Chapter Title: From Present African Health Care Systems to the Future: Health Financing in Ghana and Rwanda

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INTRODUCTION

That there is a positive correlation between healthy populations and socio-economic and human development is not in dispute. It is in countries’ interests, therefore, to aim to have healthy, productive citizens. A strong, well-functioning public health care system would go some way to realising this. In sub-Saharan Africa, the issue of how to finance health care and make it accessible to the majority of citizens is an ongoing challenge.

While the overall intention behind The Structural Adjustment Programmes (SAPs) of the 1980s and 1990s was to assist development, the inadvertent result in many African countries that subscribed to SAPs was, in fact, the deepening of poverty and inequality. The aims of the
Millennium Development Goals (MDGs) and, later, the Sustainable Development Goals (SDGs) are to reduce poverty and poverty-related diseases, increase gender equality, reduce maternal and child mortality, to address climate change and environmental degradation, and to further ensure prosperity, peace, and justice (UN, 2018).

One of the consequences of the adoption of SAPs was that governments reduced their spending on health care. In some instances (Zimbabwe, for example) the gains countries had made after independence were eroded. The targets the MDGs and the SDGs set in place created – and continue to create – the possibility for pursuing actions aimed at sustaining the health systems of these countries, despite the rising maternal and infant morbidity and mortality rates and child deaths (UN, 2018). Significantly, goal three of the SDGs aims, among other things, at focusing on providing more efficient funding of health systems, improved sanitation and hygiene, increased access to physicians, and more tips on ways to reduce ambient pollution (UN, 2018). Globally, this is directed at making strong progress to save the lives of millions.

Some African governments have attempted to bridge the gap between the rich and the poor with regard to access to health services through the introduction of different forms of public health insurance – Ghana (2003), Nigeria (2005), and Rwanda (1999) are examples. Using Ghana and Rwanda as case studies, this chapter traces the post-independence precursors to public health insurance and the impact of socio-economic and political factors on the development of health insurance schemes. The rationale for the selection of Ghana and Rwanda as case studies is that these two countries introduced a form of health insurance that sought to bridge the inequities within the social and economic spaces of their respective countries and to further render effective support in the area of tackling diseases, whether communicable or non-communicable. Organically, Ghana and Rwanda are middle-income and low- and middle-income African countries (World Bank in Ghana, 2018). They epitomise the general social and economic trajectories within the African environment. Similar socio-economic issues, alongside similar communicable and non-communicable health challenges, were the impetus for Ghana and Rwanda’s governments to put systems in place, especially relating to health financing, to allow for public action in
accessing health care and participating in the prevention, control, and management of diseases.

In pursuing this research, the theory of lesson-drawing has been found useful. Rose (1991) argues that ‘(l)esson-drawing addresses the question: under what circumstances and to what extent can a programme that is effective in one place transfer to another?’ In a study describing health insurance practices, as this one does, using the separate examples of Ghana and Rwanda, lessons to be drawn can be examined and, if appropriate, tested elsewhere. If striving to shape present and future discourses and policy-related issues of health care in Africa, and specifically in sub-Saharan Africa, is the intention, these two case studies are good starting points. Thus, this study envisages that interested activists and policy-makers will draw lessons from these two countries, contingent upon prevailing circumstances in their own countries.

Methodologically, this qualitative contribution synthesises thoughts and draws lessons from multiple secondary sources covering health care financing in Ghana and Rwanda. In the main, these were pertinent journal articles, books on the subject, and specialist reports. I selected the sources based on their authenticity and relevance to the study. Sources have been corroborated and triangulated to deal with the challenges associated on occasion with single source arguments. In presenting a thematic analysis, the research deals with the issue of continuity and change within the respective two countries’ strategies for health care financing aimed at ensuring universal health coverage.

The chapter is presented in five sections. The first section discusses the evolution of health care management in Africa. In the second, attention is paid to the Structural Adjustment Programmes (SAPs) and their impact on health care in sub-Saharan Africa. The third and fourth sections discuss the case studies of the National Health Insurance Scheme (NHIS) in Ghana and the community-based health insurance scheme (CBHI) in Rwanda. These two sections examine the origins, implementation and financing, socio-economic impact, and challenges facing the scheme. The final section provides a comparative narrative of the case studies, suggests lesson-learning, and offers recommendations.
Health institutions serve as a useful foundation in the social, political, and economic development of every society. The positive correlation that exists between health and development underscores why health institutions in terms of importance are on a par with other central institutions of governance (Akortsu & Abor, 2011). The age-old association of disease with impediments to realising one’s full human capabilities caused Africa’s governments to search for ways to combat disease and encourage the health of citizens (Brenya & Adu-Gyamfi, 2014).

In the pre-colonial era, health care was managed by traditional authorities who entrusted the health of their subjects to traditional practitioners (Maier, 1979). Since payments were made in kind or through livestock, it was essentially an out-of-pocket payment system. Indigenous practitioners received respect and dignity from their patients; and this system of reward replaced the need to provide a monetary value for their services (Kale, 1995; Akortsu & Abor, 2011; Igoli et al., 2005; Yankuzo, 2014).

During colonisation, the management of health was transferred gradually to the colonial government through the introduction of a different cosmology about what caused disease and ill health – the germ theory. The expansion of biomedicine and Western ideas of disease causation went hand in hand with the entrenchment of colonial rule. Initially, biomedicine was used to treat the ailments affecting imperial settlers and colonialists. However, during the period of the 1920s to the 1960s, a time when native labour was critical to building the colonies, biomedicine became deeply rooted in treating epidemics and keeping native populations relatively healthy (Lock & Nguyen, 2010). Health care during this period was funded from both the taxation of indigenous populations and through colonial grants. Though the mode of funding was largely through cost sharing, Africans were marginalised in the colonial health system. They were often suspicious of biomedical doctors; many preferred to use traditional or indigenous medicine (Addae, 1997; Tilley, 2016).

