reports	Brenzel et al., 2016
All-encompassing, no-omission exercise for mapping all health expenditures, flows, sources and functions within a country	Nathan et al., 2020; Rahimisadegh et al., 2022
NHA data permits analysis of financial risk protection, health financing equity, resource efficiency, which are important for evidence-based decision-making	Bui et al., 2015
Ensures consistent tracking of all health financing trends over time with international comparability due to its consistent data collection and reporting method	Teles at al
The NHA's robust health resource tracking is essential for improving the efficient and equitable resource allocation, evaluating funding adequacy, the promotion of accountability and transparency, and use as a health systems advocacy tool	Musiega et al., 2023
Used by policy-making groups to evaluate funding gaps for equity and efficiency in allocation, especially when the resource is for a designated underserved population or aspect or program of RMNCH	Martinez-Alvarez et al., 2020
Useful for coordinating new funding sources by establishing up-to-date feedback on their enhanced effectiveness and Reducing duplicated funding for the same programs- an important strategy for mobilizing resources to designate new sources for particular populations or programs	Picanyol et al., 2015
Provide a concise picture of the existing landscape, options for financial tactics	Rosen et al., 2018

Table 3: Advantages of National Health Accounts Over Other Health Expenditure Tracking (HET) Tools

Source: Several Authors

2.6 Challenges and Strategies for Enhancing Domestic Resource Mobilization (DRM) Tracking for Reproductive, Maternal, Neonatal and Child Health (RMNCH) in African Countries

Some evidence-based strategies to enhance the tracking of DRM for RMNCH in African nations are proposed in literature. (Boerma et al., 2018) made a case for the strengthening the uptake of the System of Health Accounts (SHA) tool in creating NHAs by African countries, as the SHA has since become the global standard for constructing NHAs (Nathan et al., 2020). This was supported by Hilber et al., (2016) who proposed the enforcement of specific RMNCH subaccounts within national health accounts. Another crucial component for building capacity

and fostering stakeholder collaboration that can strengthen DRM for RMNCH tracking efforts include closing data collection and analysis gaps and extending this tracking mechanisms to subnational , state, community settings and the civil society organizations, (Afnan-Holmes et al., 2015; Ouédraogo et al., 2019). Furthermore, Mathias et al. (2022) propose that long-term planning and leveraging health information management technology will enhance a continuous flow of relevant data for comprehensive resource tracking, contributing to strengthening Africa's health systems.

2.7 Concluding Notes

With the right strategies and commitment, DRM can improve RMNCH outcomes, as seen in South Africa, Morocco, Zimbabwe, and Zambia, with outcomes further enhanced by effective fund allocation and targeted policies (Atim et al., 2019; Johnson, 2016). Morocco improved tax systems and allocated funds specifically for RMNCH; South Africa has been proactive in DRM with efforts around strengthening tax collection mechanisms and enhancing financial systems; Zambia focused on improving tax compliance and revenue collection while also targeting specific health-related taxes; and Zimbabwe has successfully enhanced DRM through innovative financing mechanisms (Atim et al., 2019).

Peru is another successful example of an LMIC improving domestic resources and healthcare delivery by tracking DRM for RMNCH. The country has made substantial progress in RMNCH, relying mostly on its own financial resources. This highlights the importance of tracking DRM for RMNCH using comprehensive health accounting frameworks to monitor funding flows effectively at all levels (Huicho et al., 2018b). They achieved this by establishing specific subaccounts for RMNCH within their NHAs to track budget allocations and expenditures dedicated to RMNCH (Huicho et al., 2018a). In addition, the effectiveness and efficiency of resource tracking mechanisms strengthened resource mobilization from more funding sources being activated enabling greater reliance on its own financial resources (Huicho et al., 2018b). This is a feat worthy of emulation by African countries.

From the foregoing, I have shown that there are several disparities in data-tracking and statistical capacities across African nations that impact on the availability of high-quality data that can inform evidence-based policies for strengthening RMNCH local health financing efforts and deliver improved health outcomes to women. However, there is a dearth of

understanding on the patterns and practices at play within the contexts of African countries that characterize these statistical incapacities in tracking RMNCH local funding sources. The rest of this research will attempt to explore and fill this missing knowledge.

Chapter 3 METHODOLOGY

This research seeks to understand the extent to which African governments are tracking local funding sources for RMNCH and the types of funding sources that are being tracked. RMNCH is a key component of the health system that delivers a significant proportion of health services within African healthcare delivery and which is highly prioritized due to its critical impact on reducing maternal and child mortality as well as achieving health-related SDGs (Hasan et al., 2020; A. McKenzie et al., 2016). The resilience of a health system can be seen in its capacity to efficiently and effectively mobilize resources to deliver RMNCH services (McKenzie et al., 2016) and tracking the domestic sources of RMNCH funding is ultimately important because sustainable financing for RMNCH hinges on consistent domestic resource allocation (WHO, 2017). The relevance of this research lies in its potential to offer insights into the effectiveness of local resource mobilization for RMNCH in African countries, the statistical capacity of African states and the prioritization of RMNCH. The findings of this research may be beneficial for informing evidenced decision-making and policy design concerning DRM for RMNCH strategies, highlighting gaps and areas for improvement and further research, and demonstrating the importance of tracking domestic financing as an advocacy tool for mobilizing more local resources.

3.1 Research Questions

1. What are the capacities of African governments for tracking local funding sources for Reproductive, Maternal, Neonatal and Child Health?
2. Which are the different types of local funding sources for Reproductive, Maternal, Neonatal and Child Health being tracked across African countries?
3. What are the financing priorities concerning Reproductive, Maternal, Neonatal and Child Health across Africa?

The aim of this research is:

1. To systematically assess the scale and coverage of tracking for different types of domestic funding sources for Reproductive, Maternal, Neonatal, and Child Health in African countries;
2. To identify the various types of local funding sources for Reproductive, Maternal, Neonatal, and Child Health being tracked across different African countries.
3. To assess how funding allocations for RMNCH differ across African countries.

3.2 Research Design

My research is a systematic review that synthesized data from 38 African countries extracted from their National Health Accounts (NHAs) produced using the SHA 2011, a WHO-approved standardized health expenditure reporting framework and from the online WHO Global Health Expenditure Database (WHO, n.d a). This will involve a) Evaluating the completeness of the data collected, the frequency of data reporting and the statistical capacities for tracking local funding sources for RMNCH among African countries. b) Using the International Classification of Health Accounts (ICHA) codes to compile and categorize the specific types of domestic revenues sources for Reproductive, Maternal, Neonatal, and Child Health being tracked across African countries. c) Evaluating two health expenditure indicators- Reproductive health as a percentage of Current Health Expenditures (CHE) and Current Health Expenditures (CHE) as a percentage of GDP to determine the prioritization of RMNCH.

The NHA is a WHO-approved standardized health expenditure reporting framework while the WHO Global Health Expenditure Database (GHED) is a repository that integrates National Health Accounts (NHAs) of WHO member countries since 2000 (WHO, n.d a). This database is considered the most extensive and accessible repository of data for tracking the flow and efficiency of health resources within health systems by offering standardized and comparable health systems data across a wide range of countries, which can inform decisions on strategies for health financing and resource management, ultimately contributing to more efficient health systems globally (WHO, n.d a). A Systematic Review is a type of literature review used in research that's characterized by rigorous and reproducible methods and clear inclusion criteria to synthesize evidence that answer its narrowly defined research questions (Lasserson et al., 2019). This transparency provides strong basis for evidence from systematic reviews, compared with other types of reviews, to be used in practice and policymaking (Campbell et

al., 2019). By using existing data from NHAs created with the same SHA 2011 template, the systematic review can reveal patterns and disparities in tracking DRM for RMNCH across the different African countries, which offers a more holistic and comparable context than a primary or single-country research can provide. Furthermore, it will provide a preview of possible key areas for further targeted primary research.

I employed the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) 2020 flow diagram (Figure 10) to display my document search and it details how I identified, screened, and included or excluded documents. The PRISMA 2020 flow diagram is a visual and transparent presentation of the screening process for studies and reports used in a systematic review. It reports the researchers' decisions made during the screening stages- the number identified, included and excluded, and the reasons for exclusion (Page et al., 2021).

- **Eligibility: Exclusion and Inclusion Criteria**

Health expenditure data available on the WHO Global Health Expenditure Database (GHED):

  - of African countries with sub-accounts for Reproductive Health according to the System of Health Accounts (SHA) 2011 framework
  - for most recent year on the GHED, that is 2021
  - availability of country most recent NHA report online

National Health Accounts:

  - published by the government of African countries
  - includes sub-accounts for Reproductive Health according to the System of Health Accounts (SHA) 2011 framework
  - written in English or French (translated to English) or Portuguese (translated to English)
  - availability of country most recent NHA report online
  - African country has health expenditure data available on the WHO Global Health Expenditure Database

The geographical scope of the research design covered the African continent and the sample included all 54 African countries.

- **Population**

The diverse Africa continent is made up of 54 countries and 5 regions- North Africa, West Africa, Central Africa, East Africa, and Southern Africa. The countries vary greatly with distinct and unique histories, politics, geography, traditions and culture; and this diversity is reflected extensively in their economies, health systems and how health financing is mobilized. This research used the African Development Bank classification of African countries presented in Table 4.

African Regions and Countries				
North Africa	**West Africa**	**East Africa**	**Central Africa**	**Southern Africa**
Algeria	Benin	Burundi	Central African Republic	Eswatini
Egypt	Burkina Faso	Comoros	Democratic Republic of Congo	Lesotho
Libya	Cabo Verde	Djibouti	Gabon	Angola
Mauritania	Niger	Eritrea	Cameroun	Botswana
Morocco	Nigeria	Ethiopia	Chad	Madagascar
Tunisia	Côte d'Ivoire	Kenya	Congo	Malawi
	Gambia	Seychelles	Equatorial Guinea	Mauritius
	Ghana	South Sudan		Mozambique
	Guinea	Sudan		Namibia
	Guinea-Bissau	Rwanda		Sao Tome and Principe
	Liberia	Somalia		South Africa
	Mali	Uganda		Zambia
	Senegal	Tanzania		Zimbabwe
	Sierra Leone			
	Togo			

Table 4: Regional Classification of Africa with Member States

Source: Africa Development Bank (n.d)

- **Population, Intervention, Comparison, Outcome, and Study Design (PICOS) framework**

The PICOS framework is a widely used tool in systematic reviews and meta-analyses, to structure and formulate research questions, to define inclusion and exclusion criteria for studies and ensure a systematic and comprehensive approach to gathering and analyzing evidence (J. E. McKenzie et al., 2023). Table 5 shows how the Population, Intervention, Comparison, Outcome, and Study Design (PICOS) framework was adapted for this systematic review.

Population	Intervention	Comparison	Outcome	Study Design
African countries	Tracking of domestic funding sources for RMNCH	Comparative analysis across countries	The extent of tracking of domestic RMNCH funding sources among African countries	Descriptive and comparative analyses
The focus is on African nations and the systematic review will include data from all countries on the African continent that report on domestic resource tracking for RMNCH in their National Health Accounts (NHAs).	The intervention is the system used by African countries to track domestic funding for RMNCH. This includes their RMNCH financing data reported in the WHO Global Health Expenditure Database and data from National Health Accounts (NHAs) prepared with the System of Health Accounts 2011 framework that specifically track RMNCH funding sources based on the International Classification of Health Accounts (ICHA) codes. The review will analyze how and which domestic funding sources are monitored and reported.	In the context of this research, a direct intervention comparison does not directly apply; however , the systematic review compared how different African countries track domestic RMNCH funding. Variations in tracking comprehensiveness, and completeness of data across countries were examined.	The primary outcomes are the African countries that track and report their domestic funding sources for RMNCH and the extent to which they do. This includes examining the amount of detail and comprehensiveness in tracking different sources using ICHA codes. Secondary outcomes could include identifying the implications of tracking on the proportion of RMNCH expenditure	The review included NHAs of African countries and health expenditure data on WHO Global Health Expenditure Database (GHED) that provided data on health expenditure tracking. The resulting quantitative data was analyzed using descriptive statistics, data visualization and narrative synthesis.

Table 5: Population, Intervention, Comparison, Outcome and Study Design (PICOS) Framework

Source: Author

- **Design**

This systematic review research will explore a detailed breakdown of tracked local funding sources, the financing schemes through which they are organized and the financing institutions that deliver these financing as classified by the ICHA codes, across African countries. Following a preliminary search, it was discovered that there is no published research like this systematic review. Thus, the proposed level of granularity in this research is valuable for identifying specific financing sources that are not being tracked or prospective funding sources that are yet to be activated; for raising questions on availability of data-tracking infrastructures; and for directing attention to tracked local sources that can be improved. For data analysis, I employed mixed methods using quantitative analysis to produce descriptive statistics, data visualization (charts, graphs, and maps) to clearly present findings as well as a narrative synthesis of the quantitative data to offer insights. Pearson et al. (2015) report that a mixed-methods approach to systematic reviews can generate findings that are directly applicable to policymakers and practitioners.

Data visualization displays data using graphics and even though understated, it can reveal unusual distributions of data possibly missed by statistics, show interesting features that stimulate further research and assist researchers to become familiar with the features of their data (Unwin, 2020). Narrative synthesis is used in evidence synthesis research like systematic reviews to summarize and explain findings in a qualitative, descriptive manner as opposed to quantitative methods such as meta-analysis(Campbell et al., 2019). In combining descriptive statistics, data visualization and the narrative synthesis, this research adopts a mixed methods design. Mixed methods research involves an iterative process that's inclusive, enhances understanding, and leads to comprehensive, nuanced, and robust research outcomes(Johnson & Onwuegbuzie, 2004) which makes it an appropriate method for the exploratory nature of this systematic review. The rationale for this approach is situated in its ability to offer clear and concise presentation of complex data while employing rigorous data analysis that lends reproducibility and generalizability of the findings as well as reliability and validity to the conclusions and recommendations proposed. Specifically, visual representations of data communicate and highlight key insights easily and in a more engaging manner and the narrative synthesis provides qualitative context to quantitative data which can provide a more nuanced understanding of the data and richer findings (South & Rodgers, 2023).

This research also adopts the more exploratory bottom-up inductive approach that is grounded in data and progresses towards broader generalizations and production of new theories. This inductive study highlights the gap in the tracking and statistical reporting of DRM for RMNCH by African countries, then moves on to the collection and analysis of specific data, and then identifying patterns and trends to produce new insights about DRM for RMNCH practices in African countries.

3.3 Data Collection

Data collection in this systematic review was performed in a systematic, transparent, and reproducible manner to ensure the reliability of the findings.

