Achieving a Shared Goal: Free Universal Health Care in Ghana.

ARHR
ALLIANCE FOR REPRODUCTIVE HEALTH RIGHTS

Essential Services Platform of Ghana

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Integrated Social Development Centre

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List of Acronyms

5YPOW	Five Year Programme of Work
BMC	Budget Management Centre
CBHI	Community Based Health Insurance
CHAG	Christian Health Association of Ghana
CHIM	Centre for Health Information and Management
CHPS	Community-based Health Planning and Services
CMS	Central Medical Stores
DHMT	District Health Management Teams
DMHIS	District Mutual Health Insurance Scheme
DRG	Diagnostic Related Group
GHS	Ghana Health Service
GLSS	Ghana Living Standards Survey
ILO	International Labour Organisation
IMF	International Monetary Fund
ISODEC	Integrated Social Development Centre
MDGs	Millennium Development Goals
MHO	Mutual Health Organisation
MoH	Ministry of Health
NDC	National Democratic Congress
NDPC	National Development Planning Commission
NGO	Non-governmental Organisation
NHIA	National Health Insurance Authority
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme
OECD	Organisation for Economic Co-operation and Development
OPD	Out Patients Department
SSNIT	Social Security and National Insurance Trust
TRIPS	Trade-Related Aspects of Intellectual Property Rights
VAT	Value Added Tax
WHO	World Health Organisation

Executive Summary

Samata Rabbi (50) holding a picture of her youngest child Francesca who was 5 years old when she died recently. The family could not afford to pay the insurance premium of GHc 15 (US$10) which would have entitled her to free health care. Tamaligu community, in the Tolong-Kumbungu District of Northern Ghana. Photo: Aubrey Wade/Oxfam

The current health system in Ghana is unfair and inefficient. It doesn't have to be. The government can and should move fast to implement free health care for all citizens. Our research shows that:

- Coverage of the National Health Insurance Scheme (NHIS) has been hugely exaggerated, and could be as low as 18%
- Every Ghanaian citizen pays for the NHIS through VAT, but as many as 82% remain excluded
- Twice as many rich people are signed up to the NHIS as poor people. 64% of the rich are registered compared with just 29% of the poorest

82%

EVERY GHANAIAN CITIZEN PAYS FOR THE NHIS THROUGH VAT, BUT 82% REMAIN EXCLUDED

18%

18% BENEFIT

64%

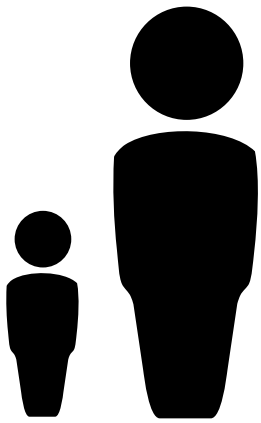
64% OF THE RICHEST ARE REGISTERED WITH THE NHIS

29%

ONLY 29% OF THE POOREST ARE REGISTERED

Source: NDPC survey 2008 [1]

- Those excluded from the NHIS still pay user fees in the cash and carry system. Twenty five years after fees for health were introduced by the World Bank, they are still excluding millions of citizens from the health care they need
- An estimated 36% of health spending is wasted due to inefficiencies and poor investment. Moving away from a health insurance administration alone could save US$83 million each year. Enough to pay for 23,000 more nurses
- Through savings, good quality aid but primarily improved progressive taxation of Ghana's own resources, especially oil, the government could afford to increase spending on health by 200%, to US$54 per capita, by 2015



GOVERNMENT COULD INCREASE SPENDING ON HEALTH BY 200%, by 2015

- This would mean the government could deliver on its own promise to make health care free for all – not just the lucky few at the expense of the many

The shared goal of free health care for all in Ghana is within reach. Investing in the health of all citizens will lay the foundations for a healthy economy into the future.