During the period of independence (1960s–1980s), biomedicine
and health care became an emblem for modernity and nation building. African governments saw health as an essential requirement for economic, social, and political development. In the post-independence era they placed the issue of cost at the centre of their efforts to bridge the health accessibility gap between the poor and the rich. Most post-independence African governments adopted a user fee-free mode of health care delivery in order to ensure that cost would not deter any individual from seeking health care. Kwame Nkrumah’s Convention People’s Party (CPP) in Ghana, Julius Nyerere’s Chama Cha Mapinduzi (CCM) in Tanzania, and Seretse Khama’s Botswana Democratic Party (BDP) in Botswana are examples of governing parties that adopted the user fee-free model of health financing (Brenya & Adu-Gyamfi, 2014; Gros, 2015).

To ensure that these policies were effectively implemented, post-independence governments developed health infrastructure and training of personnel for the health industry. These developments were possible at the time because of favourable economic variables, which offered the potential for Africa’s economy to prosper. Some of the fundamentals that supported development were derived from nature’s beneficence, such as oil, for example. Favourable oil prices, the high prices of export primary commodities, and sound colonial reserves, among other things, offered the promise of development and growth.

Although it unfolded gradually, user fee-free health care thrived in the immediate post-independence years and considerably larger numbers of people from impoverished communities had access to health care. These developments were short-lived, however (Ewusi, 1989; Castro-Leal et al., 1999; Saul & Leys, 1999; Barnes et al., 2015; Gros, 2015).

A series of coups between the late 1960s and 1980s, high inflation rates, a decline in primary commodity-based foreign exchange earnings, and corruption (Gros, 2015; Akortsu & Abor, 2011) all contributed to halting or reversing progress. The situation led to the introduction of the International Monetary Fund (IMF) Structural Adjustment Programmes (SAPs) and the debt burden on African countries that came with it. The impact was felt most profoundly on the health sectors of these African countries. Indebted governments,
in exchange for loans to pay foreign creditors, were forced to strip their health systems of various subsidies, leading to the disparity in health services in sub-Saharan Africa. Through the SAPs, the user fee model was introduced in Africa and the gap between the poor and the rich began to widen. Although the user fee model had been introduced to encourage sustainability, efficiency, and effectiveness in the health services, its aim was lost as governments and health administrators saw user fees as a means of raising funds for day-to-day administration. In no time health care in large parts of sub-Saharan Africa had reverted to the colonial standard where one had to pay to access health care, thus reinforcing disparities and inequities. The difference in this period, however, was that the disparity was between poor and affluent Africans, rather than between colonisers and indigenous populations (Loewenson, 1993; Gilson, 1997).

Championed by the World Health Organization, universal health coverage in Africa was a priority of the 2015 Millennium Development Goals (MDG) agenda (Odeyemi & Nixon, 2013). The recent wave of democratisation of most countries in Africa has correlated positively with the development of their public health institutions (Carbone, 2011; Gros, 2015). Nevertheless, the recent adoption of universal health coverage and other re-emerging forms of social insurance by many governments in sub-Saharan Africa has once again raised the issue of the relationship between cost and access to health care. While there are other factors to take into account, the issue of cost remains a critical obstacle to universal health coverage, (Boateng et al., 2017).

HEALTH CARE FINANCING AND THE STRUCTURAL ADJUSTMENT PROGRAMMES (SAPS) IN SUB-SAHARAN AFRICA

In order to rescue African economies from their precarious state, caused by high inflation, high incidence of corruption, and low gross domestic product (GDP), Western policy-makers, the World Bank and the IMF, to name a few stakeholders, responded with a series of interventions under the SAP banner – Structural Adjustment Policies and Structural Adjustment Loans being two examples. SAPs were presented as short-
term austerities that would lead to long-term growth and development (Peabody, 1996: 823). These solutions, which translated to cuts in health expenditure, have raised controversial arguments concerning Africa’s socio-economic and human development. The common explanation given for cuts in expenditure was the decline in export commodities, which had initially financed most government revenues in post-independence Africa. The drugs and technology responsible for health care in most sub-Saharan states were imported and this fact, coupled with devaluing currencies, led to an inevitable rise in the cost of health care (Peabody, 1996).

The negative impacts of SAPs on the health sector of multiple African governments, a sector critical to a country’s overall development, has been documented clearly. These have included cuts in public health expenses by participating governments, adverse effects on the public health workforce, reduced health accessibility and coverage for the population, conflict of interest between public health institutions and private health entities, and the decentralisation and increasing cost of health care (Kentikelenis, 2017). Concerning the cuts in public health expenditure, many governments had to reduce the subsidies that cushioned the cost of health care for the poor and vulnerable, and so they made paying a user fee compulsory for accessing health care (Stromquist, 1999). Essentially, it was the introduction of SAPs that raised the cost of health care in most African states.

The SAPs also affected the health sector indirectly through the macroeconomic policies African governments adopted. The changes in policy resulted in the income of individuals going down and the prices of goods and services going up. Included in this increase were the price of drugs and hospital services. This, in turn, had an effect on household incomes and savings, which resulted in low use of health services. In addition, the inability of public health centres to provide essential medical technologies to combat infirmities led to many individuals turning to private health institutions (Peabody, 1996). This situation placed rural dwellers at a further disadvantage because they could not afford the health care provided by these private entities. Public health institutions in rural centres were generally understaffed, and shortages of essential medications were common (Buor, 2004).
Ineffective tax collection coupled with stripping off tariffs and import duties in the name of increasing foreign direct investment saw a drastic drop in public revenue in those African states that had enrolled in the SAPs (Woodward, 1992). Governments could not fund health financing exemption programmes. The SAPs also led to workers being laid off so their ability to pay out-of-pocket for health care was reduced.

Although the SAPs had been directed toward extricating the economies of African countries from dire macroeconomic difficulties, these programmes in most instances resulted in increasing disparity and inequities.

Presenting an opposing view, one which sees the SAPs as having had some positive effect, Clements et al. (2013) argue that the SAPs increased social spending, which encouraged sustainability of the health systems in Africa. Similarly, Peabody (1996) contends that reducing government subsidies for health care made individuals work and pay for their own health, which increased the sustainability of Africa’s health services. In contrast, Schatz (1994) states that the performances of African economies during the SAPs and after the programme became worse since indicators such as GDP and poverty status, among others, were either the same or increased slowly in this period.

In recent times African governments continue to consider the issue of health financing as an essential determinant of universal access to health care. Most countries have adopted national health coverage and other forms of social funding to health care in order to increase universal access. In the next two sections, the discussion focuses on two examples: the health insurance programmes in Ghana and Rwanda.