3.3.1 Data Sources

a. **Databases**

i. WHO Global Health Expenditure Database

The WHO Global Expenditure Database (GHED) was searched to collect comparable reproductive health expenditure data for 54 African Countries and to download PDFs of African country NHAs that met the inclusion criteria. The WHO Global Expenditure Database covers data from 192 nations over a period of 24 years extracted from the NHAs of countries. WHO partners with Member States to update the GHED using data from NHAs, government expenditure records and official national statistics. Estimates are also made to ensure coherence of the data year to year and across countries. The NHAs comply with the SHA 2011 framework and employ the International Classification of Health Accounts (ICHA) codes, both internationally standardized frameworks to maintain data integrity, interoperability and comparability across different countries. WHO has also developed a Health Account Production Tool (HAPT) as a software to analyze health expenditure data and create reports used to develop NHAs. The database is open access, a one-stop platform to access country NHAs and contributes to a better understanding on health spending in different countries. It was noticed that the most recent NHAs were not uploaded on the GHED and this led to further search on other databases and websites.

ii. Pubmed Database

The PubMed Database was searched for the most recent NHA reports of African countries.

b. **Manual Search**

In addition, a manual search on websites of ministries of health and finance of African countries as well as the World Bank and Google search engine was conducted to locate most recent NHAs of African countries.

3.3.2 Search Strategy

a. **Search Strategy for Databases**

i. **WHO Global Health Expenditure Database**

To retrieve the comparative health expenditure data on the GHED, I used the following approach:

- From the Data Explorer section, out of the 439 variables under 'Indicators and Data', I selected 24. I started this by expanding 'Health Expenditure Data' , under which I picked 'Disease and Conditions' and selected the sub-categories in the Figure 8 below.

- Current health expenditure by Disease and Conditions
  - Reproductive health
    - Maternal Conditions
    - Perinatal Conditions
    - Contraceptive Management (Family Planning)
    - Unspecified reproductive health conditions (n.e.c)
- Domestic General Government Expenditure by Disease and Conditions
  - Domestic General Government Expenditure on Reproductive health
    - Domestic General Government Expenditure on Maternal Conditions
    - Domestic General Government Expenditure on Perinatal Conditions
    - Domestic General Government Expenditure on Contraceptive Management (Family Planning)
    - Domestic General Government Expenditure on Unspecified reproductive health conditions (n.e.c)
- External Sources of Funding by Disease and Conditions
  - External Sources of Funding on Reproductive health
    - External Sources of Funding on Maternal Conditions
    - External Sources of Funding on Perinatal Conditions
    - External Sources of Funding on Contraceptive Management (Family Planning)
    - External Sources of Funding on Unspecified reproductive health conditions (n.e.c)
- Domestic Private Health Expenditure by Disease and Conditions
  - Domestic Private Expenditure on Reproductive health
    - Domestic Private Expenditure on Maternal Conditions
    - Domestic Private Expenditure on Perinatal Conditions
    - Domestic Private Expenditure on Contraceptive Management (Family Planning)
    - Domestic Private Expenditure on Unspecified reproductive health conditions (n.e.c)

Figure 8: WHO Global Health Expenditure Database Search Filter for Comparative Health Expenditure Data

Source: WHO (n.d a)

- Under the 192 'Countries' on GHED, I selected all 52 African Countries listed on the GHED . Of the 54 African countries, only 44 had RMNCH subaccounts within their NHAs on the GHED.

- Out of the available 23 years listed under 'YEARS' (1999-2021), I selected 11 years, from 2011-2021, to include NHAs developed using the SHA 2011 framework.
- Of the 12 possible 'Units of Expenditure', I selected '% of Current Health Expenditure'. This is because my research seeks to understand proportions of local funding within the current health spending of African countries.

Secondly, to assess the Current Health Expenditure (CHE) of countries as a percentage of Gross Domestic Product (GDP). I used the following filters depicted in Figure 9:

- Out of the 439 variables under 'Indicators and Data', I selected 6.

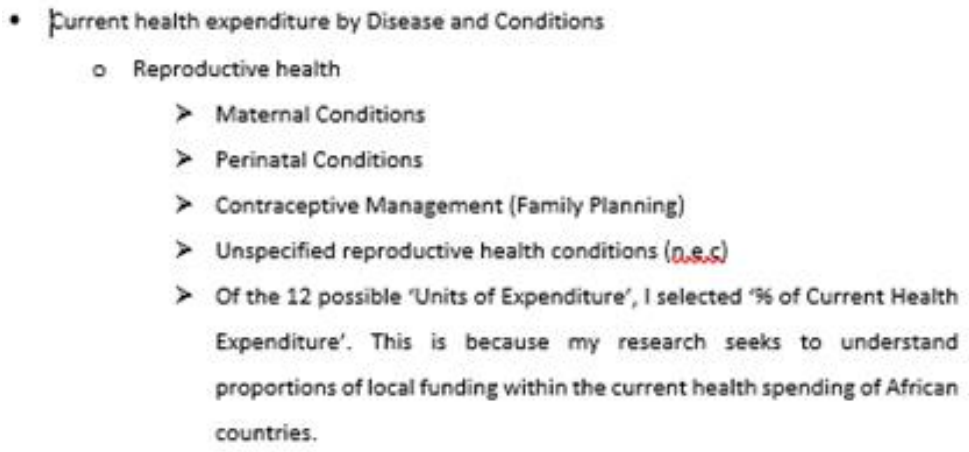

Figure 9: WHO Global Health Expenditure Database Search Filter for Current Health Expenditure (CHE) as a Percentage of Gross Domestic Product (GDP)

WHO (n.d a)

- Under the 192 'Countries' on GHED, I selected all 52 African Countries listed. Of the 54 African countries, only 44 had RMNCH subaccounts within their NHAs on the GHED.
- Out of the available 23 years listed under 'YEARS' (1999-2021), I selected 2021 to reveal the most current %GDP values
- Of the 12 possible 'Units of Expenditure', I selected '% Gross Domestic Product'.

ii. **PubMed Database**

On Pubmed, a comprehensive search strategy was developed using a combination of keywords and MeSH terms with Boolean operators, truncation, quotes and field tags to build comprehensive searches for NHAs of African countries. To run my search, I used the building block approach; that is, I built each concept of the search one block at a time and then I connected these blocks together in a final search to produce a list of relevant literature. Advantages of using this approach are that mistakes can be quicker and easier to identify in these smaller blocks before putting everything together; it produces a wider search of databases; and the stepwise nature ensures the search strategy can be documented and reproduced (Durai, 2020). See final search syntax generated in Appendices.

b. **Manual Search Strategy**

Ministries of Health and Finance websites

I searched for these websites by typing the agency and country in Google search engine (for example, "Ministry of Health Ghana"). Once on the site, I navigated to the documentation or publications section to locate and download National Health Accounts (NHA) reports, along with National Health Development Plans, Service Plans, and Delivery Strategy documents. After a preliminary scan, I found that only NHAs included actual health expenditure, while the other documents focused on future plans.

World Bank Group website

On the World Bank Group's Documents and Reports page (World Bank, n.d b), I searched for "National Health Accounts" using filters aligned with my inclusion/exclusion criteria.

Google Search Engine

I searched for NHAs on Google by typing the country and 'National Health Accounts' in the search box (for example, "Botswana National Health Accounts")

3.3.3 Selection and Screening Process

a. Health Expenditure Data available on WHO Global Health Expenditure Database

Out of the 54 African countries, the GHED does not have Health expenditure data for 2 countries-Eritrea and South Sudan, leaving 52 countries. From this number, based on the inclusion/exclusion criteria, only 38 countries were selected.

b. National Health Accounts

In order to identify eligible NHAs, I first downloaded NHA reports from the Documentation Center on the WHO GHED website using the inclusion/exclusion criteria. This produced NHAs reports for 36 countries. Further search on Google using the inclusion/exclusion criteria produced 2 more NHA reports, from the United States Agency for International Development (USAID) and Partnership for Health (P4H) websites, making a total of 38 NHA reports.

c. PubMed

The search on PubMed yielded 4 documents for screening. The titles and abstracts of all 4 were screened and excluded based on the inclusion and exclusion criteria. Therefore, their full-text articles were not retrieved for further review. Figure 10 is the PRISMA flow diagram visually presenting the flow of studies through the stages of this systematic review from the initial search results to the final included NHAs.

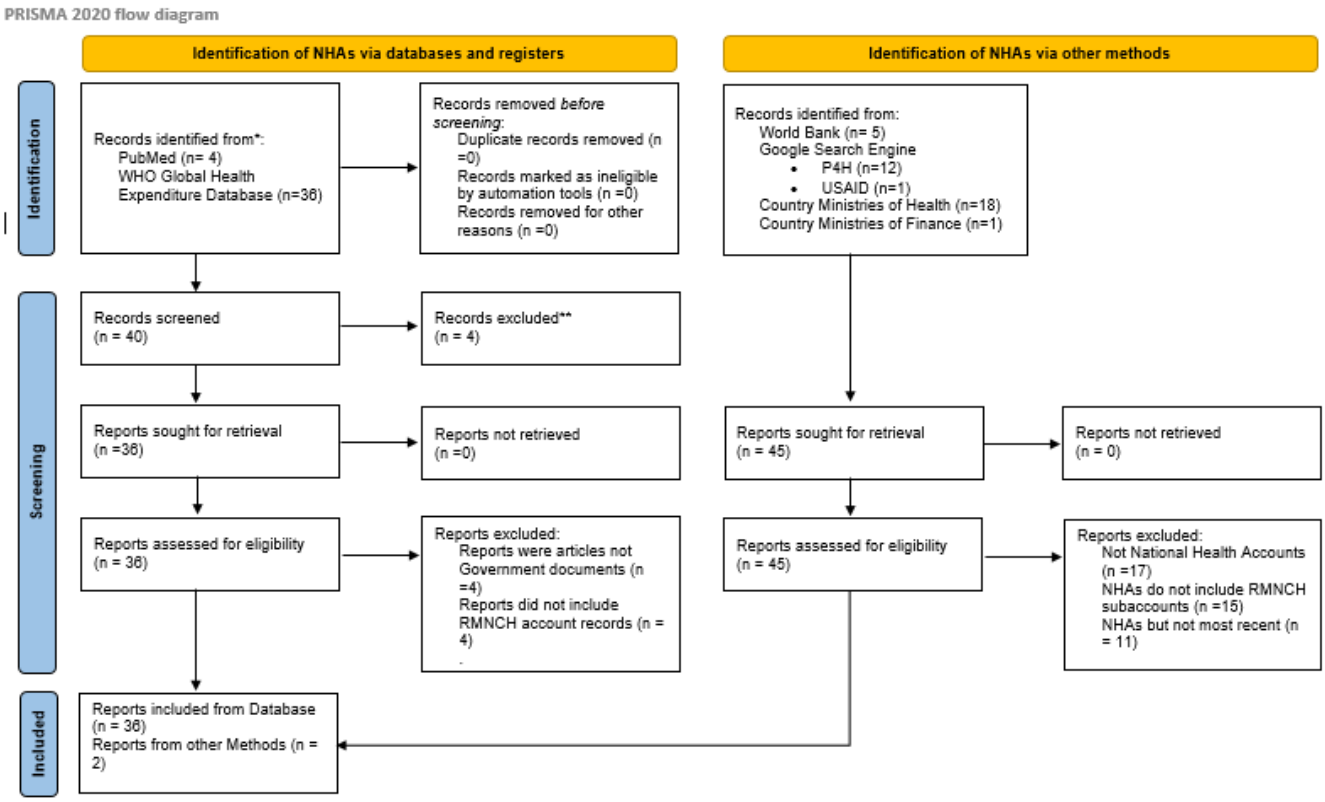

Figure 10: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 Flow Diagram

Source: Diagram- Page et al, 2021; Data-Author

3.3.4. Data Extraction

a. The 3 ICHA Classifications for Financing Sources

The System of Health Accounts (SHA) 2011 classifies 3 ICHA codes that reveal where funds are mobilized from, and which can be tracked; they are-

1. Revenues of Healthcare Financing Schemes (FS),
2. Healthcare Financing Schemes (HF) and
3. Financing Agents (FA)

Figure 11 below explains their meaning and applications.

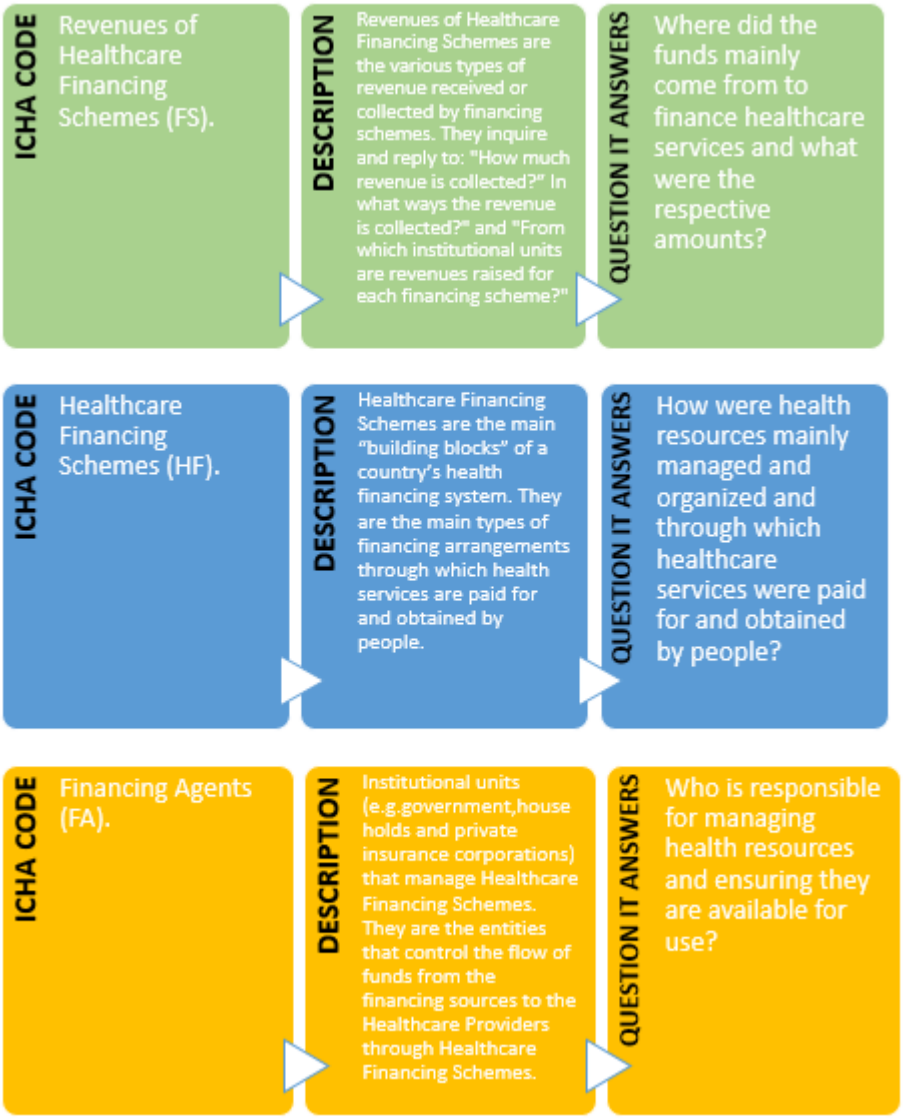

Figure 11: Description of 3 International Classification of Health Accounts (ICHA) Health Financing Codes

National Health Accounts 2020, Reublic of Mauritius

b. ICHA Classification of Disease Conditions- DIS

In classifying the distribution of expenditure by type of diseases, the ICHA code uses Disease Conditions (DIS) and the codes corresponding to RMNCH are classified under 'Reproductive Health'. The DIS classification provides information about resource allocation by disease and Figure 12 presents their description.