In 2009 President Atta Mills and the National Democratic Congress came to power in Ghana on a promise to deliver a truly universal health insurance scheme that reflected the contribution of all the country's residents. The promise included guaranteed access to free health care in all public institutions, and to cut down the health insurance bureaucracy in order to 'plough' back the savings into health care services. Health was put at the heart of the government's development agenda to transform Ghana into a middle-income country by 2015. These were good promises that won large-scale popular support. Unfortunately they still remain unfulfilled.

There can be no doubt that the introduction of Ghana's National Health Insurance Scheme (NHIS) in 2003 was a bold progressive step that recognised the detrimental impact of user fees, the limitations and low coverage of Community Based Health Insurance (CBHI) and the fundamental role of public financing in the achievement of universal health care. The NHIS provides a comprehensive package of services and for members of the scheme evidence suggests that access and quality of services have improved. Average outpatient visits per member per year were between 1.4 and 1.5 in 2009 against a national average of 0.81.[2]

However for Ghana to be held up as a success story for health insurance in a low-income country and a model for other poor countries to replicate is misleading. According to our analysis of the data available, membership of the largely tax funded National Health Insurance Scheme could be as low as 18% – less than a third of the coverage suggested by Ghana's National Health Insurance Authority (NHIA) and the World Bank. Despite the introduction of the NHIA, the majority of citizens continue to pay out of pocket for their health care in the parallel 'cash and carry' health system, or resort to unqualified drug peddlers and home treatment due to lack of funds. The richest women are nearly three times more likely than the poorest to deliver at a health care facility with a skilled birth attendant.[3]

The National Health Insurance Scheme – costly and unfair

The NHIS's heavy reliance on tax funding erodes the notion that it can accurately be described as social health insurance and in reality is more akin to a tax-funded national health care system, but one that excludes over 80% of the population. The design is flawed and unfair - every citizen pays for the NHIS but only some get to join. More than twice as many of the rich are registered compared to the poorest, and evidence suggests the non-insured are facing higher charges for their health care.[4] Out-of-pocket payments for health are more than double the World Health Organisation (WHO) recommended rate[5] and the risk of financial catastrophe due to ill health remains unacceptably high.

The NHIS suffers from an inefficient administrative and registration system, cost escalation and high levels of abuse leading to serious questions about its sustainability. The average cost per insurance claim more than doubled between 2008 and 2009 and total expenditure on claims has increased 40 fold since the scheme first started.[6] Incentives are provided for curative not preventative health and the budget for the latter is on the decline.[7] While the government has publicly acknowledged many of these problems and is exploring different options (including a one-off nominal lifetime fee and capitation payments), progress has stalled due to increasing fragmentation that works against sector wide planning and co-ordination, and has led to damaging public displays of institutional conflict and political infighting.