**HEALTH CARE MANAGEMENT IN GHANA**

Over time, the NHIS has become an essential tool in Ghana’s system of health management and financing. The Ghanaian idea of access to national health care, as embodied in the NHIS, provides a legitimate, continuously evolving tool for free access to health care. It needs refinement, nevertheless, to ensure that the poor will be enrolled in ways that guarantee their protection.
Origins of the NHIS

Ghana is one of the few countries in Africa to have successfully implemented a form of social insurance health care, known locally as the National Health Insurance Scheme (Sarpong et al., 2010). Ghana’s success rate stems from the zealous efforts made by previous governments to pursue universal health care for poor and vulnerable groups (see Adu-Gyamfi et al., 2015a). Political actors from Kwame Nkrumah, Kofi Busia, to John Kufuor all pushed for some form of health care financing based on the belief that health care implementation and financing is an essential tool for social and economic development.

After independence, Nkrumah, the founder of the CPP and Ghana’s first president, gave the citizens hope of universal access to health care for all. However, mismanagement and corruption, which was especially rife in health centres and hospitals, thwarted the dream. In 1966 a military coup saw the National Liberation Council (NLC) seize power. This further complicated the provision of health care. By then Ghanaians had come to relish the idea of the free health care introduced by Nkrumah. Subsequently, when Busia’s Progress Party, which replaced the CPP as the next civilian government in 1969, tried to introduce a nominal fee as guarantee for access to health care, there was widespread resistance. The idea that finance was a barrier to accessing health care prompted Busia to adopt a health insurance scheme of financing health care where the government paid a greater portion of the costs (Brenya & Adu-Gyamfi, 2014).

The type of health care management introduced by Nkrumah and Busia was put to the test during the 1970s and 1980s. Amidst a drastic decline in the health status of Ghanaians, and a high incidence of corruption and mismanagement at the national level, the introduction of a user fee as a compulsory tool to access health care widened the inequality gap, especially between the rural and urban centres (Ewusi, 1989).

A return to democratisation in 1992, as well as the fourth republican constitution, put the Ghanaian health system on a better path to ensuring universal health care to citizens (Carbone, 2011). Ghanaians’ hope for better health care management resulted in the New Patriotic Party (NPP), led by Kufuor, promising to replace the ‘dreadful cash and carry system’ which had existed from 1970–2003 (Carbone, 2011;
From Present African Health Care Systems to the Future

Gros, 2015). It was during Kufuor’s leadership that the National Health Insurance Scheme was introduced in October 2003 through an act of parliament. Efforts to establish universal health insurance date back to the 1970s when the Hospital Fee (Act 387 of 1971) was established. This step was later thwarted by the 1972 coup (Adu-Gyamfi et al., 2015b).

Some viewed the NHIS as a privilege, while political parties used it as political leverage (Carbone, 2011). The NHIS in Ghana is not a neutral entity but one that remains mired in politics. Besides the politics and political usefulness of a scheme like the NHIS, there is the need to understand the continuities and discontinuities – the changes – that gave birth to it. Towards this end it is important to consider the nature of the implementation and financing strategies.

Implementation and financing of NHIS

The first efforts to reintroduce the National Health Insurance Scheme were in 1997 under the auspices of the Ministry of Health (MoH), the Ghana Health Company, and the Social Security and National Insurance Trust (SSNIT). These stakeholders intended to mobilise funds to ensure a smooth implementation of health insurance. The Ghana Health Company, for example, was to provide other means of finance to fund health insurance in Ghana (Adoma-Yeboah, 2005). Although they were not wholly successful, the existence of private insurance companies, such as the Vanguard Assurance Company and the Gemini Life Insurance Company in urban centres, enabled alternative funding for health insurance (Adu-Gyamfi et al., 2015b). While the rural areas were at a disadvantage in terms of insurance companies, in places like Damango, Tano, Jaman, and the Dangme West districts support was also provided by NGOs and religious bodies, thus showing that a health insurance which incorporated the rural populace was possible.

Today the NHIS is managed by the National Health Insurance Authority, which is an autonomous body (NHIS, 2017). It is regulated through the National Health Insurance Council, which sees to a number of functions: planning, monitoring, and evaluation; registration and licensing; administration and management support; and funding and investment. Some of the functions the NHIS performs are: registering of members for the scheme, ensuring equity in health care coverage,
protection of the poor against financial risk, and the drafting of proposals to the Minister of Health for the formulation of policies concerning health insurance.

The means of financing the scheme is through a cost-sharing responsibility between the participants of the scheme and the government of Ghana. Schedules made for this funding are a 2.5 per cent National Health Insurance levy on all goods and services collected under the Value Added Tax (VAT), 2.5 per cent of 17.5 per cent Social Security and National Insurance Trust (SSNIT) contributions per month, returns on National Health Insurance Fund investments, and premiums paid by those who work in the informal sector (MoH, 2004).

There are two main groups that use the scheme and they are differentiated by whether they work in the formal or informal sector. Those who work in the formal sector include employees of private entities and self-employed individuals who contribute to the SSNIT fund. Children under 18, persons in need of antenatal, delivery, and postnatal care, persons classified by the Ministry for Social Welfare as indigent under the Livelihood Empowerment Against Poverty (LEAP) programme, persons with mental disorders, pensioners of SSNIT, and persons aged 70 years and above are entitled to the benefits those in formal sector employment receive (NHIS, 2014).

SSNIT contributors, SSNIT pensioners, adults of age 70 and above, and children under 18 years old pay both renewal and card processing fees. However, pregnant women, programme beneficiaries, and persons with mental disorders are exempted from the card processing fee and renewal fees (NHIA, 2017b; 2017c). These formal groups constitute about 69 per cent of the NHIS membership composition (Wang et al., 2017: 19) and they are not required to pay the premium. The second group that uses the scheme are those in informal employment: 31 per cent of the 40 per cent of the national population covered by NIHS are from the informal sector (Wang et al., 2017: 17). Members who are informal sector workers are required to pay a premium.