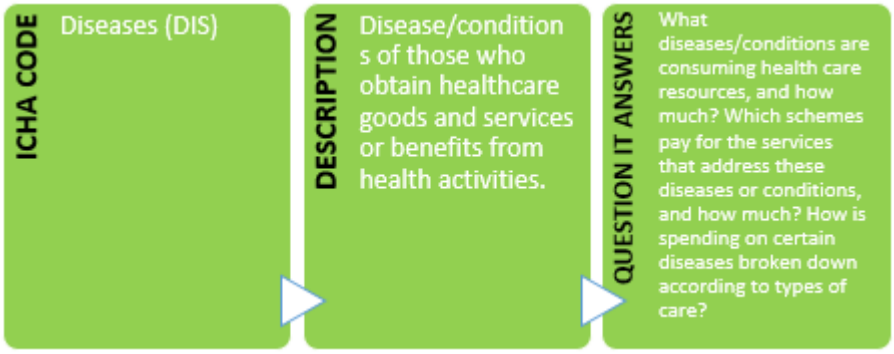

Figure 12: Description of 3 International Classification of Health Accounts (ICHA) Health Financing Codes

National Health Accounts 2020, Reublic of Mauritius

c. Data Extraction Process

A data extraction form that included all identified variables was used to collect data from the WHO GHED and the NHAs of the 38 countries included in this study; extracted data corresponded with each variable in the data extraction form. Table 6 below presents the data extraction form and codebook used in this study used to measure and organize data for analysis. Other variables (units) for ICHA codes FS, HF and FS are presented in the Appendices.

Section	No	Variable	Variable Type	Input
Extracted from Country National Health Accounts				
Document Information	1	Country Name	Open	E.g Nigeria
	2	Year of Publication	Open	E.g 2021
	3	Period covered	Open	Period the report covers Eg 2019-2021
	4	Number of years covered	Integer	Number of years the report covers eg 3
	4	Language	Categorical (select one)	1. English 2. French 3. Portuguese
	5	Region	Categorical (select one)	1. West Africa 2. East Africa 3. North Africa 4. Southern Africa 5. Central Africa
	6	International agency support	Categorical (select one)	1. Yes (If funding and/or technical support is provided by any foreign country or agency) 2. No (If the above is not the case)
RMNCH Subaccount Methodology	7	HF X DIS Cross-Classification Matrix	Categorical (select one)	1. Yes (If the NHA includes a cross-table of Health Financing Schemes and Disease Conditions) 2. No (If the above is not the case)
	8	FS X DIS Cross-Classification Matrix	Categorical (select one)	1. Yes (If the NHA includes a cross-table of Revenues of Health Financing Schemes and Disease Conditions) 2. No (If the above is not the case)
	9	FA X DIS Cross-Classification Matrix	Categorical (select one)	1. Yes(If the NHA includes a cross-table of Financing Agents and Disease Conditions) 2. No (If the above is not the case)
	10	Total number of Tracked RMNCH Health Financing Schemes Codes (HF) (45)	Integer	Total number of Health Financing Schemes (HF) for RMNCH that has an attached monetary value in the NHA out of the total number of 45 recommended ICHA Health Financing Schemes
	11	Number of local RMNCH Health Financing Schemes (HF)	Integer	Number of **Local** Health Financing Schemes (HF) for RMNCH that has an attached monetary value in the NHA out of the total number of 45 recommended ICHA Health Financing Schemes
	12	External or Rest of world for RMNCH HF	Integer	Number of **Foreign** Health Financing Schemes (HF) for RMNCH that has an attached monetary value in the NHA out of the total

				number of 45 recommended ICHA Health Financing Schemes
	13	Total number of tracked RMNCH Revenues of Health Financing Schemes Codes (FS) (46)	Integer	Total number of Revenue of Health Financing Schemes (FS) for RMNCH that has an attached monetary value in the NHA out of the total number of 46 recommended ICHA Health Financing Schemes
	14	Number of local RMNCH Revenues of Health Financing Schemes (FS)	Integer	Number of **Local** Revenue of Health Financing Schemes (FS) for RMNCH that has an attached monetary value in the NHA out of the total number of 46 recommended ICHA Health Financing Schemes
	15	External or Rest of world for RMNCH (FS)	Integer	Number of **Foreign** Revenue of Health Financing Schemes (FS) for RMNCH that has an attached monetary value in the NHA out of the total number of 17 recommended ICHA Health Financing Schemes
	16	Total number of Tracked RMNCH Financing Agents Codes (ICHA-FA) (17)	Integer	Total number of Financing Agents (FA) for RMNCH that has an attached monetary value in the NHA out of the total number of 17 recommended ICHA Health Financing Schemes
	17	Number of local RMNCH Financing Agents (FA)	Integer	Number of **Local** Financing Agents (FA) for RMNCH that has an attached monetary value in the NHA out of the total number of 17 recommended ICHA Health Financing Schemes
	18	External or Rest of world for RMNCH FA	Integer	Number of **Foreign** Financing Agents (FA) for RMNCH that has an attached monetary value in the NHA out of the total number of 17 recommended ICHA Health Financing Schemes
NHA Production Frequency	19	Number of NHAs produced using SHA 2011 with RMNCH subaccounts on the WHO GHED (2013-2021)	Integer	Number of NHAs with RMNCH sub-accounts produced by each country on the WHO GHED; earliest is 2013
	20	Most recent NHA produced on the WHO GHED	Open	Most recent year of NHA production by a country on the WHO GHED
Extracted from WHO Global Health Expenditure Database				
Percentage of Current Health Expenditure	21	2021 Reproductive Health as % of Current Health Expenditure (CHE)	Integer	The proportion of funds that flowed from all funding sources to Reproductive health out of the current amount a country spent on health in 2021, the most current year of NHAs

				productions for countries in this research (this Reproductive Health proportion is a total of variable nos 22-24)
	22	2021 RMNCH Domestic General Government Health Expenditure as % of CHE	Integer	The proportion of funds that flowed from the government to Reproductive health out of the current amount a country spent on health in 2021
	23	2021 RMNCH External Health Expenditure as % of CHE	Integer	The proportion of funds that flowed from foreign aid to Reproductive health out of the current amount a country spent on health in 2021
	24	2021 RMNCH Domestic Private Health Expenditure as % of CHE	Integer	The proportion of funds that flowed from all other local sources excluding government to Reproductive health out of the current amount a country spent on health in 2021
2021 Current Health Expenditure as % of GDP	25	2021 Current Health Expenditure as % of GDP	Integer	The proportion of funds that flowed to the health sector out of the total amount a country made from its goods and services in 2021

Table 6: Codebook For Main Data Extraction

Source: Author

For data extraction from NHA reports, I first read the introduction and methodology sections to extract data on how the NHA was produced and how it is structured. Next, I checked for a list of Annexes and Tables to locate pages with matrices (cross-tables0 and tables containing data of Disease Conditions and Health Financing Schemes (HF), Revenue of Health Financing Schemes (FS), and Financing Agents (FA). If a document did not include lists of Annexes and Tables, I typed the key word 'Reproductive Health' in the search box to identify parts of the document containing the key words, then I scrolled through these parts to see if they had relevant Matrices and Tables. This also applied to NHAs which i translated from French and Portuguese to English using online translator apps- Onlinedoctranslator and Google Translate. For the WHO GHED, based on the eligibility criteria, I downloaded the relevant health expenditure data on the 38 countries in an excel sheet from which I extracted the data into the extraction form.

3.4 Data analysis

Data Analysis included quantitative analysis presented through data visualization and narrative synthesis to contextually draw out insights from quantitative findings. Data visualization using different charts and graphs were used to display descriptive statistics data- mean, median, mode, quartiles and percentiles. Also illustrated were patterns of types of funding sources for RMNCH that were tracked and the extent of tracking that was conducted when compared with the number of ICHA codes for each funding source. Other likely indicators of statistical capacity like frequency of NHA production and year of most current NHA were also be measured. I used Microsoft Excel and Powerpoint, both versatile apps with data visualization capacities that offer a robust set of tools for analyzing and interpreting data as well as creating insightful graphics (Microsoft, n.d).

The narrative synthesis approach was used to integrate quantitative findings with qualitative insights. I achieved this by synthesizing information from the data into key insights while enriching with context within the broader landscape of statistical capacity and financing for women's health in African countries. This mixed-methods, exploratory and inductive approach leverages on statistical and contextual narrative that will allow patterns and insights to emerge from the data which is key for answering the research questions.

3.5 Ethical considerations and Research Limitations

In conducting this systematic review, ethical considerations that uphold the integrity and credibility of the research were considered. I paid particular attention to transparency in clearly documenting research methods especially in searching for documents and accurate data handling during data extraction because misrepresentation can lead to false conclusions. I also considered the implications of my findings and recommendations and made efforts to constructively present them, avoiding biases or misinterpreting data that could lead to false evidence which could lead to harmful policy decisions. I also ensured cultural sensitivity that respects the diversity of African countries while also examining my positionality as an African.

The limitations of this study include the difference in publish dates of the NHAs used for data extraction. This is due to the inconsistency among African nations in producing the NHAs. This means that the data was not collected in the same year and may influencing generalizability of the research however seeing that the SHA 2011, ICHA codes and HAPT tool for producing

the NHAs used in this study are all standardized tools, it makes a case for strengthened data comparability. Besides since RMNCH local funding sources are peculiar to each country and are directly influenced by dynamic socioeconomic and political factors, tracking practices are likely to be more influenced by these intrinsic factors than the external differences in publish dates. Another limitation is the number of researchers which would have allowed a broader examination of observed phenomena and in the case of this research could include evaluating the local RMNCH funding sources over a longer period or performing a meta-analysis of multiple studies addressing similar research questions.

A key strength of this research is its comprehensive data extraction process. This involved detailed review of each NHA report of all 38 (70%) out of 54 African countries that maintain RMNCH subaccounts, to extract all 3 tracked health financing ICHA codes. This approach ensures that the research presents a broad picture of the state of RMNCH funding across 70% of the continent, which is significant.

The implications of this detailed data extraction from many countries on the research findings is an enhancement of the reliability and validity of the findings, allowing more nuanced and country-level insights to be drawn which is important for targeted recommendations for policy making and reforms. In addition, the findings, including trends and disparities identified, will be grounded in robust evidence making the recommendations and conclusions more credible and actionable.

CHAPTER 4 RESULTS

4.1 Introduction

This chapter presents the key findings from the systematic review of African nations who are tracking domestic funding sources of RMNCH. It covers the analysis of data extracted from the WHO Global Health Expenditure Database (GHED) and NHAs of 38 African countries found eligible for the review based on inclusion/exclusion criteria. The chapter sections are structured to address the main research questions on the effectiveness of African countries in monitoring local funding sources for RMNCH; the different types of local funding sources for

RMNCH being tracked across African countries; and the funding priorities concerning RMNCH health across Africa, using RMNCH as a proxy.

There is some evidence on the data-tracking practices and capacities on RMNCH across African nations. Most African National Health Accounts (NHA) do not regularly breakdown funding for subsectors like RMNCH within health and rarely include tracked information on all local funding sources (Hilber et al., 2016). Also, at the expense of other local funding sources, Government-funded RMNCH programs are the most tracked, the domestic funding sources that makes up the largest percentage of total health expenditure (Hilber et al., 2016). This is supported by Atim et al. (2019) and WHO (n.d b) who report that challenges faced in tracking other local sources for RMNCH funding in African countries include inadequate financial commitment from these sources, inadequate fiscal space for RMNCH, insufficient exploration of innovative financing mechanisms and weak local partnerships for data collection.

4.2 Summary of Data Sources

Information on the most recent RMNCH health expenditure of the 38 African countries included in this study was retrieved from the GHED and data on tracked RMNCH local financing sources in these countries was extracted from their most recent NHA reports available online. Particularly, data extracted from the NHA reports was based on the units of sources of the 3 ICHA codes that describe local sources of health financing, namely 33 Revenues of Health Financing Schemes (FS), 36 Health Financing Schemes (HF) and 19 Financing Agents (FA), making a total of 88 local financing units of sources that can be tracked.

4.3 Extent of Tracking of Reproductive, Maternal, Neonatal and Child Health Local Financing Sources

4.3.1 Scale of Tracking Across Countries

This study found that the mean number of tracked sources across the countries was 5 and owing to the positively skewed distribution seen in Distribution Curve below, the mode and median, both with values of 4, are more indicative of the average number of RMNCH local funding sources being tracked by most African countries. The sharp rise of data on the left shows that more African countries track zero or fewer sources while the curve's tail to the right suggests that few countries track significantly more sources than the others but are rare

outliers. In addition, the probability that countries are tracking up to 20 sources is low and there are few countries tracking significantly more local RMNCH financing sources, between 15 and 19, than others; with Kenya tracking the highest at 19 out of a possible 88 local health financing sources according to the International Classification of Health Accounts.

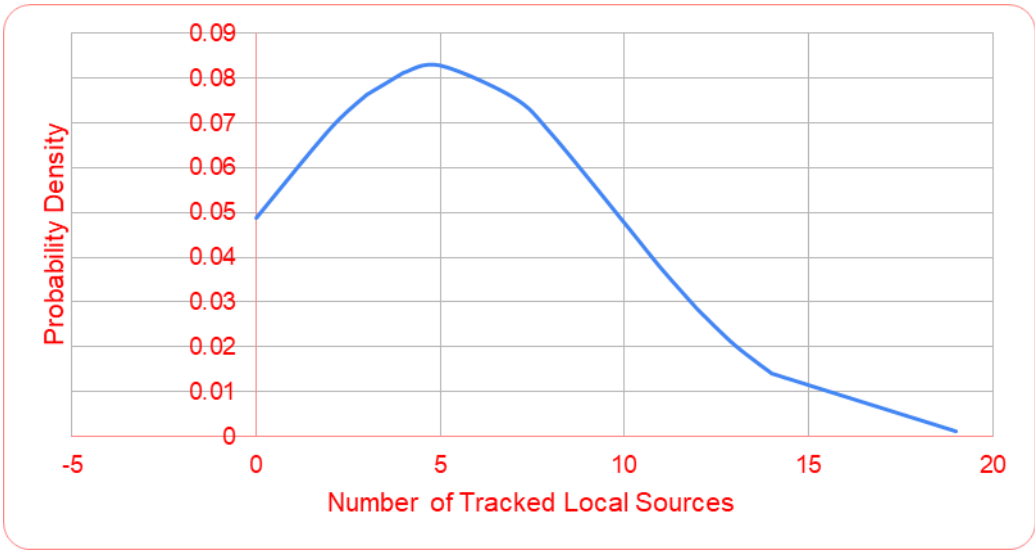

Figure 13: Distribution Curve of African Countries Tracking Local Funding Sources for Reproductive, Maternal, Neonatal and Child Health

Source: Author

The Pie Chart illustrates the proportion of African countries tracking the ICHA health financing codes for RMNCH. 11% tracked all 3, most tracked one and about a quarter tracked none revealing that few African countries have complete RMNCH local financing data.