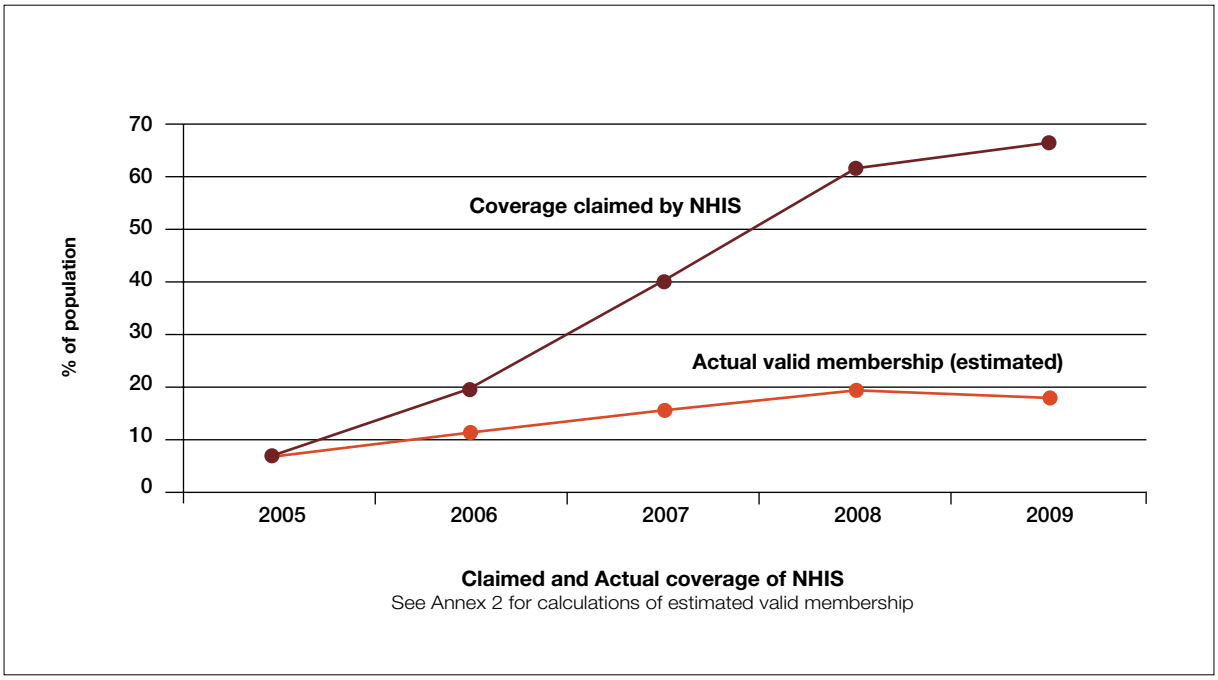
As the NHIA is responsible for managing a large public budget as well as the individual contributions of NHIS members, its poor transparency is of great concern. Financial reports are difficult if not impossible to obtain and in 2008, 45% of NHIA funds went unaccounted.[8] Confusing institutional arrangements and unclear lines of responsibility undermine the NHIA's accountability and should be immediately addressed by the President.

Realising a vision: health care for all, free at the point of use

Thankfully the Government of Ghana and its external development partners still hold the keys to build a universal health care system that delivers for all and is the envy of Africa. The introduction of free health care for all pregnant women was a major step forward in 2008. In just one year of implementation 433,000 additional women had access to health care.[9] But bolder changes are now urgently required to accelerate progress.

The government must move to implement its own aspiration and promise of a national health system free at the point of delivery for all - a service based on need and rights and not ability to pay. Every citizen of Ghana should be able to access and use the same range of good quality health services within easy reach of his or her home.

Women and infants in the Bongo District of the Upper East Region, Ghana. This region has only nine doctors, with just one doctor to every million patients.



Claimed and Actual coverage of NHIS
See Annex 2 for calculations of estimated valid membership

There is much to build on. Ghana is one of the few African nations within reach of achieving the Abuja commitment to allocate a minimum 15% of government resources to health. Malaria deaths for children have reduced by 50%, the success rate for tuberculosis treatment is 85%, and child and infant mortality are on the decline after years of stagnation.[10]

But Ghana is off track to achieve the health Millennium Development Goals (MDGs). One quarter of the population live over 60km from a health facility where a doctor can be consulted[11] and skilled birth attendance is low at only 46%.[12] If current trends persist Ghana will not achieve the MDG for maternal health until 2027.

If the introduction of 'Cash and Carry' health care was stage one, and the NHIS stage two, it is now time for stage three:

Step 1: The government must commit to a clear plan to remove the requirement of regular premium payments, abolish fees in the parallel 'cash and carry' system and make health care free at the point of delivery for all by 2015. A time-bound plan must also be set to reduce out-of-pocket payments as a proportion of total health expenditure to the WHO recommended rate of between 15% and 20%.[13]

The change away from a premium-based health financing model means much of the fragmented, inefficient and costly insurance architecture can be removed and many of the functions of the NHIA will no longer be required. The National Health Insurance Fund (NHIF) should be transformed into a National Health Fund to pool fragmented streams of financing for the sector. The purpose of the fund should be expanded to cover infrastructure and other capital and recurrent expenditure and be placed under the clear jurisdiction of the Ministry of Health, along with the core functions of the NHIA that remain relevant.