The NHIS covers about 95 per cent of ailments treated in health facilities in Ghana (Wang et al., 2017). These are enshrined in the products rendered by the hospitals and health facilities. They are the Out-Patient Department (OPD) services addressing medical conditions like malaria,
From Present African Health Care Systems to the Future

acute respiratory tract infection, skin diseases and ulcers, among other diseases. The In-Patient Department (IPD) delivers services such as laboratory investigations, cervical and breast cancer treatment, as well as surgical operations, including appendectomy. The oral and eye services deal with issues of dentistry and optometry respectively, while maternal service deals with antenatal and postnatal care, including child delivery (NHIA, 2014: 10).

The accredited centres of health care covered by the scheme (Table 1) are: community-based health planning and services (CHPS) health centres; clinics; polyclinics; primary hospitals, including district hospitals and private primary hospitals; and secondary hospitals, which include regional hospitals, pharmacies, licensed chemical shops, and diagnostic centres. In Ghana, there are about 3,500 public, private, and faith-based health care facilities. Of these, 57 per cent are public facilities, 33 per cent are private, and 7 per cent are facilities operated by the Christian Health Association of Ghana (CHAG) (Wang et al., 2017: 11). Table 1 shows the details of public, private, and missionary hospitals. In all, one teaching hospital is private, and the rest, which include teaching, municipal, metropolitan, regional, and district hospitals, are public facilities.

Table 1: The number of health service types in Ghana

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHPS</td>
<td>653</td>
</tr>
<tr>
<td>Clinic</td>
<td>1,173</td>
</tr>
<tr>
<td>Health centre</td>
<td>787</td>
</tr>
<tr>
<td>Maternity home</td>
<td>369</td>
</tr>
<tr>
<td>Polyclinic</td>
<td>16</td>
</tr>
<tr>
<td>Hospital unidentified</td>
<td>276</td>
</tr>
<tr>
<td>Metropolitan/Municipal hospital</td>
<td>5</td>
</tr>
<tr>
<td>Regional hospital</td>
<td>3</td>
</tr>
<tr>
<td>Psychiatric hospital</td>
<td>3</td>
</tr>
<tr>
<td>Teaching hospital</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>183</td>
</tr>
</tbody>
</table>

*Source: Wang et al. 2017: 11*
There exist two main types of health insurance under the NHIS in Ghana. These are the social-type health insurance and the private commercial health insurance. The social-type health insurance is categorised into the District Mutual Health Insurance Scheme (DMHIS) and the Private Mutual Health Insurance Scheme (PMHIS).

The DMHIS is an initiative of the government to target the poor who cannot access health care financially. Hence, packages vary according to finance status in the community. They are the core poor, very poor, poor, middle income, rich, and the very rich (Jehu-Appiah et al., 2011). In 2004, the government released 40.6 billion Ghana cedis to establish the DMHIS in all districts, metropolitan and municipal assemblies (Ghana News Agency, 2004). The DMHIS is self funded, with subsidies from the government (MoH, 2004: 11). Returns from investments or surplus cash are returned to the scheme.

The PMHIS operates on market principles. Premiums are determined based on a calculated risk of the group being insured getting sick. The PMHIS does not receive any funding from the government (MoH, 2004). Recently, 11 private insurance companies joined the NHIS (see Table 2). Because of their incentive to make profit, these companies are all based in urban areas. Rural areas are left to rely on DMHIS.

### Table 2: Private insurance companies on the NHIS

<table>
<thead>
<tr>
<th>Insurance Company</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accra Health Insurance Limited</td>
<td>Accra</td>
</tr>
<tr>
<td>Apex Health Insurance Limited</td>
<td>Accra</td>
</tr>
<tr>
<td>Cosmopolitan Health Insurance Limited</td>
<td>Accra</td>
</tr>
<tr>
<td>Empire Health Insurance</td>
<td>Accra</td>
</tr>
<tr>
<td>Glico Health Limited</td>
<td>Accra</td>
</tr>
<tr>
<td>Kaiser Global Health Limited</td>
<td>Kumasi</td>
</tr>
<tr>
<td>Liberty Medical Health Limited</td>
<td>Tema</td>
</tr>
<tr>
<td>Metropolitan Nationwide Medical Insurance Scheme</td>
<td>Accra</td>
</tr>
<tr>
<td>NMH Nationwide Medical Insurance Scheme</td>
<td>Accra</td>
</tr>
<tr>
<td>Premier Health Insurance Company Limited</td>
<td>Accra</td>
</tr>
<tr>
<td>Universal Health Insurance Limited</td>
<td>Tema</td>
</tr>
</tbody>
</table>

Socio-economic impact of NHIS
The National Health Insurance Scheme has either impacted on or has been impacted by several factors associated with social, political, cultural, and economic spaces within which the NHIS is implemented in Ghana. In addition, global-orientated programmes, like those around the MDGs, have also had an impact on how the insurance scheme operates.

The enrolment base of the NHIS is highest among informal workers. In Ghana, 80 per cent of people who are employed work in the informal economy (Osei-Boateng & Ampratwum, 2011). These informal workers are largely grouped into two: the rural sector and the urban informal sector (Adu-Amankwah, 1999). Informal workers have to register for the NHIS, but when there is proof that they are indigent, they are exempted from the payments. However, the nature of informal work places workers at a higher risk of exposure to danger and disease, making them the ones most likely to need health care services (Gyasi et al., 2017b). To this end, most of them consider the NHIS as the safest way to assure their access to health care. This indirectly expands the enrolment base of the scheme and has the potential to bridge the inequity gap, since most informal workers – for instance, the young boys and girls, including women, who work as head porters (kayayo) on the streets of major cities like Accra, Kumasi, Tema, and Takoradi, farmers, market women, hawkers, labourers – are included in this category (Gyasi et al., 2017b). The NHIS has resulted in increased hospital attendance in Ghana and has increased the propensity for good health as well as an active labour force.

The idea of accessing health care at a subsidised cost has also had an impact on the number of subscribers as well as health facility utilisation (Dzakpasu et al., 2012). The NHIS has helped to remove lack of finances as an obstacle to seeking health care. In other words, it has brought health care to the doorstep of the poor (Gyasi et al., 2015).