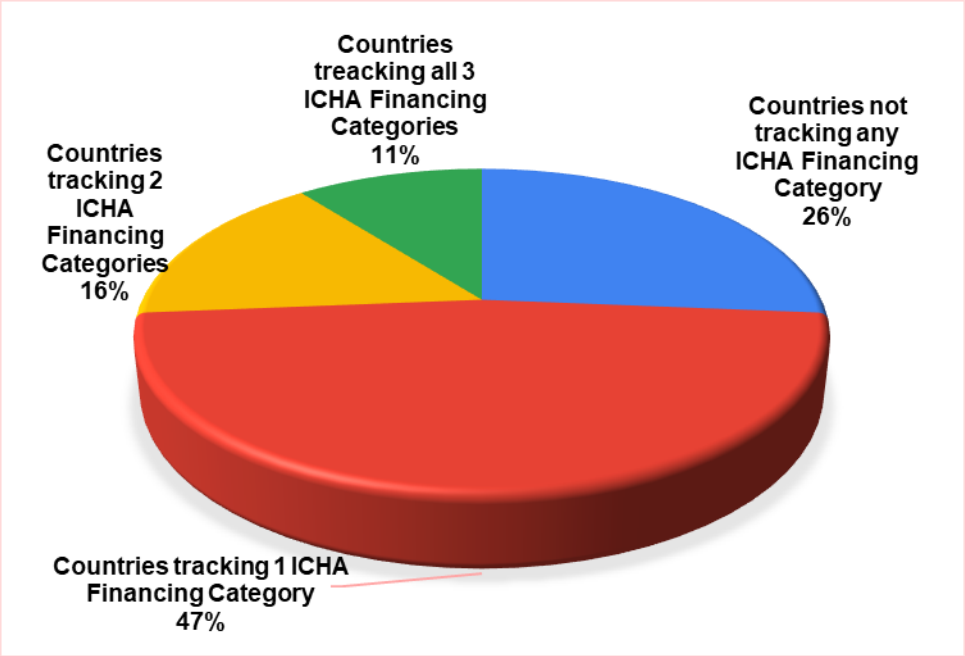

Figure 14: Tracking Pattern of the 3 International Classification of Health Accounts (ICHA) Codes for Health Financing Sources by African Countries

Source: Author

4.3.2 Frequency of National Health Accounts (NHA) Production

The Line Graph below shows the years in which the most recent NHAs were published by the 38 African countries in this review. It reveals that there was a reduction in NHA publications between 2017and 2019 but spiked with a significant rise between 2019 and 2020 where about 60% (23 out of 38 countries) of most recent publications happened between 2020 and 2023.It is also seen that 80% of the countries tracked health expenditure data covering 1 or 2 years in their most recent NHA, with NHAs covering 4 to 5 years being published between 2020 and 2023. These findings may reflect the commitment of African countries to produce NHAs and report health expenditure data for every year, seemingly regardless of the quality and completeness of the data presented.

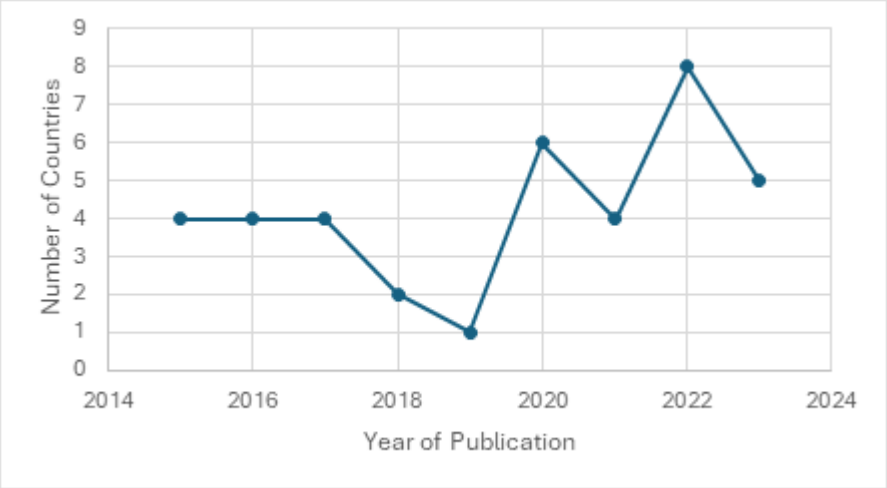

Figure 15: Year of Publication of Most Recent National Health Accounts of 38 African Countries

Source: Author

4.4 Types of Reproductive, Maternal, Neonatal and Child Health (RMNCH) Local Funding Sources Tracked

In total, the 3 ICHA codes for health financing describe a total of 120 units, 88 of which are local sources and 32 are foreign sources. The Stacked Column below presents the total units across 3 ICHA codes revealing that 58%, (22 out of 38) of African Countries in this study are tracking the FS code, the most fundamental code of the 3 ICHA financing source codes, while the more complex HF and FA codes are both tracked to a lesser extent, 26% (10 out of 38 countries). This finding may point to lack of capacity for complex statistical operations.

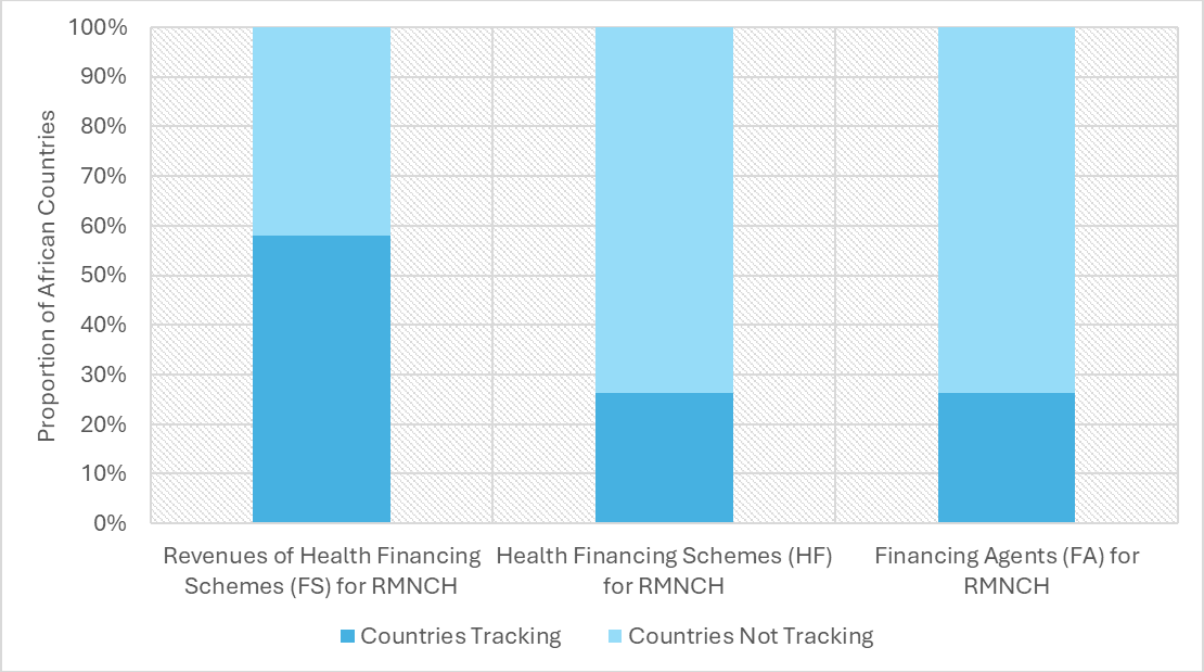

Figure 16: Tracking Pattern of African Countries for RMNCH the 3 ICHA Financing Sources- Revenues of Health Financing Schemes (FS), Health Financing Schemes (HF) and Financing Agents (FA).

Source: Author

Table 7 below shows that Namibia, Mauritius and Tanzania are tracking the most units of local funding sources for RMNCH within the 3 ICHA codes, while Kenya tracks the most overall. More interestingly, except for Kenya, none of the other countries are tracking other ICHA codes asides from the codes where they track the most units. Furthermore, although most external funding is a prominent source of RMNCH financing in Africa, few units corresponding to foreign funds are being tracked. Despite countries' efforts, these numbers are much lower than what could be tracked.

Country Tracking the Most Units for each ICHA Code for RMNCH	ICHA Code and Units	Number of Units of Each Code Tracked by Country for RMNCH		ICHA Units within each Code	
		Local	Foreign	Local	Foreign
Namibia	Revenue of Health Financing Scheme (FS)	12	2	33	16
Mauritius	Health Financing Scheme (HF)	13	0	36	12
Tanzania	Financing Agents (FA)	10	2	19	4
Kenya	All 3 Codes	19	2	88	32

Table 7: Countries Tracking the Most Units in Each ICHA Financing Source Code
Source: Author

Table 8 presents the specific units in FS, HF and FA codes that have the most African countries tracking them. It shows which units of financing are being monitored the most by African countries and can shed more light on their data-tracking practices and trends. The Appendices incudes a full list of the specific units in each ICHA code that are being tracked by African countries.

	Units of Revenues of Health Financing Schemes (FS) for RMNCH	Description	Number of African Countries Tracking Units
1	FS.RI.1.5	Rest of the world	17
2	FS.RI.1.3	Households	17
3	FS.RI.1.1	Government	17
4	FS.RI.1.2	Corporations	16
5	FS.RI.1.4	Non-Profit Institutions Serving Households (NPISH)	14

	Units of Health Financing Schemes (HF) for RMNCH	Descriptions	Number of African Countries Tracking Units
1	HF.1	Government schemes and compulsory contributory health care financing schemes	7
2	HF.3	Household out-of-pocket payment	7
3	HF.1.1	Government schemes	6
4	HF.2	Voluntary health care payment schemes	6

	Units of Financing Agents (FA) for RMNCH	Descriptions	Number of African Countries Tracking Units
1	FA.4	Non-profit institutions serving households (NPISH)	9
2	FA.3	Corporations (other than insurance corporations)	8
3	FA.5	Households	8
4	FA.1	General government	6
5	FA.6	Rest of the world	5

Table 8: Most Tracked Revenue of Health Financing Schemes (FS), Health Financing Schemes (HF) and Financing Agents (FA) Units for Reproductive, Maternal, Neonatal and Child Health (*RMNCH)*

Source: Author

4.5 Priority Given to Reproductive, Maternal, Neonatal and Child Health

RMNCH has great significance within healthcare systems, with a large portion of health services delivered within this subset, highlighting its importance in health service hierarchy and delivery (McKenzie et al., 2016). Given this significance, the prioritization of its financing and monitoring is crucial for accessibility, and quality of care that delivers improved health outcomes for women.

4.5.1 Prioritization in comparison with other Disease Conditions

The Doughnut Chart below presents information on countries tracking same or less units of ICHA codes for RMNCH in comparison to other diseases. It illustrates that a greater proportion of countries African track the same units of ICHA codes for all diseases while just about a quarter track less units of ICHA codes for RMNCH than for other diseases, showing a possible high prioritization for RMNCH.

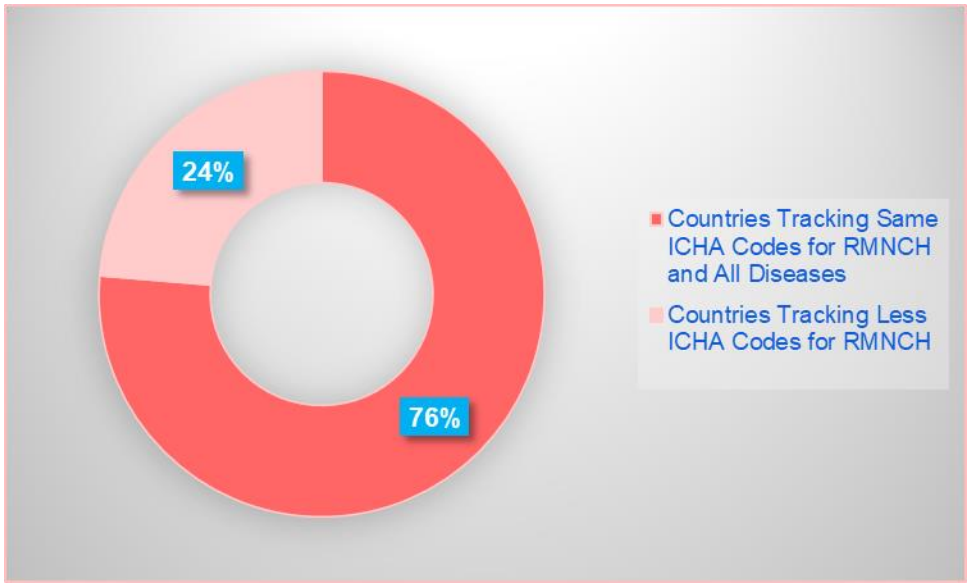

Figure 17: Pattern of Tracking of Units of ICHA Codes for All Diseases in African Countries

Source: Author

4.5.2 Prioritization Relative to Current Health Expenditure (CHE) and Gross Domestic Product (GDP)

The Box and Whiskers plot below is based on data from the WHO Global Health Expenditure Database (GHED) for 2021, which is the most recent year with recorded values on the GHED for all 38 countries in this study. THE GHED assigns 'Reproductive Health' to include all aspects of RMNCH. The visualization illustrates country Reproductive Health (RH) spending in 2021 and what proportion of the Current Health Expenditure (CHE) it represents across the 38 countries. The negative lower bound indicates that there are no countries with RH expenditure below the minimum of 1% while the upper bound of 30% means African countries do not spend more than 30% of their CHE on RH, with values above 30% considered as outliers having unusually high RH spending. However, the median of 12% offers a clearer picture of their typical RH spending and reveals that half of the countries are spending less than 12% of their CHE on RH. The inter-quartile range (IQR) of 8% further suggests that there is some variability in RH expenditure and most African countries fall within a relatively narrow value of RH expenditure. Also, the wide range between 1% and 42% as well as the substantial gap between the 90th percentile at 24.5% and the maximum at 42%, shows that even though 90% of countries spend under 24.5% of CHE on RH, a few countries or outliers in the top 10%,

have much higher expenditure and this suggests important differences in how countries prioritize RH.