Step 2: At the same time a rapid expansion and improvement of government health services across the country is urgently needed to redress low and inequitable coverage and meet increased demand created by making care free. Rejuvenation of the Community-based Health Planning and Services (CHPS) strategy should form the backbone of the expansion plan and the foundation of an effective referral system. At the same time identified gaps in secondary and tertiary facilities, particularly district hospitals should be filled. Priority should be placed on scaling up and strengthening government and Christian Health Association of Ghana (CHAG) services as the majority health care providers. While much improvement is needed the public sector performs better than the private sector at reaching the poor at scale, particularly for inpatient care.[14]

Significant advances have been made on reaching government targets for nurse training and recruitment. The government must now urgently review the reasons for poor progress on achieving the same for doctors. In 2009 Ghana had just one doctor per 11,500 people, worse than in 2007. A comprehensive review of health worker gaps across other cadres including health sector managers, pharmacists, and midwives is critical to inform a new and fully costed human resources strategy from 2012 to 2016.

Medicines in Ghana are 300% to 1500% higher than international reference prices.[15] The government, with the support of external development partners, should use its purchasing power to negotiate lower prices, including through generic competition, while also tackling corruption, price hikes and stock outs across the supply chain. To improve quality the government should prioritise investment in the capacity of drug-regulatory authorities.

As part of the expansion plan the Ministry of Health should instigate and manage a co-ordinated effort across line ministries to tackle the social determinants of health. Low levels of literacy, gender inequality, poor sanitation, under-nutrition, alcohol abuse, sedentary life styles and unhealthy diets all contribute to ill health and high mortality rates in Ghana but are beyond the reach of the Ministry of Health acting alone. Health audits across different government departments would be a good first step to identify low-cost opportunities to improve the health impact of their respective operations.

How much will free universal access cost and who will pay?

No homegrown comprehensive costing estimate of universal and equitable coverage currently exists in Ghana and this gap should be addressed. The latest World Health Report states that low-income countries will need to spend a little over US$60 per capita per year by 2015 to achieve the Millennium Development Goals. In the interim, this serves as a guide.

Two points are clear, business as usual is not financially viable; and, even if the government moves to a single lifetime payment as opposed to annual premiums as is proposed, this will not contribute significant funds to the overall health budget if its goal is to increase equity and

access. Our calculations suggest that financing universal health care in Ghana can be achieved from three key sources:

- **Inefficiencies, cost escalation, corruption and institutional conflict are costing the health sector millions of Ghana Cedis each year. We calculate possible savings worth 36% of total government health expenditure in 2008, or US$10 per capita.**
- **With projected economic growth, together with action to improve progressive taxation of Ghana's own resources, especially oil, we calculate that the government alone can mobilise a health expenditure of US$50 per capita by 2015. This figure assumes a minimum government investment in health of 15% of total revenues.**
- **An additional US$4 per capita can be added by 2015 if improvements in the quality of aid are achieved, including that at least 50% of health aid is given as sector budget support.**

These sources combined mean that by 2015 Ghana could increase its per capita expenditure for health by 200% from 2008 levels to at least US$54 per capita, and be well on the way to spending the US$60 per capita recommended by the WHO.

Free health care for all in Ghana is achievable and affordable through cost-savings, progressive taxation and good quality aid. With less than two years left before voters in Ghana return to the polls, urgent and sustained action is now required from the President and his Government to deliver on their election promises as well as their constitutional duty to achieve health care for all. Doing so will deliver the foundation for a healthy economy into the future, that will in turn provide even more resources to improve the health of all Ghanaians.

Women having their blood pressure taken at Achimota Hospital, where free health care has been available for pregnant women since 2008.