Public education offered by the NHIS in collaboration with other statutory bodies like the National Commission for Civic Education (NCCE) has also increased the utilisation of and enrolment in the scheme. In 2008, NHIS coverage was 12.5 million (55 per cent). However, this increased by 7 per cent to 14.5 million a year later (NHIA, 2009). The chairman of the NHIS Council attributed this increase to the effort of the public education department of the National Health Insurance
Authority, which had sensitised the various Ghanaian communities about the benefits of enrolling in the scheme. The role played by public universities in the enrolment and utilisation of NHIS cannot be underestimated. Since 2009, the Kwame Nkrumah University of Science and Technology (KNUST), for instance, ensured that students who were not on the NHIS enrolled upon admission (see Osei et al., 2017).

The NHIS has been influenced by the politics of the day. Since its inception in 2003, Kufuor’s government saw to it that subscribers had access to the health centres in their districts, municipal or metropolis (NHIA, 2008). This type of care provided by the NHIS was ubiquitous from 2004 to 2010. However, the 2008 general elections ushered the John Atta Mills-led National Democratic Congress (NDC) into office. The policy direction was to initiate a one-time premium contribution. This policy, which was to materialise in 2011, was put on hold. This factor notwithstanding, the existing NHIS eliminated the regional boundaries imposed on health care while emphasising the annual renewal of the insurance package. These policy interventions allowed for accessibility and equity in health care without prejudice to age, status, ethnicity, and geographical location.

The Millennium Development Goals to some extent have also impacted the NHIS in Ghana. The health component of the UN programme sought to promote maternal health, combat diseases like malaria and HIV/AIDS, and reduce child mortality by 2015. These three components have been incorporated into the scheme’s packages, starting with the free maternal care adopted in 2008, which also included free postnatal care (NHIA, 2008). Even though there has not been much progress made at reducing maternal mortality, child mortality rates have been positively impacted. The infant mortality rate decreased from a previous high of 76 to 52 per 1,000 live births in 2011; there has also been significant improvement in terms of the health of women and children (Owoo & Lambon-Quayefio, 2013: 19). It can be inferred that mothers who had hitherto been unable to access health care due to out-of-pocket cost (and who had also formed the habit of not reporting their own ill-health and that of their children to doctors) have been spurred on to visit hospitals with their children due to the social change instigated by the National Health Insurance Policy. Again, it is important to emphasise that
this policy has served a useful purpose in the lives of individuals, especially the poor and those living in deplorable conditions (like the migrant female head porters – *kayayo* – from the Northern and Upper regions of Ghana) by giving them the opportunity to access health care (Boateng et al., 2017) to seek largely curative care. Sometimes, through such access, some degree of counselling is offered, which has the tendency to prevent or stall the spread of contagions and also support the treatment of non-communicable diseases among the deprived population.

**Challenges of the NHIS in Ghana**

The dominant challenge for Ghana’s NHIS is claims management (Adu-Gyamfi et al., 2015a: 54). The NHIS has gone through changes in the type of financing adopted by the National Health Insurance Authority over successive years. The claim system was the main way the NHIS worked. In this system, the costs of the health care of NHIS subscribers were presented to the district, municipal, or metropolitan assemblies for a refund. These costs were linked to the individual NHIS numbers, which were then forwarded to the Ministry of Finance for a refund (NHIS, 2017).

Claims payments to providers were often delayed for a long time, thereby denying subscribers essential services, such as drug supply and medical care. In addition, inconsistent billing systems by providers, lack of effective mechanisms for tracking claims, and the low billing the scheme had introduced undermined the idea of equity in the Ghanaian health system (Adu-Gyamfi et al., 2015a).

Given the complexities attached with claiming a refund, capitation was introduced as an alternative means of funding the NHIS. Capitation is structured on a ‘per member per month’ basis, where the cost of health care of an individual is paid by the NHIS monthly (NHIA, 2017a). It was launched in 2011 to reimburse primary care for OPD services. Capitation offers the subscriber the opportunity to choose a health facility from which they will seek medical service. Recent evaluation research has found capitation suitable to be considered ‘a key provider payment method for primary out-patient care in order to control cost in health care delivery’ provided that some aspects of design be reviewed (Andoh-Adjei et al., 2018).
The NHIA also complained of late submission of claims by service providers. This created a ripple effect of district, municipal, or metropolitan assemblies not vetting these claims properly or delaying payments (NHIA, 2010). The initial effort to release funds to settle debts in which the NHIS owed and which had been processed in 2015 only materialised when the government released 180 million Ghana cedis on 5 February 2017 to settle debts to service providers (Graphic Online, 2017). Initially, to combat such payment challenges, and to limit fraud, the NHIA made some efforts to introduce an E-Claim system (NHIA, 2013).

Financial sustainability of the scheme is another challenge (Adu-Gyamfi & Dramani, 2017). The increase in the scheme’s coverage and health facility utilisation does not correlate with the funding source of the scheme. Subscribers increased from 23,238 in 2005 to 25,794 in 2006 (NHIA, 2009). Membership increased by 56 per cent in 2008 and 62 per cent in 2009, representing 12.5 and 14.5 million subscribers respectively over the two years. Membership increased continuously from 8 million subscribers in 2010, to 8.2 million in 2011, 8.8 in 2012, and 10.2 in 2013 (NHIA, 2013). As at 2013, 38 per cent of the total population had enrolled in the scheme (NHIA, 2013). These increasing subscriber figures denote an additional means of financing to the scheme. Although the government of Ghana had introduced the capitation in 2012 to ease the financial burden, ineffective piloting and planning caused its suspension in the Ashanti Region (Graphic Online, 2017), along with a plan to abolish it (Ampratwum-Mensah, 2017). In order to sustain the scheme financially, parliament on 14 July 2017 approved 2.2 billion Ghana cedis to aid in the scheme’s debts payment (NHIA, 2017b).