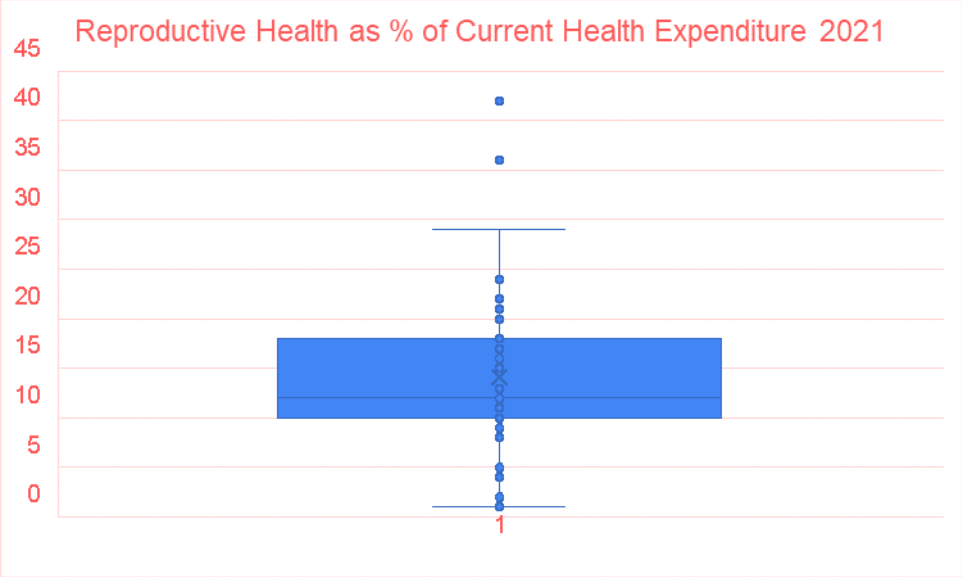

Figure 18: Reproductive Health as % of Current Health Expenditure in African Countries in 2021

Source: Author

Figure 19 is a Scatter plot that compares local funding sources for RMNCH and RH % of CHE across the countries in this study. The cluster of countries at zero on the x-axis show that most countries track few local funding sources for RMNCH, regardless of their RH % of CHE. Notably, even outliers with RH expenditure above the upper bound of 30% (such as Comoros and Chad) still track few RMNCH local funding sources, while others, despite tracking more sources, have low RH expenditures, suggesting no established impact of one on the other. On the other hand, Figure 20 shows a Dual-Axis Bar Chart with the Current Health Expenditure (CHE) as a Percentage of Gross Domestic Product (GDP) and the Reproductive Health as a Percentage of CHE for African countries in 2021. This visualization allows a comparison between how much of the GDP is mobilized and spent on health and how much of that health spending is allocated to RH across different countries. This study finds variable disparities across African countries. When countries have high CHE as a % of GDP but low RH spending, it indicates that a sizeable proportion of the GDP is allocated to the health sector but only a

small portion of this is directed to RMNCH. Examples are Sao Tome and Principe and Sierra Leone. On the other hand, in countries such as Gabon and Gambia, with low CHE as a % of GDP but high RH expenditure, despite this small overall health expenditure, RH receives a higher proportion suggesting prioritization of RH even with a restricted health budget. Scenarios showing balance between CHE as a % of GDP and RH expenditure are also present in countries like Namibia (both indicators high) and Cameroon (both indicators low). However, there are anomalies such as abnormally high (Comoros and Chad) or abnormally low (Mozambique and Guinea Bissau) RH spending relative to CHE as a % of GDP, suggesting peculiarities within their RH subsector.

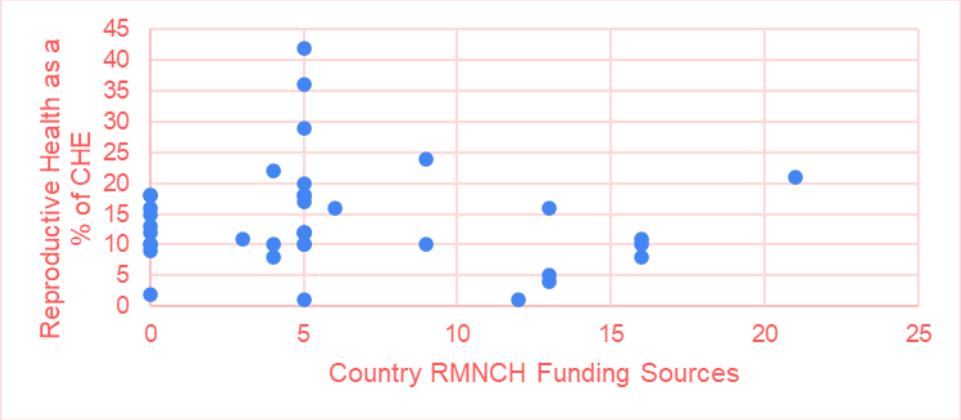

Figure 19: Reproductive Health as a Percentage of Current Health Expenditure (CHE) and the Tracked Sources of Financing for RMNCH per African Country

Source: Author

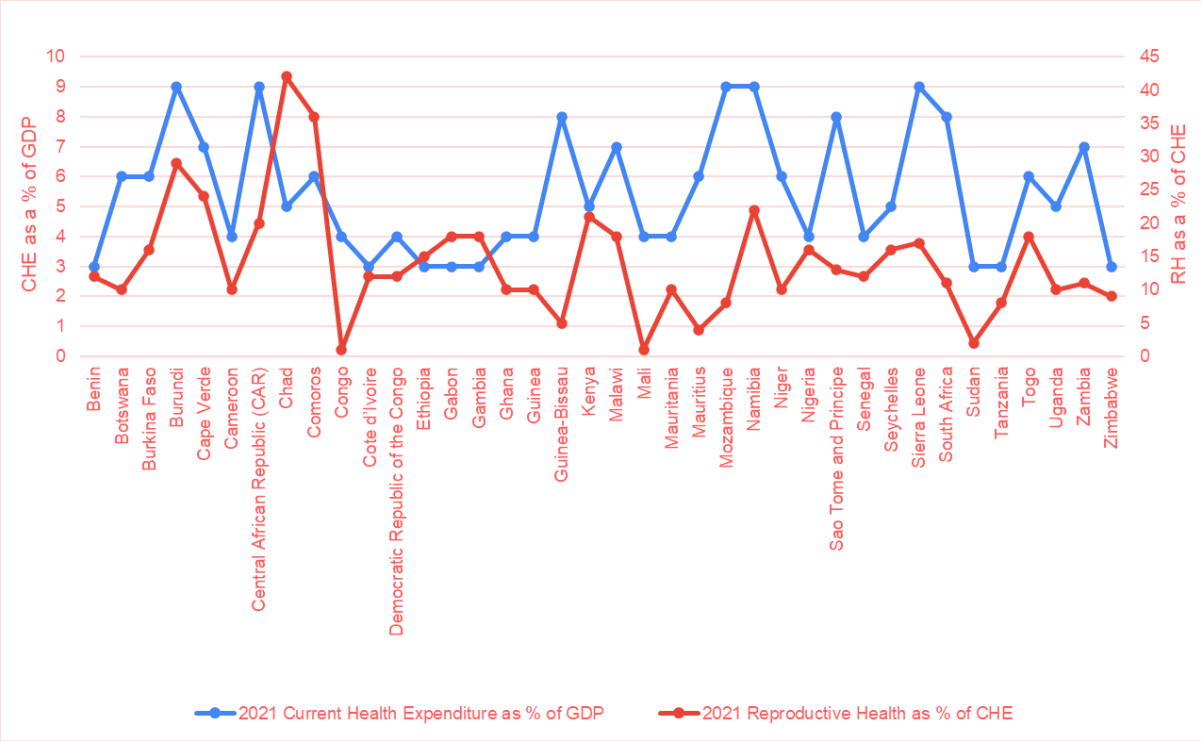

Figure 20: Comparison of 2021 Current Health Expenditure (CHE) as a Percentage of Gross Domestic Product (GDP) and the Reproductive Health as a Percentage of Current Health Expenditure (CHE)

Source: Author

Overall, the findings of this review show gaps and limitations in the tracking practices of African countries for RMNCH funding sources but also highlight inconsistencies in data availability and quality across the countries used in this study.

Chapter 5 DISCUSSION

5.1 Introduction

This Chapter takes an inductive approach in discussing patterns and trends identified from data analysis to produce a synthesis of more nuanced and new insights on the state of DRM for RMNCH across African countries. This narrative synthesis is discussed around two main themes based on the research questions and aims of this research, namely a) RMNCH Monitoring and Statistical Capacity of African Countries and b) RMNCH Prioritization across African countries.

Generally, the findings of this review suggest that African countries have grossly low data-tracking and statistical capacities for monitoring domestic sources of financing for RMNCH and health as a whole. Challenges facing African nations in tracking DRM as identified by OECD iLibrary (2023) include a lack of local know-how to collect and analyze data extensively and insufficient funding to strengthen the former. The findings of this study while aligning with OECD iLibrary (2023) also strongly indicate a lacking application of data-tracking strategy or framework.

The WHO is at the forefront of the drive to institutionalize the National Health Account (NHA) based on the System of Health Accounts (SHA) 2011 and provided technical and financial support, along with other international agencies, in the production of all the NHAs used in this review. This evidences WHO's commitment to African nations to produce NHAs yearly or every other year (Lacroix & Long, 2024) and may be implicated in the increase in NHA production seen in recent years as highlighted by the findings of this review. Also, the increase in NHA production across African nations post-2020, with a few countries covering 4 to 5 years of health expenditure in a single NHA publication may be indicative of increased prioritization of updating NHAs because of the 2020 COVID-19 pandemic and its attendant heightened global attention on health systems (Aranda et al., 2022; Mac-Seing et al., 2023).

A unique trend in the NHA of Burkina Faso, Senegal and a few others, is the creation of a separate and distinctly detailed subaccount for Family Planning (FP), which ought to be under the RMNCH subaccount. In both countries, most FP funding was external (76% and 79%). While this might suggest FP is a priority or reflects donor interest in controlling fertility rates (5.0 and 4.3 children per woman vs. the global average of 2.4), the more salient issue is that as evidenced in this trend, donors could better support African nations to enhance statistical capacity alongside funding for RMNCH and health programs. This aligns with Dietrich (2013) who reported that the poor statistical capacity of African nations may also be worsened by the current model of international development funding which largely funds donor priorities awhile ignoring building local long-term capacities.

5.2 RMNCH Monitoring and Statistical Capacity of African Countries

5.2.1 The Centrality of Statistical Capacity

Using the 3 International Classification of Health Accounts (ICHA) health financing codes- Revenues of Health Financing Schemes (FS), Health Financing Schemes (HF) and Financing Agents (FA)- out of a possible 88, most countries track about 4 to 7 local funding sources for RMNCH, with extreme outliers like Kenya tracking the most at 19. This suggests a deficient tracking system where the prevalent trend is to merely track the total expenditure spent on RMNCH. Furthermore, this review finds that across the countries, there is no clear relationship between the number of ICHA codes tracked (1, 2 or 3) and the number of unit sources (10 or more) they track; for example, Guinea tracks 7 sources under HF and FA while Mauritius tracks 12 sources all under FS. This implies a lack of statistical strategy for tracking Health accounts data and may mean that African countries concentrate on monitoring specific sources considered as most convenient or more relevant to their unique priorities or policy goals. This aligns with the recommendation of the Ouagadougou Declaration on Primary Health Care and Health Systems, a framework for directing health financing systems in Africa, which proposes that African countries develop health financing policies that reflect their unique settings (Zere et al., 2010). This may result in selective tracking of relevant local RMNCH funding sources; the danger of which may be the overlooking of innovative funding streams that may require some intentionality to discover.

A similar 'simplistic' pattern of tracking is evidenced in the number of African countries (58%) that track FS, the most fundamental ICHA code with fewer (26%) tracking HF and FA which are more complex. Even across the 3 codes, the most tracked units of sources are from government, corporations, households/out-of-pocket payments (OOP), non-profit institutions serving households (NPISH) and rest of the world/external funding. The decision to track these specific units may stem from the fact that they are straightforward sources of RMNCH financing that are typically easier to identify and monitor due to their popularity as funding sources; for instance, government expenditures are basically extracted from country budgets. This agrees with evidence from literature placing OOPs, followed by government and external funding as top 3 sources for RMNCH financing (WHO, n.d a; Pitt et al., 2021) and more importantly re-iterates the low statistical capacity of African countries.

The danger in tracking similar sources within all 3 ICHA codes shows an over-reliance on these limited funding sources. This trend could mushroom other sources thereby diminishing diversification and stable financing for RMNCH; and could also subject health systems to greater vulnerability, if there are changes in these funding sources. This was experienced during the COVID-19 pandemic when reduced government spending and OOPs resulted in 41 out of 54 African countries taking COVID-relief loans from the IMF (IMF, 2022). In addition to this vulnerability, the challenge goes beyond RMNCH financing to include Africa's health systems. Most African countries (74%) track the same health financing sources for both RMNCH and other disease conditions, and even those who track more do so by a small margin. This suggests a broader data-tracking deficiency that not only impacts RMNCH financing but the whole health system and so may constitute a major barrier to quality health delivery by compromising the quality of data used in making RMNCH and health policy decisions in general. Furthermore, this propensity to track the more granular unit sources of financing, FS, may not only suggest the quality of their data-tracking and statistical capacity but may also point to the level of sophistication in the management of their RMNCH financing. I summarize these insights in Table 10 below.

Code	**Description**	**Level of Sophistication**	**Description of Level of Sophistication**
Revenues of Health Financing Schemes (FS)	Money paid for health services.	Basic	An essential approach with focus on basic tracking and ensuring adequate revenue to pay for health services but not necessarily how they are managed or utilized. This level is insufficient for informing data-driven policies.

Health Financing Schemes (HF)	How money that pays for health services are pooled and organized	Intermediate	There is more attention on monitoring data on the planning and structuring of revenues to possibly secure a more efficient and equitable health system.
Financing Agents (FA)	Institutions who manage and distribute organized money within the health system	Advanced	This level underscores a further interest in governance and accountability as data tracking focuses on resource allocation and management which can highlight performance across the different institutions tracked.
All 3 codes	Covers the progression of financing sources from the 3 codes	Complex	An integrative and comprehensive approach that requires greatest coordination which can result in a resilient system able to handle complexities and sustain financing of health system. It requires more

			statistical capacity and is possibly the most suitable for identifying trends, and making data-driven decisions

Table 10: Levels of Sophistication in RMNCH Financing Management.

Source: Author

5.2.2 Data –Tracking Methodologies

Findings reveal that while Namibia, Mauritius and Tanzania track the most units within the 3 ICHA codes- FS, HF and FA respectively, their seeming commitment falls short as they fail to track unit sources under other codes except Tanzania that tracks one additional FS unit source. On one hand, it suggests that with greater commitment, African countries can track more local sources RMNCH financing but on the other hand it highlights the deficiency of methodical tracking strategies, where this lack of tracking integration across the 3 ICHA codes could prevent comprehensive monitoring of all relevant RMNCH domestic financing sources.