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Introduction

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There can be no doubt that the introduction of Ghana's National Health Insurance Scheme (NHIS) in 2003 was a bold progressive step that recognised the detrimental impact of user fees and the fundamental role of public financing in the achievement of universal health care. However to hold Ghana up as a success story for health insurance in a low-income country[17] is misleading. According to our analysis of the data available, membership of the largely tax funded National Health Insurance Scheme could be as low as 18% – less than a third of the coverage suggested by Ghana's National Health Insurance Authority (NHIA) and the World Bank.

This report welcomes the Government of Ghana's commitment to health but argues that the current approach of tweaking the flawed and inequitable health insurance scheme will fail to deliver the scale of change promised. Every citizen of Ghana has the right to good quality health care, free at the point of use, and within easy reach of his or her home. To achieve this, bolder changes are now urgently needed, guided by a renewed and co-ordinated vision of universal care. The government should overhaul the health insurance bureaucracy and create a national health system free at the point of access for all. At the same time a rapid expansion and improvement of health service delivery should be implemented across the country with priority attention to the poorest and most deprived districts and regions. All this should and can be paid for by fairer taxation of domestic resources and with the continued support of good quality aid. Free health care for all in Ghana is within reach – it is both possible and affordable.

Pregnant women and those with infants gather to discuss their issues with a local midwife in Kunkua Village in the Bongo District of the Upper East Region

Chapter Two
Past and ongoing efforts towards financing health care in Ghana

2.1 User Fees

At Independence in 1957, Ghana's new Government committed to a welfare state including a health care expansion plan and free health care for all. The large-scale popular support for free health care deterred any serious attempt to introduce user fees up until the mid 1980s.[18]

During the 1970s and 1980s Ghana's economic crisis led to a fall in government expenditure of 70% and a reduction in health spending to 20% of its former level.[19] The period was characterised by shortages of essential medicines and other supplies, badly paid and demoralised staff, illegal under the table payments by patients for care, and an effective freeze on building new facilities for those without access.

The World Bank imposed solution to these challenges was to introduce cost recovery in the form of user fees for both health and education. In return for its assistance the World Bank required the Ministry of Health to generate at least 15% of its recurrent expenditure from such fees.[20] In July 1985, the "cash and carry" or user fee system was established. By 1987, 15% cost recovery for recurrent expenditure had been achieved and 81% of drug replacement costs were raised through direct user charges.[21]

The "cash and carry" system had an enormously detrimental impact on utilisation. In the rural areas of Ashanti-Akim district for example, clinics saw a decline in utilisation of between 75% and 83%.[22] Utilisation dropped by half in the rural areas of the Volta region with a disproportionate decline for the over 45-year age group.[23] At the national level utilisation dropped by more than half.[24]

Evaluators of a large-scale study on user fees in one region of Ghana also concluded that:

> *"fee revenue can be dangerously attractive, particularly if it is administratively more accessible than general government allocations. There is a danger that revenue collection becomes a disproportionately important evaluative criterion in a system which is, after all, ultimately intended to improve health status"*[25]

Later studies have indicated that, in the two and a half decades since the introduction of user fees for health care, more than half of the country's patients have turned to traditional and self-medication.[26] It is notable that despite the instrumental role of the World Bank in pushing for cost recovery in the form of user fees in Ghana, its subsequent loans throughout the 1980s and 1990s did nothing to address their catastrophic impact.[27]

2.2 User Fee Exemptions

In small recognition of the barrier presented by user fees, partial exemptions for health personnel, antenatal and postnatal services, and treatment at child welfare clinics, among others were introduced in 1985. In 1997 the government expanded the base of exemptions to cover children under five years old, people aged over 70 years and the poor.

The inadequacy of exemptions to protect access to health care for poor people are well documented internationally[28] and Ghana is no exception. Problems included non-uniform application across regions, difficulties in identifying poor people or verifying the age of children at or around the upper age limit, poor public information and inconsistent flow of funds from government to reimburse providers for services rendered.[29] A 2005/6 WHO survey found that the contribution of user charges to provider running costs and salary top-ups created an inherent disincentive for providers to exempt patients.[30]

In practice the exemptions policy went largely unfunded with consequent adverse impacts on beneficiaries and providers alike. The lessons from this experience are important in examining the operation of the current exemptions to NHIS premiums and their potential impact on providers and ultimately users.