The problem of identifying the poor in the informal sector is also a challenge. The general motive of the NHIS is to make the poor exempt from paying for health care, or at least make it affordable to them. The reality is that it is the larger sections of the population, exactly the poor the NHIS is wanting to assist, who are not covered (NHIA, 2010). Identifying the poor presents a major challenge in the scheme’s dream to ensure equity in health care. In order to address this better, collaborative efforts have been made by the National Health Insurance Authority with organisations like LEAP to identify and enrol poor people at community level.
There is a tendency among some members of the scheme to abuse it by their over-utilisation of health centres (Adu-Gyamfi et al., 2015b). Subscribers report to health facilities even if their conditions do not demand the service of that type of facility. In other words, the chain of medical treatment, which should begin at a primary health centre, followed by a secondary and tertiary form of health care based on recommendations of respective health officials, is not being used (Gobah & Zhang, 2011: 90). Furthermore, some subscribers do not complete treatment at one health centre. This leads to a duplication of cost, which burdens the scheme financially (Adu-Gyamfi et al., 2015a). This moving from one centre of care to another might be attributed, in part, to how the subscriber was treated by health officials in their previous centre. To combat this, the NHIA established a clinical audit unit in 2012 to investigate how NHIS subscribers were being treated (NHIA, 2012).

Two other obstacles to the scheme achieving its objectives concern identification (ID) cards and Information Communication Technology (ICT). Issues relating to the ID cards include the delay in obtaining the card resulting from the management chain of data entry, data batching, card production, and distribution (NHIA, 2012). Members compound these issues further by changing residence, double registering, or failing to identify their location properly. The main problem of the ICT department is network jamming; this has a ripple effect on data entry, data batching, and checking subscriber eligibility at health centres.

These challenges negatively affect subscribers’ perception of the quality of the health care the scheme is providing – they regard it as poor (Jehu-Appiah et al., 2011) – which has led to members changing their preference to out-of-pocket health care payment since it is perceived to be of a higher quality (Adu-Gyamfi et al., 2015a: 57). This puts the poor at a disadvantage as they are unable to afford this (NHIA, 2012); there have been occasions when subscribers have had to purchase medication that was supposed to be covered by the scheme. There are equally related questions concerning policy holders’ perceptions and factors influencing renewal in different regions. This has been of particular concern in the Volta Region (Boateng & Awunyov-Vitor, 2013: 1–10).

A final challenge linked to the quality of health care is the issue of neonatal and maternal mortality. Neonatal mortality accounts for
about 40 per cent of child death in Ghana, despite the introduction of free maternal health care in 2008. The NHIS does not cover all the cost of neonatal treatment, leading some parents to rely on out-of-pocket payment. In 2013, for instance, there were several media reports on the failing free maternal policy. As at 2016, pregnant women were compelled to buy antibiotics, blood tonics, disinfectants, and sanitary pads in preparation for delivery (Lambon-Quayefio & Owoo, 2017:2; Ghana News Agency, 2016).

THE RWANDAN HEALTH INSURANCE SYSTEM

Rwanda’s system of community-based health insurance (CBHI) is sometimes described as unprecedented in the history of CBHIs in sub-Saharan Africa. It is further argued that it provides strong administrative and political support for the expansion and functioning of a health care system. Some countries therefore regard the Rwandan model as an alternative vehicle for health sector financing and delivery of basic health services (Shimeles, 2010).

Origins of CBHI

This section investigates the origins of Rwanda’s health insurance system and the nature of its financing and implementation. It highlights some of the benefits as well as the challenges that were confronted through the implementation process.

Rwanda was one of the poorly performing economies of Africa, and the country relied heavily on foreign exchange earned from tea, banana, and coffee exportation (Abbott & Binagwaho, 2017: 103). In the 1990s Rwanda experienced unparalleled violence which took an exacting toll on the country (Gros, 2015: 223), culminating, in 1994, in the 100-day genocide. About 1 million people were killed and many more were displaced (Lemarchand, 2004). The genocide did not only affect the political, economic, and social institutions of the state. It also affected the health system (Binagwaho et al., 2014). During that time, Rwanda had the lowest life expectancy and highest infant mortality rates. Its health system was in shambles and many health workers had fled the country, fearing for their lives. A decade later, by 2005,
Rwanda remained one of Africa’s ill-performing economies with GDP under USD 300 (Diop & Butera, 2005).

After the genocide, a development plan called Vision 2020 was formulated by the Rwandan Patriotic Front (RPF) led by President Paul Kagame. The overall aim was to reduce poverty and the plan included implementing universal health insurance coverage (Logie et al., 2008).

Previously, in the immediate post-independence era, Rwanda had provided free health care to its citizens, but this was short-lived, as the country went into economic decline (Kaberuka, 2000: 1–31). As part of the conditions of structural adjustment, in the 1980s user fees for health care were introduced, which increased disparities. After the genocide the situation worsened (Logie et al., 2008). In 1999, community-based health insurance (CBHI) was introduced, in line with the Vision 2020 goals (Binagwaho et al., 2014).

The term CBHI describes not-for-profit pre-payment plans for health care, with community control and voluntary membership that provide risk pooling to low-income populations. CBHI has the potential to improve access to and quality use of medicines. In Rwanda the scheme is called the Mutuelle de Santé (or Mutuelles).

Prior to the launch of the health insurance reforms, government health funds were used to directly support public providers, with households spending substantial amounts out-of-pocket to see private providers or for co-payments to public providers (Saksena et al., 2011). Rwanda’s political structure also allowed premium collection from all but the poorest people.

Implementation and financing
Mutuelles is a key component of Rwanda’s national health strategy on providing universal health care and reaching the health MDGs (Lu et al., 2012). Membership is structured into three categories, based on the level of economic status: the poor, those of middle income, and the privileged. This also determines the amount of premium to be paid. The poorest comprise 27 per cent of the total 74 per cent (per population) of the total subscribers in Rwanda. A report by the Rwanda Ministry of Health (RMoH) in 2016 indicated that the indigent pay a premium of RWF 2000 (approximately USD 2.99). Those of middle income
comprised about 70 per cent of the subscribers and paid RWF 3,000 (approximately USD 4.35), and the privileged, representing 3 per cent, paid RWF 7,000 (approximately USD 10.34). Payment covers members for one Rwandan fiscal year, which is from July to June. Additionally, each subscriber pays a co-payment fee of RWF 200 per visit to the CBHI unit at the health centre; 10 per cent of this co-payment is paid to the hospital by the CBHI (WHO, 2016). Each subscriber is restricted to a health centre in their district and visits other specialised centres by referral only. The idea of issuing co-payments is to limit the abuse of health centres by subscribers (RMoH, 2010).

Despite the growing popularity of taxes as a key source of revenue for coverage programmes, Rwanda continued to attempt to collect voluntary premiums from informal-sector households, from whom taxes can be difficult to access (Saksena et al., 2011).