OECD (2011) report that within the SHA 2011 framework, the 3 ICHA codes for health financing are designed to link interconnectedly both in how funds flow and how data is collected within the codes. The health care financing schemes (HF) are the key analytical units of SHA 2011, and their data are collected from Financing Agents (FA) while each HF unit in turn provides data on the FS units from which it receives revenue flows. This shows that all 3 ICHA health financing codes are designed to work in sync to provide a broader understanding of the overall health financing landscape, the lack of which can lead to sub-optimal resource mobilization and allocation as well as policy decisions based on incomplete data. The recommendation of the SHA 2011 financing framework for data collection to start data tracking from FA and work backwards to HF and FA is particularly suited for resource-constrained settings like African countries where data-tracking infrastructure and processes are expensive to embed at all levels of health systems. However, FA are macro-institutions

that generally already have established data tracking infrastructure and so their strategic position as starting point for measuring health financing sources is efficient and effective.

Kenya exemplifies this strategic approach. Among the 4 countries that track all 3 codes -Mali, Kenya, Zambia and Burkina Faso- Kenya stands out as the country that tracks the most sources overall and the only one that follows the interconnected SHA 2011 financing framework for data tracking across the 3 codes. This highlights the usefulness of the SHA 2011 financing framework in improving data accuracy and efficiency. I illustrate in Figure 21 a graphic representation of Kenya's adoption of the SHA 2011 financing framework showing the possible cross-linkages of tracked RMNCH local funding sources within the 3 ICHA codes for health financing. Similar mapping for Mali, Zambia and Burkina Faso does not reveal same interconnectedness.

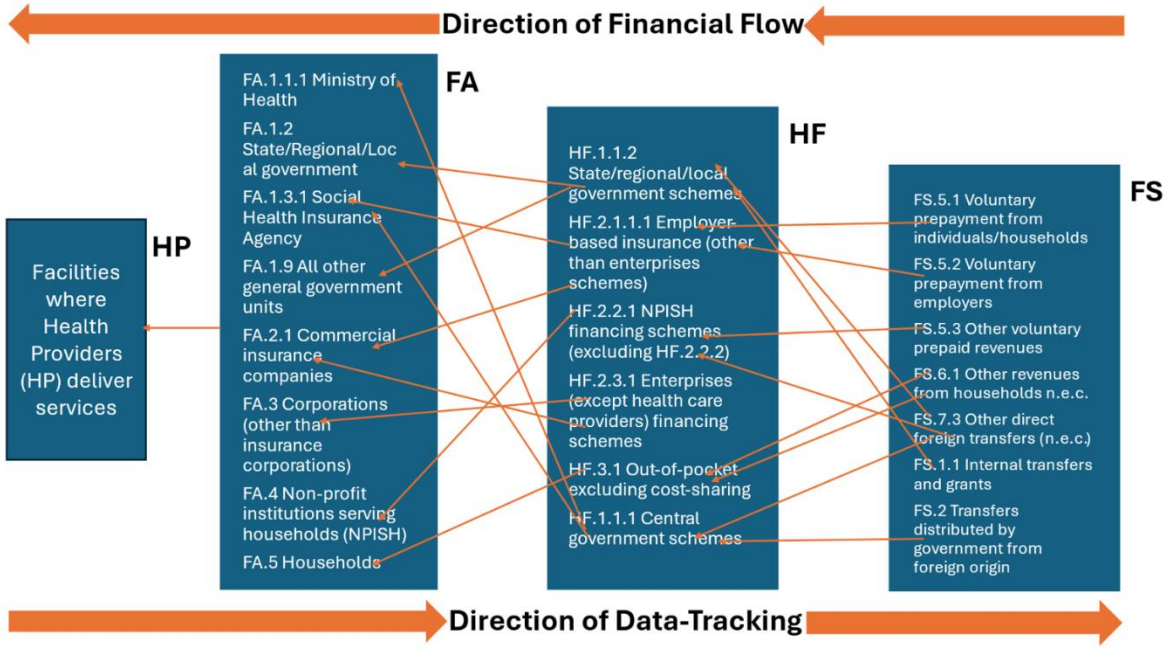

Figure 21: Kenya's Adoption of the SHA 2011 Financing Framework

Source: Author

Furthermore, Kenya had the widest coverage of Financing Agents (FA) institutions, 637, from which data for HF and FS was collected and this may be another reason for the quality of their data-tracking. Burkina Faso and Mali collected data from 250 and 194 FA while Zambia did not specify. The FA institutions included Government parastatals, Private companies, Non-

governmental Organizations (NGOs) and Insurance companies. It may be observed that of the 4 countries, Kenya has the largest and most diversified economy with a GDP of about $107.44 billion in 2023 while the others have GDPs below $30billion (World Bank Group, n.d.) Additionally, Kenya's economy enjoys significant contributions from a more subsectors than the others (Lee et al., 2019). It is therefore expected for Kenya to have a higher number of larger FA institutions. This implies that the quality of data-tracking of local health financing sources depends on the number and size of its macro-institutions that constitute Financing Agents (FA) which is ultimately influenced by the size and diversification of the country's economy.

Structural Functionalism provides a theoretical framework that supports the idea that the number and size of a country's macro-institutions are influenced by the size and diversification of its economy. This theory posits that the different components of society, including institutions, operate in mutual dependence to maintain stability and order(Buchanan et al., 2013; Hedoin, 2020). Essentially, as an economy grows and diversifies, the number and complexity of institutions also evolve to support the new economic realities. Hédoin (2012) in his structuralist explanations for economic performance emphasizes the 'downward effect' of pre-existing macro-institutions in shaping and enabling economic outcomes. This suggests that as economies expand and diversify into various sectors, the institutions that govern economic interactions and cater to these sectors, also grow in number and sophistication to fulfill their roles more effectively. In terms of health financing data- tracking according to the SHA 2011 financing framework, the role of these macro-institutions as FA includes greater statistical capacity that not only produces extensive, quality and complete data but is also able to drive health financing innovation. This also goes to say that in African countries with smaller less complex economies, macro-institutions that act as FA are less sophisticated with less capacity to support the interconnected health financing data-tracking as proposed by the SHA 2011 financing framework. Ultimately, the capacity of African countries to track DRM for RMNCH and health in general, which reflects their statistical capacity is related to their underlying economy.

Based on the foregoing observations, I submit that tracking all 3 codes systematically is not only a more robust way to successfully track RMNCH local funding sources but also a pathway for discovering more contextual local funding sources and to build statistical capacity. With

the SHA 2011 financing framework 'downward' data-tracking approach and based on the design of the 3 ICHA unit sources to flow into multiple unit sources, the data-tracking process can be adapted to discover and innovate more domestic RMNCH financing sources that can be measured and strengthen statistical reporting. This adaptation includes embedding data-tracking infrastructure - tools and systems designed to collect, manage, analyze, and report data such as health information systems, accounting and statistical software, cloud storage, data governance protocols- at all levels of the 3 ICHA codes for health financing. This means that as data is being tracked, processes and products to strengthen statistical capacity are being included which will not only improve the quality and completeness of data in the long term but can also provide more insight for developing new local health financing sources. This idea that continuous tracking and measurement can lead to improvements in capacity or performance is posited by the Measurement Theory.

Measurement theory focuses on the principles, methodologies and systematic approach used to monitor, quantify and evaluate phenomena based on defined and established guidelines (Benoit, 2010). The idea of measurement for improvement is a pillar of the versatile Measurement theory and has been applied in various studies across different fields. This theory posits that the act of measurement itself can lead to enhancements in performance, efficiency, and outcomes by providing feedback that informs decision-making and encourages accountability (Lehmann & Lunze, 2011; McCullough, 2005). This is achieved through continuous monitoring which creates iterative systems that can develop better data collection practices and strengthen measurement accuracy and system performance (McCullough, 2005; Lehmann & Lunze, 2011).

Furthermore, continuous tracking establishes feedback loops that can refine measurement techniques and improve understanding of the system being measured (McCullough, 2005). I propose that this improved understanding is critical for identifying and addressing gaps and opportunities for improvement within the system. It is at these gaps and opportunities that embedding data-tracking infrastructure is vital. Imputing data-tracking infrastructure as local health financing data is tracked can result in greater sophistication (see Table 10) of the system over time which in turn, can lead to increased measurement accuracy, collection of more comprehensive data and improved statistical capacity of the health system, creating an iterative process. Catasús et al. (2007) go further by arguing that within organizations,

measurement is critical for mobilizing resources and improving performance as it has capacity to create a management framework based on the values that have been identifying, monitored, quantified and analyzed. They propose that “What gets mobilized gets managed, especially if it gets measured’ (Catasús et al., 2007). Therefore, continuous tracking-monitoring and measuring- is the best way to both increase capacity and improve efficiency and effectiveness of RMNCH local financing sources.

5.2.3 The Consideration of Context

Another important consideration are existing local funding sources for RMNCH in Africa that are well-established in literature yet are seemingly not tracked by African countries. An example is loans. Loans are a common practice for health financing in African nations(Kentikelenis et al., 2015; Uzochukwu et al., 2015) and there is evidence that their impact on RMNCH is complex and often negative.(Pandolfelli et al., 2014; Coburn et al., 2015). Yet, none of the NHA reports in this review reported loans as a source of financing for RMNCH. Although this may have been classified as external funding since most loans are from foreign institutions however, the ICHA codes give allowance for greater specificity and includes designated codes for loans and which the countries overlooked. This omission once again points to statistical reporting inconsistencies across Africa. Additionally, another crucial yet poorly tracked local source of RMNCH funding in Africa is health insurance yet health insurance is an established financial risk protection tool, which is essential for achieving UHC. A systematic review by Ifeagwu et al. (2021) on national health insurance (NHI) schemes, reports that countries in Sub-Saharan Africa are either in the process of implementing NHI as a sustainable health financing mechanism or have already established such frameworks despite significant barriers across the continent. This is supported by(Barasa et al., 2021; Dadjo et al., 2023). Despite the progress being made, this study finds that health insurance is not tracked by most African countries for all ICHA health financing codes. A reason for this may be because sufficient data-tracking infrastructure is not being included in the NHI frameworks being developed by African countries, or there may be lack of data-sharing cooperation by private insurance companies, or perhaps limited NHI coverage. All these may make health insurance seem less relevant and therefore less prioritized for tracking. Ultimately, this still points to a seeming lack of understanding of the critical importance of

data-tracking among African countries and how it can be employed to address health financing challenges

Devarajan (2013) describes the prevailing deficient statistical capacity in Africa as a 'Statistical Tragedy', characterized by statistical foundations that are weak, underfunded and uncoordinated leading to discrepancies in data collection and reporting, resulting in low statistical reliability and comparability necessary for evidence-based policies and decisions. Regardless of local and international pressure on African countries to increase DRM for financing health and development, the statistical tragedy presents an ominous barrier that significantly hinders development, economic planning and effective governance.

5.3 RMNCH Prioritization Across African Countries

The assessment of health spending priorities and the relevance for RMNCH across Africa countries reveals significant variability among them with differing implications. One indicator, Reproductive Health (RH) expenditure as a percentage of current health expenditure (CHE), measures the proportion of spending allocated to RH within a country's health spending and includes all RMNCH components. Across Africa, the typical RH expenditure of 12% with majority of countries not exceeding 24.5% may imply a generally low prioritization of RH. However, a few countries spend between 30% to 42% of CHE on RH showing a possible high prioritization of RH. This wide range of RH as a % of CHE across African countries suggests significant differences in how they prioritize RH within health budgets. Literature shows that these differences in RH spending may be influenced by country health priorities like focus on family planning, a high burden of a RH-related disease like HIV, population demographics like a large reproductive-age population or a high maternal and child mortality rate or resource constraints(Tazinya et al., 2022; Wojcicki, 2017). It may also be assumed that the variability of RH expenditure may be indicative of inequities like insufficient RH services in lower spending countries and more robust RH programs in higher spending countries.

There is also substantial variability when RH as a % of CHE is compared with another indicator, CHE as a percentage of Gross Domestic Product (GDP), which is how much of GDP is spent on health and how much of that health spending is allocated to RH across African countries. Where there is high CHE % of GDP but low RH % of CHE, reproductive health may not be a top priority which may lead to underfunding and limited access to crucial RMNCH services. With

low CHE % of GDP but relatively high RH % of CHE, there may be RMNCH prioritization despite low health budget, which may lead to better health outcomes for women at the expense of a strained health system. Low scores on both indicators could imply a general low prioritization of the health sector, including RMNCH and may result in poor health outcomes overall, with particularly severe impact on RMNCH delivery possibly leading to high mortality rates. UNICEF (2023) statistics on mortality rates of this category of RH expenditure and lower are up to 5 to 6 times higher than global averages. It is important to note that many African countries are considered poor with high levels of mismanagement and corruption; so, even if there is a desire to prioritize RMNCH, there is a limiting reality of resource constraints. Ultimately, the variability underscores the importance of context-specific approaches for DRM for RMNCH to improve and sustain RH expenditures in each country and achieving optimal health outcomes for women.

A limitation of this study is that it does not focus on the impact of corruption and mismanagement on RMNCH prioritization, domestic financing and service delivery. Future research may focus on tracking Public Expenditure Reviews for Health to assess the efficiency of allocation and spending of public resources for Health and Public Expenditure Tracking Surveys for Health to assess leakages and mismanagement in fund flow within health systems of African countries.

Chapter 6 CONCLUSION AND RECOMMENDATIONS

The relevance of this review lies in its distilling of data tracking practices for RMNCH local funding sources across African countries to reveal the pain points of low adherence to the data tracking methodology of SHA 2011 Financing Framework due to weak institutions and lacking political will, symptoms of developing and under-developed economies. It also contributes knowledge on the significant variability of RMNCH prioritization across Africa. This exposes a greater need to apply context-specific domestic resource mobilization (DRM) approaches contingent on each country's realities which can increase efficient RMNCH spending and address inequities.

This systematic review has shown that African countries are greatly limited in their capacity to track domestic resource mobilization (DRM) for Reproductive, Maternal, Neonatal and Child Health (RMNCH) and ultimately, the statistical capacity required for African countries to

track DRM for RMNCH and health in general, is related firstly to their application of the tracking methodology SHA 2011 financing framework and secondly to their underlying economy. In the first case, there is a need for stronger political will and support from stakeholders to apply the rigour required by the SHA 2011 Financing Framework. The second instance may be considered tragic because most African economies are still developing and are characterized by weak institutions (Alhassan & Kilishi, 2019). However, as discussed in the literature review, resource restraints, corruption, poor governance and resource mismanagement are more formidable root causes of the abysmal state of data tracking for RMNCH local funding sources across African countries.

Theoretical implications of the key findings of this study underscore the importance of Structural Functionalism in understanding the relationship between a country's economy and its statistical capacity. In addition, the Measurement theory frames how methodical and continuous tracking of RMNCH local funding sources can produce an iterative system that leads to improved data collection, statistical capacity and a better understanding of the RMNCH financing system. This understanding is especially important for incorporating data-tracking infrastructure which deepens the iteration to produce more comprehensive tracking. In practice, the importance of fully adopting the SHA 2011 financing Framework that necessitates the tracking of all 3 ICHA health financing codes in the opposite direction of flow of funds, from Financing Agents (FA) to Revenues of Health Financing Schemes (FS) must be emphasized to NHA stakeholders. This interconnectedness provides a full picture of the of RMNCH health financing landscape which is necessary for further mobilization of new sources and providing accurate data for policy decisions.

While there is a possibility that lack of local relevance of some of the ICHA FS unit sources may deter African countries from tracking such sources, an innovative approach is to intentionally cultivate such revenue sources to become RMNCH local financing sources. For instance, FS 1.3 Subsidies is a foreign concept that was not tracked by any of the African countries in this study. Although one might assume that subsidies should be popular as they can potentially ease health financing burdens on households in Africa where out-of-pocket (OOP) payments from mostly poor households fund the health system. An innovative pathway may be Government and external donors providing RMNCH subsidies (FS) to poor households through Social Insurance and Voluntary Prepayment Schemes (HF) managed by Insurance Companies (FA).

This can be both investment for private sector growth and opportunity to strengthen statistical capacities of Insurance companies.

Even though there is evidence that NHA production has considerably risen among African countries since 2020, the quality and completeness of the data tracked is less desirable and shows significant disparities in statistical capacities of these countries. It is challenging to make informed decisions, allocate resources efficiently, or identify gaps in funding without comprehensive data and this has potential to hinder the ability of African countries to make evidence-based policies that will optimize their RMNCH financing, prioritize women's health and move Africa towards sustainable health systems.

Policy recommendations should therefore include policies that instuitionalize NHAs within institutions of Financing Agents (FA) such that the required data is captured routinely in an automated mechanism. This will require great investments in data-tracking infrastructure, which apart from technology includes a dedicated NHA unit. Policies should also focus on promoting cooperation across FA institutions to encourage timely and rigorous NHA methodology and emphasize promoting diversification with prioritization of RMNCH financing by activating viable sources like Insurance as well as developing domestic innovative financing mechanisms such as private sector social health bonds. Policies should also align with frameworks like the Ouagadougou Declaration, which emphasizes adapting health financing strategies to local contexts.

In conclusion and in light of the critical context which situates RMNCH within the broader landscape of women's overall well-being, RMNCH financing is positioned as a pathway to improve health outcomes and progress towards equity and development for women. As discussed in the literature review , women’s health has socioeconomic and political dimensions, therefore expanding RMNCH local financing will significantly contribute to achieving Africa’s broader development goals and even the global Sustainable Development Goals

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APPENDICES

Types of International Classification of Health Accounts Codes

Codebook for Revenues of Health Financing Schemes (FS)

Section	No	Variable	Variable Type	Input
Revenue of Health Financing Schemes (FS) ICHA Codes	1	FS.1 Transfers from government domestic revenue (allocated to health purposes)	Categorical (select one)	1.Yes 2. No
	2	FS.1.1 Internal transfers and grants	Categorical (select one)	1.Yes 2. No
	3	FS 1.2 Transfers by government on behalf of specific groups	Categorical (select one)	1.Yes 2. No
	4	FS.1.3 Subsidies	Categorical (select one)	1.Yes 2. No
	5	FS.1.4 Other transfers from government domestic revenue	Categorical (select one)	1.Yes 2. No
	6	FS.2 Transfers distributed by government from foreign origin	Categorical (select one)	1.Yes 2. No
	7	FS.3 Social insurance contributions	Categorical (select one)	1.Yes 2. No
	8	FS.3.1 Social insurance contributions from employees	Categorical (select one)	1.Yes 2. No
	9	FS.3.2 Social insurance contributions from employers	Categorical (select one)	1.Yes 2. No
	10	FS.3.3 Social insurance contributions from self-employed	Categorical (select one)	1.Yes 2. No
	11	FS.3.4 Other social insurance contributions	Categorical (select one)	1.Yes 2. No
	12	FS.4 Compulsory prepayment (other than FS.3)	Categorical (select one)	1.Yes 2. No
	13	FS.4.1 Compulsory prepayment from individuals/households	Categorical (select one)	1.Yes 2. No
	14	FS.4.2 Compulsory prepayment from employers	Categorical (select one)	1.Yes 2. No
	15	FS.4.3 Other compulsory prepaid revenues	Categorical (select one)	1.Yes 2. No
	16	FS.5 Voluntary prepayment	Categorical (select one)	1.Yes 2. No
	17	FS.5.1 Voluntary prepayment from individuals/households	Categorical (select one)	1.Yes 2. No
	18	FS.5.2 Voluntary prepayment from employers	Categorical (select one)	1.Yes 2. No
	19	FS.5.3 Other voluntary prepaid revenues	Categorical (select one)	1.Yes 2. No
	20	FS.6 Other domestic revenues n.e.c.	Categorical (select one)	1.Yes 2. No
	21	FS.6.1 Other revenues from households n.e.c.	Categorical (select one)	1.Yes 2. No
	22	FS.6.2 Other revenues from corporations n.e.c.	Categorical (select one)	1.Yes 2. No

	23	FS.6.3 Other revenues from NPISH n.e.c.	Categorical (select one)	1.Yes 2. No
	24	FS.7 Direct foreign transfers	Categorical (select one)	1.Yes 2. No
	25	FS.7.1 Direct foreign financial transfers	Categorical (select one)	1.Yes 2. No
	26	FS.7.1.1 Direct bilateral financial transfers	Categorical (select one)	1.Yes 2. No
	27	FS.7.1.2 Direct multilateral financial transfers	Categorical (select one)	1.Yes 2. No
	28	FS.7.1.3 Other direct foreign financial transfers	Categorical (select one)	1.Yes 2. No
	29	FS.7.2 Direct foreign aid in kind	Categorical (select one)	1.Yes 2. No
	30	FS.7.2.1 Direct foreign aid in goods	Categorical (select one)	1.Yes 2. No
	31	FS.7.2.1.1 Direct bilateral aid in goods	Categorical (select one)	1.Yes 2. No
	32	FS.7.2.1.2 Direct multilateral aid in goods	Categorical (select one)	1.Yes 2. No
	33	FS.7.2.1.3 Other direct foreign aid in goods	Categorical (select one)	1.Yes 2. No
	34	FS.7.2.2 Direct foreign aid in kind: services (including TA)	Categorical (select one)	1.Yes 2. No
	35	FS.7.3 Other direct foreign transfers (n.e.c.)	Categorical (select one)	1.Yes 2. No
	36	Memorandum items	Categorical (select one)	1.Yes 2. No
	37	Reporting items	Categorical (select one)	1.Yes 2. No
	38	FS.RI.1 Institutional units providing revenues to financing schemes	Categorical (select one)	1.Yes 2. No
	39	FS.RI.1.1 Government	Categorical (select one)	1.Yes 2. No
	40	FS.RI.1.2 Corporations	Categorical (select one)	1.Yes 2. No
	41	FS.RI.1.3 Households	Categorical (select one)	1.Yes 2. No
	42	FS.RI.1.4 NPISH	Categorical (select one)	1.Yes 2. No
	43	FS.RI.1.5 Rest of the world	Categorical (select one)	1.Yes 2. No
	44	FS.RI.2 Total foreign revenues (FS.2 +FS.7)	Categorical (select one)	1.Yes 2. No
	45	FS Related items	Categorical (select one)	1.Yes 2. No
	46	FSR.1 Loans	Categorical (select one)	1.Yes 2. No
	47	FSR.1.1 Loans taken by government	Categorical (select one)	1.Yes 2. No
	48	FSR.1.2 Loans taken by private organisations	Categorical (select one)	1.Yes 2. No

	49	FSR.2 Aid in kind at donor value	Categorical (select one)	1.Yes 2. No

Codebook for Health Financing Schemes (HF)

Section	No	Variable	Variable Type	Input
Financing Schemes (HF) ICHA Codes)	1	HF.1 Government schemes and compulsory contributory health care financing schemes	Categorical (select one)	1.Yes 2. No
	2	HF.1.1 Government schemes	Categorical (select one)	1.Yes 2. No
	3	HF.1.1.1 Central government schemes	Categorical (select one)	1.Yes 2. No
	4	HF.1.1.2 State/regional/local government schemes	Categorical (select one)	1.Yes 2. No
	5	HF.1.2 Compulsory contributory health insurance schemes	Categorical (select one)	1.Yes 2. No
	6	HF.1.2.1 Social health insurance schemes	Categorical (select one)	1.Yes 2. No
	7	HF.1.2.2 Compulsory private insurance schemes	Categorical (select one)	1.Yes 2. No
	8	HF.1.3 Compulsory Medical Saving Accounts (CMSA)	Categorical (select one)	1.Yes 2. No
	9	HF.2 Voluntary health care payment schemes	Categorical (select one)	1.Yes 2. No
	10	HF.2.1 Voluntary health insurance schemes	Categorical (select one)	1.Yes 2. No
	11	HF.2.1.1 Primary/substitutory health insurance schemes	Categorical (select one)	1.Yes 2. No
	12	HF.2.1.1.1 Employer-based insurance (other than enterprises schemes)	Categorical (select one)	1.Yes 2. No
	13	HF.2.1.1.2 Government-based voluntary insurance	Categorical (select one)	1.Yes 2. No
	14	HF.2.1.1.3 Other primary coverage schemes	Categorical (select one)	1.Yes 2. No
	15	HF.2.1.2 Complementary/supplementary insurance schemes	Categorical (select one)	1.Yes 2. No
	16	HF.2.1.2.1 Community-based insurance	Categorical (select one)	1.Yes 2. No
	17	HF.2.1.2.2 Other complementary/supplementary insurance	Categorical (select one)	1.Yes 2. No
	18	HF.2.2 NPISH financing schemes	Categorical (select one)	1.Yes 2. No
	19	HF.2.2.1 NPISH financing schemes (excluding HF.2.2.2)	Categorical (select one)	1.Yes 2. No
	20	HF.2.2.2 Resident foreign agencies schemes	Categorical (select one)	1.Yes 2. No
	21	HF.2.3 Enterprise financing schemes	Categorical (select one)	1.Yes 2. No
	22	HF.2.3.1 Enterprises (except health care providers) financing schemes	Categorical (select one)	1.Yes 2. No

	23	HF.2.3.2 Health care providers financing schemes	Categorical (select one)	1.Yes 2. No
	24	HF.3 Household out-of-pocket payment	Categorical (select one)	1.Yes 2. No
	25	HF.3.1 Out-of-pocket excluding cost-sharing13	Categorical (select one)	1.Yes 2. No
	26	HF.3.2 Cost sharing with third-party payers	Categorical (select one)	1.Yes 2. No
	27	HF.3.2.1 Cost sharing with government schemes and compulsory contributory health insurance schemes	Categorical (select one)	1.Yes 2. No
	28	HF.3.2.2 Cost sharing with voluntary insurance schemes	Categorical (select one)	1.Yes 2. No
	29	HF.4 Rest of the world financing schemes (non-resident)	Categorical (select one)	1.Yes 2. No
	30	HF.4.1 Compulsory schemes (non-resident)	Categorical (select one)	1.Yes 2. No
	31	HF.4.1.1 Compulsory health insurance schemes (non-resident)	Categorical (select one)	1.Yes 2. No
	32	HF.4.1.2 Other compulsory schemes (non-resident)	Categorical (select one)	1.Yes 2. No
	33	HF.4.2 Voluntary schemes (non-resident)	Categorical (select one)	1.Yes 2. No
	34	HF.4.2.1 Voluntary health insurance schemes (non-resident)	Categorical (select one)	1.Yes 2. No
	35	HF.4.2.2 Other schemes (non-resident)	Categorical (select one)	1.Yes 2. No
	36	HF.4.2.2.1 Philanthropy/international NGOs schemes	Categorical (select one)	1.Yes 2. No
	37	HF.4.2.2.2 Foreign development agencies schemes	Categorical (select one)	1.Yes 2. No
	38	HF.4.2.2.3 Schemes of enclaves (e.g. international organisations or embassies)	Categorical (select one)	1.Yes 2. No
	39	Memorandum items	Categorical (select one)	1.Yes 2. No
	40	Financing agents managing the financing schemes	Categorical (select one)	1.Yes 2. No
	41	HF.RI.1.1 Government	Categorical (select one)	1.Yes 2. No
	42	HF.RI.1.2 Corporations	Categorical (select one)	1.Yes 2. No
	43	HF.RI.1.3 Households	Categorical (select one)	1.Yes 2. No
	44	HF.RI.1.4 NPISH	Categorical (select one)	1.Yes 2. No
	45	HF.RI.1.5 Rest of the world	Categorical (select one)	1.Yes 2. No
	46	Financing schemes and the related cost-sharing together	Categorical (select one)	1.Yes 2. No
	47	HF.RI.2 Government schemes and compulsory contributory	Categorical (select one)	1.Yes 2. No

		health insurance schemes together with cost-sharing (HF.1 + HF.3.2.1)		
	48	HF.RI.3 Voluntary health insurance schemes together with cost-sharing (HF.2+HF.3.2.2)	Categorical (select one)	1.Yes 2. No

Codebook for Revenues of Financing Agents (FA)

Section	No	Variable	Variable Type	Input
Financing Agents (FA) ICHA Codes	1	FA.1. General government	Categorical (select one)	1.Yes 2. No
	2	FA.1.1 Central government	Categorical (select one)	1.Yes 2. No
	3	FA.1.1.1 Ministry of Health	Categorical (select one)	1.Yes 2. No
	4	FA.1.1.2 Other ministries and public units (belonging to central government)	Categorical (select one)	1.Yes 2. No
	5	FA.1.1.3 National Health Service Agency	Categorical (select one)	1.Yes 2. No
	6	FA.1.1.4 National Health Insurance Agency	Categorical (select one)	1.Yes 2. No
	7	FA.1.2 State/Regional/Local government	Categorical (select one)	1.Yes 2. No
	8	FA.1.3 Social security agency	Categorical (select one)	1.Yes 2. No
	9	FA.1.3.1 Social Health Insurance Agency	Categorical (select one)	1.Yes 2. No
	10	FA.1.3.2 Other social security agency	Categorical (select one)	1.Yes 2. No
	11	FA.1.9 All other general government units	Categorical (select one)	1.Yes 2. No
	12	FA.2 Insurance corporations	Categorical (select one)	1.Yes 2. No
	13	FA.2.1 Commercial insurance companies	Categorical (select one)	1.Yes 2. No
	14	FA.2.2 Mutual and other non-profit insurance organisations	Categorical (select one)	1.Yes 2. No
	15	FA.3 Corporations (other than insurance corporations)	Categorical (select one)	1.Yes 2. No
	16	FA.3.1 Health management and provider corporations	Categorical (select one)	1.Yes 2. No
	17	FA.3.2 Corporations (other than providers of health services)	Categorical (select one)	1.Yes 2. No
	18	FA.4 Non-profit institutions serving households (NPISH)	Categorical (select one)	1.Yes 2. No
	19	FA.5 Households	Categorical (select one)	1.Yes 2. No
	20	FA.6 Rest of the world	Categorical (select one)	1.Yes 2. No
	21	FA.6.1 International organisations	Categorical (select one)	1.Yes 2. No