The major source of revenue to the CBHI from 2012 to 2013 was premiums, which accounted for 66 per cent of the contribution to the insurance. This was followed by government revenues, at 14 per cent, global funds (international aid) at 10 per cent, co-payments, at 6 per cent, plus other revenues (like investment returns, for example) of 3 per cent, and social and private health insurance of 1 per cent (WHO, 2018). Funds from the government covered referral hospital bills and premiums for indigent members (WHO, 2016). The majority of premiums came from the middle-income group, who were the largest source of revenue. Fifty-five per cent of the premium is retained by the health centre to cover claims, while 45 per cent is sent to district hospitals to cover hospital claims. Altogether 10 per cent of the latter is sent to the national hospitals to cover referral costs.

Highlighting some of the benefits of CBHI in Rwanda
By 2010 it had been reported that CBHI had a high degree of utilisation of health services, which helped to protect members from large and unforeseen, potentially catastrophic, health-related expenses (Shimeles, 2010). As a result of their insurance functions, CBHI schemes protect the income of their members against financial risks associated with illness. This happens through two mechanisms: sick members of CBHI schemes seek care earlier, resulting in efficiency
gains in the consumption of health care services; and sick persons pay small out-of-pocket co-payments at the health centres (Diop & Butera, 2005). In 2005 it had been noted that the CBHI scheme’s coverage also increased the use of reproductive health services, including prenatal care and delivery care. However, CBHI then had no effect on the use of family planning services.

Greater access of the poor to CBHI scheme benefits was promoted through a series of strategies. These included building on partnerships between CBHI schemes, and working with existing and newly formed grassroots associations under a financing scheme where micro-finance schemes provided small loans to the association’s members to pay for their yearly contributions to the CBHI schemes. This also opened opportunities for the poor CBHI members to have greater access to larger micro-finance loans to finance income-generating activities (Diop & Butera, 2005; Schneider, 2005; Saksena et al., 2011).

This community-level social capital has fostered a sense of trust among the wider Rwandan community and has boosted the propensity of the poor to enrol in the scheme. Additionally, it has stimulated networks and business relations with local banks and agricultural cooperatives to provide access to credit and savings. The implication can be drawn that the cooperation among people through the insurance has also helped them reach other common goals outside the health sector (Diop & Butera, 2005; Schneider, 2005; Saksena et al., 2011). The increased mobilisation of domestic resources to ensure CBHI’s financial independence also discourages the misappropriation of funds. The Rwandan health insurance system remains the most prominent and diversified scheme in terms of population coverage. The coverage is strongly associated with a reduction in unmet need and of risk of catastrophic expenditure (Saksena et al., 2011).

Challenges of CBHI in Rwanda
The major challenge of CBHI is its over-reliance on government and donor funds to cover the premiums. Although 66 per cent of the scheme’s revenue comes from premiums, the majority of the Rwandan population is poor, and this means the government needs to pay more than the 14 per cent of the contribution (see Nzeyimana et al., 2014).
If government revenue declines, there will be a commensurate decline in revenue for the scheme. To guard against this, there is a need therefore to develop financing alternatives for the scheme. A recent attempt made by the government to move the management of the scheme from the MoH to the Rwanda Social Security Board was one such effort to help sustain the scheme financially (WHO, 2016).

In 2010 critics of the programme argued that the CBHI could be inefficient and injurious to the health service, which is heavily subsidised by funds coming from the treasury as well as international aid. Two main reasons came to the fore. First, the flat premium rate (about USD 2 per year per person) is considered to be too high for the very poor. Given a choice the poor will rather defer health care expenditure until it is vitally needed. Second, even if extremely poor people become members of CBHI, they may not fully utilise its provisions, since not everything is free. There are also other layers of expenses to be borne such as transport, prescription drugs, and the opportunity cost of time, especially for casual labourers. Therefore, the CBHI has the potential to further alienate the extremely poor and the uninsured from utilising health services (Shimeles, 2010; Saksena et al., 2011).

The abuse of the CBHI by subscribers is a further challenge. The idea of free health care rendered by health centres has increased the rate at which patients visit the centres. Though this in itself is good, it has been widely reported that they also visit for matters that do not require urgent medical attention. In a bid to limit this – the over-utilisation of the health centres – the Ministry of Health introduced the co-payment method (Carrin et al., 2005).

This challenge also cuts the other way. The right to essential health care was a new concept in Rwanda and at first patients did not always know their rights with regard to health care. Generally, they did not complain or report the matter when issues were not solved by health providers. Also, in several instances, there had been no access to certain treatments, and no access to private health providers, but the authorities were not made aware. By 2014 things had changed and reports were being received that some CBHI members were not satisfied with poor courtesy, weak customer care, and the regular stockouts of drugs in some contracted health facilities. Incapacity or a delay in the reimbursement...
of health care bills were also being reported. Other issues included incapacity at hospital pharmacies to serve all drug prescriptions due to stockouts.

Such situations affect quality of care for CBHI members. There is also the question of over-prescription and over-charging for health services; increases in pharmaceutical and medical surgical consumables’ prices due to a high inflation rate, among other things, tend to cause poor financial management, especially weak cost control (Nyandekwe et al., 2014).

POLICY DIRECTIONS AND RECOMMENDATIONS

The bases upon which these two national health insurance schemes were introduced in the two countries differ. In Ghana, the NPP introduced their scheme on the basis of winning legitimate power from the people. The preceding cash-and-carry system had caused health service complications and challenges in the country. Individuals who could not afford health care refused to visit hospitals and this had the tendency to increase self-help approaches and self-medication. People would only go to the hospital in an emergency. The people wanted a better health financing system, which the Kufuor-led administration promised in the 2000 general election campaign. The NHIS in Ghana had come to stay through political democratisation in Ghana (Carbone, 2011).

In Rwanda, it was the evils of the genocide of 1994 which prompted the RPF to introduce the universal health insurance which was to become the Mutuelle CBHI scheme in 1999. The harsh socio-economic and political situation after the genocide had prepared the ground for Rwanda’s health insurance scheme (Binagwaho et al., 2014). Although Rwanda has 60 per cent of the population living in poverty, with about 60 per cent of the population having a household income of less than USD 52 a month, as defined by the Rwandan government, the sense of commitment from the government to provide universal health care for the citizenry, rich or poor, serves as a potential model for other African countries to emulate.