	22	FA.6.2 Foreign governments	Categorical (select one)	1.Yes 2. No
	23	FA.6.3 Other foreign entities	Categorical (select one)	1.Yes 2. No

PubMed Database Search Syntax

Search number	Query	Search Details	Results
4 (combined search)	((("Reproductive health"[tw] OR "Maternal health"[tw] OR "Neonatal health" [tw] OR "Child health" [tw] OR RMNCH [tw] OR "Maternal health" [tw] OR "child health" [tw] OR "Perinatal health" [tw] OR "Women's health" [tw] OR "Newborn health" [tw] OR "Adolescent health" [tw]) AND (Africa[tw] OR "Sub-Saharan Africa" [tw] OR "Sub Saharan Africa" [tw] OR "SubSaharan Africa" [tw] OR "East Africa" [tw] OR "West Africa" [tw] OR "Southern Africa" [tw] OR "Central Africa" [tw] OR "North Africa"[tw] OR [tw] OR Algeria[tw] OR Angola[tw] OR Benin[tw] OR Botswana [tw] OR Burkina Faso[tw] OR Burundi[tw] OR Cabo Verde[tw] OR Cameroon[tw] OR "Central African Republic"[tw] OR Chad[tw] OR Comoros[tw] OR "Congo, Democratic Republic of the" [tw] OR "Democratic Republic of the Congo" [tw] OR "Republic of the Congo"[tw] OR "Cote d'Ivoire" [tw] OR[tw] OR Djibouti[tw] OR Egypt[tw] OR "Equatorial Guinea" [tw] OR Eritrea[tw] OR Eswatini[tw] OR Ethiopia[tw] OR Gabon[tw] OR Gambia[tw] OR Ghana[tw] OR Guinea[tw] OR "Guinea-Bissau" [tw] OR "Guinea Bissau" [tw] OR Kenya[tw] OR Lesotho[tw] OR Liberia[tw] OR Libya[tw] OR Madagascar[tw] OR Malawi[tw] OR Mali[tw] OR Mauritania[tw] OR Mauritius[tw] OR Morocco[tw] OR Mozambique[tw] OR Namibia[tw] OR Niger[tw] OR Nigeria[tw] OR Rwanda[tw] OR "Sao Tome and Principe" [tw] OR Senegal[tw] OR Seychelles[tw] OR Sierra Leone[tw] OR Somalia[tw] OR "South Africa"[tw] OR "South Sudan" [tw] OR Sudan[tw] OR Tanzania[tw] OR Togo[tw] OR Tunisia[tw] OR Uganda[tw] OR Zambia[tw] OR Zimbabwe[tw])) AND ("National health accounts"[tw] OR "Expenditure Review" [tw] OR "Health Program report" [tw] OR "Tracking Surveys"[tw] OR "subaccount"[tw])	(("Reproductive health"[Text Word] OR "Maternal health"[Text Word] OR "Neonatal health"[Text Word] OR "Child health"[Text Word] OR "RMNCH"[Text Word] OR "Maternal health"[Text Word] OR "Child health"[Text Word] OR "Perinatal health"[Text Word] OR "Women's health"[Text Word] OR "Newborn health"[Text Word] OR "Adolescent health"[Text Word]) AND (((((("Africa"[Text Word] OR "sub saharan africa"[Text Word] OR "sub saharan africa"[Text Word] OR "SubSaharan Africa"[Text Word] OR "East Africa"[Text Word] OR "West Africa"[Text Word] OR "Southern Africa"[Text Word] OR "Central Africa"[Text Word] OR "North Africa"[Text Word]) AND "OR"[Text Word]) OR "Algeria"[Text Word] OR "Angola"[Text Word] OR "Benin"[Text Word] OR "Botswana"[Text Word] OR "burkina faso"[Text Word] OR "Burundi"[Text Word] OR "cabo verde"[Text Word] OR "Cameroon"[Text Word] OR "Central African Republic"[Text Word] OR "Chad"[Text Word] OR "Comoros"[Text Word] OR "congo democratic republic of the"[Text Word] OR "Democratic Republic of the Congo"[Text Word] OR "Republic of the Congo"[Text Word] OR "Cote d'Ivoire"[Text Word]) AND "OR"[Text Word]) OR "Djibouti"[Text Word] OR "Egypt"[Text Word] OR "Equatorial Guinea"[Text Word] OR "Eritrea"[Text Word] OR "Eswatini"[Text Word] OR "Ethiopia"[Text Word] OR "Gabon"[Text Word] OR "Gambia"[Text Word] OR "Ghana"[Text Word] OR "Guinea"[Text Word] OR "guinea bissau"[Text Word] OR "guinea bissau"[Text Word] OR "Kenya"[Text Word] OR "Lesotho"[Text Word] OR "Liberia"[Text Word] OR "Libya"[Text Word] OR "Madagascar"[Text Word] OR "Malawi"[Text Word] OR "Mali"[Text Word] OR "Mauritania"[Text Word] OR "Mauritius"[Text Word] OR "Morocco"[Text Word] OR "Mozambique"[Text Word] OR "Namibia"[Text Word] OR "Niger"[Text Word] OR "Nigeria"[Text Word] OR "Rwanda"[Text Word] OR "Sao Tome and Principe"[Text Word] OR "Senegal"[Text Word] OR "Seychelles"[Text Word] OR "sierra leone"[Text Word] OR "Somalia"[Text Word] OR "South Africa"[Text Word] OR "South Sudan"[Text Word] OR "Sudan"[Text Word] OR "Tanzania"[Text Word] OR "Togo"[Text Word] OR "Tunisia"[Text Word] OR "Uganda"[Text Word] OR "Zambia"[Text Word] OR "Zimbabwe"[Text Word]) AND ("National health accounts"[Text Word] OR "Expenditure Review"[Text Word] OR "Health Program report"[Text Word] OR "Tracking Surveys"[Text Word] OR "subaccount"[Text Word])	4

3	"Reproductive health"[tw] OR "Maternal health"[tw] OR "Neonatal health" [tw] OR "Child health" [tw] OR RMNCH [tw] OR "Maternal health" [tw] OR "child health" [tw] OR "Perinatal health" [tw] OR "Women's health" [tw] OR "Newborn health" [tw] OR "Adolescent health" [tw]	"Reproductive health"[Text Word] OR "Maternal health"[Text Word] OR "Neonatal health"[Text Word] OR "Child health"[Text Word] OR "RMNCH"[Text Word] OR "Maternal health"[Text Word] OR "Child health"[Text Word] OR "Perinatal health"[Text Word] OR "Women's health"[Text Word] OR "Newborn health"[Text Word] OR "Adolescent health"[Text Word]	163,129
2	Africa[tw] OR "Sub-Saharan Africa" [tw] OR "Sub Saharan Africa" [tw] OR "SubSaharan Africa" [tw] OR "East Africa" [tw] OR "West Africa" [tw] OR "Southern Africa" [tw] OR "Central Africa" [tw] OR "North Africa"[tw] OR [tw] OR Algeria[tw] OR Angola[tw] OR Benin[tw] OR Botswana [tw] OR Burkina Faso[tw] OR Burundi[tw] OR Cabo Verde[tw] OR Cameroon[tw] OR "Central African Republic"[tw] OR Chad[tw] OR Comoros[tw] OR "Congo, Democratic Republic of the" [tw] OR "Democratic Republic of the Congo" [tw] OR "Republic of the Congo"[tw] OR "Cote d'Ivoire" [tw] OR[tw] OR Djibouti[tw] OR Egypt[tw] OR "Equatorial Guinea" [tw] OR Eritrea[tw] OR Eswatini[tw] OR Ethiopia[tw] OR Gabon[tw] OR Gambia[tw] OR Ghana[tw] OR Guinea[tw] OR "Guinea-Bissau" [tw] OR "Guinea Bissau" [tw] OR Kenya[tw] OR Lesotho[tw] OR Liberia[tw] OR Libya[tw] OR Madagascar[tw] OR Malawi[tw] OR Mali[tw] OR Mauritania[tw] OR Mauritius[tw] OR Morocco[tw] OR Mozambique[tw] OR Namibia[tw] OR Niger[tw] OR Nigeria[tw] OR Rwanda[tw] OR "Sao Tome and Principe" [tw] OR Senegal[tw] OR Seychelles[tw] OR Sierra Leone[tw] OR Somalia[tw] OR "South Africa"[tw] OR "South Sudan" [tw] OR Sudan[tw] OR Tanzania[tw] OR Togo[tw] OR Tunisia[tw] OR Uganda[tw] OR Zambia[tw] OR Zimbabwe[tw]	((((("Africa"[Text Word] OR "sub saharan africa"[Text Word] OR "sub saharan africa"[Text Word] OR "SubSaharan Africa"[Text Word] OR "East Africa"[Text Word] OR "West Africa"[Text Word] OR "Southern Africa"[Text Word] OR "Central Africa"[Text Word] OR "North Africa"[Text Word]) AND "OR"[Text Word]) OR "Algeria"[Text Word] OR "Angola"[Text Word] OR "Benin"[Text Word] OR "Botswana"[Text Word] OR "burkina faso"[Text Word] OR "Burundi"[Text Word] OR "cabo verde"[Text Word] OR "Cameroon"[Text Word] OR "Central African Republic"[Text Word] OR "Chad"[Text Word] OR "Comoros"[Text Word] OR "congo democratic republic of the"[Text Word] OR "Democratic Republic of the Congo"[Text Word] OR "Republic of the Congo"[Text Word] OR "Cote d'Ivoire"[Text Word]) AND "OR"[Text Word]) OR "Djibouti"[Text Word] OR "Egypt"[Text Word] OR "Equatorial Guinea"[Text Word] OR "Eritrea"[Text Word] OR "Eswatini"[Text Word] OR "Ethiopia"[Text Word] OR "Gabon"[Text Word] OR "Gambia"[Text Word] OR "Ghana"[Text Word] OR "Guinea"[Text Word] OR "guinea bissau"[Text Word] OR "guinea bissau"[Text Word] OR "Kenya"[Text Word] OR "Lesotho"[Text Word] OR "Liberia"[Text Word] OR "Libya"[Text Word] OR "Madagascar"[Text Word] OR "Malawi"[Text Word] OR "Mali"[Text Word] OR "Mauritania"[Text Word] OR "Mauritius"[Text Word] OR "Morocco"[Text Word] OR "Mozambique"[Text Word] OR "Namibia"[Text Word] OR "Niger"[Text Word] OR "Nigeria"[Text Word] OR "Rwanda"[Text Word] OR "Sao Tome and Principe"[Text Word] OR "Senegal"[Text Word] OR "Seychelles"[Text Word] OR "sierra leone"[Text Word] OR "Somalia"[Text Word] OR "South Africa"[Text Word] OR "South Sudan"[Text Word] OR "Sudan"[Text Word] OR "Tanzania"[Text Word] OR "Togo"[Text Word] OR "Tunisia"[Text Word] OR "Uganda"[Text Word] OR "Zambia"[Text Word] OR "Zimbabwe"[Text Word]	571,689
1	"National health accounts"[tw] OR "Expenditure Review" [tw] OR "Health Program report" [tw] OR "Tracking Surveys"[tw] OR "subaccount"[tw]	"National health accounts"[Text Word] OR "Expenditure Review"[Text Word] OR "Health Program report"[Text Word] OR "Tracking Surveys"[Text Word] OR "subaccount"[Text Word]	182

Specific Units in Revenues of Health Financing Schemes (FS) Code Being Tracked by African Countries.

	Units of Revenues of Health Financing Schemes (FS) for RMNCH	Description	Number of African Countries Tracking Units
1	FS.RI.1.5	Rest of the world	17
2	FS.RI.1.3	Households	17
3	FS.RI.1.1	Government	17
4	FS.RI.1.2	Corporations	16
5	FS.RI.1.4	Non-Profit Institutions Serving Households (NPISH)	14
6	FS.2	Transfers distributed by government from foreign origin	5
7	FS.5	Voluntary prepayment	4
8	FS.1	Transfers from government domestic revenue (allocated to health purposes)	4
9	FS.6.1	Other revenues from households n.e.c.	4
10	FS.6	Other domestic revenues n.e.c.	4
11	FS.7	Direct foreign transfers	4
12	FS.3	Social insurance contributions	3
13	FS.5.3	Other voluntary prepaid revenues	3
14	FS.6.3	Other revenues from NPISH n.e.c.	2
15	FS.6.2	Other revenues from corporations n.e.c.	2
16	FS.RI.1	Institutional units providing revenues to financing schemes	2
17	FS.5.1	Voluntary prepayment from individuals/households	1
18	FS.5.2	Voluntary prepayment from employers	1
19	FS.7.3	Other direct foreign transfers (n.e.c.)	1
20	FS.1.1	Internal transfers and grants	1

Specific Units in Health Financing Schemes Code Being Tracked by African Countries.

	Units of Health Financing Schemes (HF) for RMNCH	Descriptions	Number of African Countries Tracking Units
1	HF.1	Government schemes and compulsory contributory health care financing schemes	7
2	HF.3	Household out-of-pocket payment	7
3	HF.1.1	Government schemes	6
4	HF.2	Voluntary health care payment schemes	6
5	HF.1.1.1	Central government schemes	4
6	HF.2.2	NPISH financing schemes	4
7	HF.4	Rest of the world financing schemes (0n-resident)	4
8	HF.2.2.1	NPISH financing schemes (excluding HF.2.2.2)	3
9	HF.1.2	Compulsory contributory health insurance schemes	2
10	HF.2.1	Voluntary health insurance schemes	2
11	HF.2.1.1.1	Employer-based insurance (other than enterprises schemes)	2
12	HF.2.3	Enterprise financing schemes	2
13	HF.2.3.1	Enterprises (except health care providers) financing schemes	2
14	HF.3.1	Out-of-pocket excluding cost-sharing	2
15	HF.1.1.2	State/regional/local government schemes	1
16	HF.1.2.1	Social health insurance schemes	1
17	HF.2.1.1	Primary/substitutory health insurance schemes	1
18	HF.2.1.1.3	Other primary coverage schemes	1

Specific Units in Financing Agents (FA) Code Being Tracked by African Countries.

	Units of Financing Agents (FA) for RMNCH	Descriptions	Number of African Countries Tracking Units
1	FA.4	Non-profit institutions serving households (NPISH)	9
2	FA.3	Corporations (other than insurance corporations)	8
3	FA.5	Households	8
4	FA.1	General government	6
5	FA.6	Rest of the world	5
6	FA.1.1.1	Ministry of Health	4
7	FA.2	Insurance corporations	4
8	FA.1.1.2	Other ministries and public units (belonging to central government)	3
9	FA.1.2	State/Regional/Local government	2
10	FA.1.9	All other general government units	2
11	FA.1.1.4	National Health Insurance Agency	1
12	FA.1.3.1	Social Health Insurance Agency	1
13	FA.2.1	Commercial insurance companies	1
14	FA.6.3	Other foreign entities	1