Second, the mode in which health insurance is organised differs between the two countries. Rwanda’s community-based approach
allows for a wider chance of sustainability than its Ghanaian counterpart. The co-payment of RFW 200 which is made also prevents the abuse of health facilities (WHO, 2016). NHIS in Ghana operates currently on a national basis where a subscriber is not restricted to a health centre in their community. Also the absence of co-payment is likely to increase the rate in which NHIS in Ghana can be abused.

Gros’ suggestion of the political regime of the day influencing health policy outcomes is manifested in these two states. Nkrumah had pioneered Ghana’s free health care in the 1960s and Kufuor’s NHIS followed suit in 2004. In Rwanda, Kagame’s provision of NHIS was a military government’s move to provide the democratic good of health care (Gros, 2015). The bottom line is that in both countries the political regime of the day took major decisions to implement health insurance. This shows that the right policies with respect to universal health coverage and implementation for the benefit of both urban and rural populations can emerge from diverse political regimes.

Third, international initiatives have largely shaped the content of subscribers’ packages of national health insurance in both countries. The MDGs regarding health care have largely been adopted in these states. In Ghana, the free maternal policy was adopted in 2008 to buttress the MDG goal of reducing the maternal mortality ratios in African countries. The free health care for infants also stems from the wider African MDG initiative to reduce child mortality. In Rwanda, the efforts to reduce child mortality, improve maternal health, and combat diseases like malaria and HIV/AIDS have been part of the scheme. This aim is to reduce disease prevalence among Rwandans and also to fulfil the MDGs in Rwanda. Rwanda is among the developing countries in the world to achieve MDGs in health (Abbott & Binagwaho, 2017), and the Mutuelle de Santé had a central role in this achievement. It is important to stress that with Sustainable Development Goals (SDGs) in the mix, Rwanda would strive harder to obtain higher optimum goals in the quest to ensure goal three of the SDGs, which aims at ensuring healthy lives and promotion of wellbeing for all at all ages (see WHO, 2018).

In Ghana, considering that over 86 per cent of the population use traditional medicine (Gyasi, 2015: 1), traditional medicine needs to be covered by the NHIS. The potency of traditional medicine has raised
several arguments among policy-makers in the world. In the Ghanaian setting, there have been several government attempts to incorporate traditional medicine into orthodox forms of care but the process needs to be accelerated. As most Ghanaians access these facilities (Gyasi et al., 2017a), it is important that this takes place in order to provide and enable a more certified form of holistic care. Though some question the efficacy of traditional medicine, the Ghana Psychic and Traditional Healers Association, the Food and Drug Authority (FDA), and other allied institutions, including institutions of higher learning (like KNUST, which introduced a Department of Herbal Medicine in 2002), are there to maintain standards for treatment and prevent quackery (Adu-Gyamfi, 2016).

The alternatives offered in traditional medicine could potentially help ease the cost burden of drugs that are imported by the government. More funds should therefore be made available for further research into the range of herbs on which traditional medicine draws. Furthermore, the Centre for Plant Medicine Research (CPMR) at Mampong-Akuapim (CPMR, 2017) has conducted research into herbal plants and the production of indigenous medicine to meet the local demands. The government needs to do more to facilitate the integration of traditional medicine into the existing orthodox care to encourage more Ghanaians to utilise and enrol in the NHIS. These same ideals could be emulated in those countries in Africa with larger rural settlements which are not surveyed and are unreached by biomedical care.

In this context, governments in Africa need to encourage the establishment of private herbal hospitals and clinics. In Ghana the government has issued a few licences to herbal hospitals like the Amen Scientific Herbal Hospital, the Agbeve Herbal Hospital, the Lifeman Herbal Clinic, and the Top Herbal Clinic. This notwithstanding, the government should extend this encouragement to get more private entities to go into herbal medical services – and then follow suit with NHIS. Also, because traditional medicine is more accessible, collaborative efforts between the traditional healers associations and health insurance schemes in Africa would result in wider utilisation.

More health facilities and clinics need to be built in order to help bridge the gap between individuals/communities and health centres.
Long distances to hospitals discourage individuals from using the still sparse existing facilities. On the larger African platform, Ghana included, government hospitals should give greater attention to systems that will allow access to alternatives that will reduce fiscal burdens on the provision of health care. In countries like Nigeria, Ghana, and elsewhere in Africa, the increasing population and the increase in communicable and non-communicable diseases that are not fully covered under existing insurance packages should draw the attention of policy-makers to what is doable: preventive health care strategies, enforcement of public legislation, and research into traditional and alternative health medicines which could remain cheap, accessible, and efficacious to larger populations and reduce the financial burden on individuals and the state.

Concerning the Rwandan case study, although international donor funds subsidise the cost of covering more indigents, the Rwanda Ministry of Health might reconsider its decision on the co-payment method as this is an obstacle to greater inclusivity. To prevent the possible reliance on other means of medical care, it might also engage traditional healers to provide efficient health care alongside the orthodox care in order to subsidise cost. The larger debate to use traditional medicines in countries is further enforced by the question of affordability and sustainability of health insurance in growing populations. New and emerging technologies that are enhancing or accelerating the science of herbal and alternative medicines should also be part of the debate.

The African question continues to beg for policies that are home grown rather than those that have been bequeathed to the continent by institutions like the IMF and the World Bank. With all good intents and purposes, the question of effective management of health care, including the question of health financing, seemed to have been largely left in the hands of political patrons. The issue of financial accountability by office holders and those who manage health care should not remain in the general mix. African countries that hope to develop their economies must appreciate that mismanaging health care operates in tandem with economic mismanagement. The former can grievously hurt the health of labour in African countries, especially of those who are largely in the informal sector; it will also affect those employed in the public sector, and those in the private sector whose insurance is not fully guaranteed.
under poor-paying jobs and harsh working conditions, such as in the mines and in the fields. Improved health status dovetails with increased productivity, educational performance, and life expectancy, as well as a propensity for a decrease in debt and expenditure on healthcare. Quality health care should be seen as an inalienable right of all human beings, and Africans in particular.

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