2.3 The Free Delivery Policy

In 2004, the Government of Ghana implemented a free maternal health care programme in the four most deprived regions of the country. The scheme, partly financed by debt relief, was later extended to the remaining six regions, effectively giving all women free delivery care in public, private and mission institutions. The exemption package covered all normal and assisted deliveries, including Caesarean sections and the care and treatment of complications. Apart from transportation, logistic and other supply costs, women were supposed to face no direct costs at all in delivering.

The policy led to increases in facility based-deliveries of between 10% and 35%.[31] Complex (and costly) interventions such as Caesareans were also on the rise.[32] Health professionals considered that postnatal

follow-up - a free service - improved after deliveries became free.[33] Implementation of the policy was evaluated as successful, but a shortfall of funding resulted in it being implemented inconsistently.[34] Facilities became increasingly indebted and many reverted to charging. The number of facility based deliveries declined as a result.[35]

In 2008, the policy was practically reinstated with financial support from the British Government. In one year of implementation approximately 433,000 more women had received health care than would have otherwise.[36]

More recently at the UN General Assembly in New York in 2009 the President of Ghana committed to provide free health care for all people under 18 years old regardless of their parents' NHIS membership status.[37] Together with the over 70s age group exemption this means in theory that 50% of the population are entitled to free care. Disappointingly the government has been slow to implement the commitment to free care for all people under 18.

2.4 Community-Based Health Insurance

From the early 1990s, against the background of high user fees, inability to pay, and exemptions failure, some stakeholders began exploring alternative financing models in the form of Community-Based Health Insurance schemes (CBHI). In 1993, the Ministry of Health (MoH) also began piloting insurance. A common feature of these schemes is that they were all initiated, directly operated and most often owned by health care providers.

In 1997, the MoH went further to launch a pilot scheme for a National Health Insurance Scheme (NHIS) in four districts of the Eastern Region of the country.[38] The object was to pilot various features of the proposed NHIS and then roll this out nationally at a later stage. However, there was minimum political will and implementation stalled.

A turning point came when a new model of the CBHI scheme, the Mutual Health Organisation (MHO), based on the principles of social solidarity as well as community ownership and democratic control (as opposed to provider management) was introduced around 1999, partly inspired by experience in Francophone Africa. Due in part to the assistance provided by the Ghana Health Service (GHS) and external development partners[39] the MHO model took hold very quickly and the number of schemes across the country grew from 3 in 1999 to 258 by 2003.[40]

However, in terms of population coverage and as has been the experience of CBHI throughout Africa,[41] these community schemes were not able to provide health care access for more than a small percentage of the Ghanaian population. Critically their coverage never exceeded 2% of the population.[42]

Despite the low population coverage the proliferation in number of schemes had the effect of validating the MHO concept and legitimising this approach to health financing in the eyes of policy makers and other health sector stakeholders, especially the donor community.

2.5 The National Health Insurance Scheme

The National Health Insurance Scheme built on Ghana's experience of CBHI and grew out of an election promise made by the new incoming government in 2000 to abolish user fees, address inequity in the health system and ensure 'access to basic health care services to all residents'.[43] The National Health Insurance Act sets out three distinct types of health insurance schemes that may be established and operated in Ghana: District Mutual Health Insurance Schemes (DMHIS), private commercial health insurance schemes and private mutual health insurance schemes.

The National Health Insurance Authority (NHIA), established as part of the same Act, holds responsibility for regulating the insurance schemes, including registering, licensing, and supervision. It also accredits providers and manages the National Health Insurance Fund (NHIF). The function of the NHIF is to subsidise the District Mutual Health Insurance Schemes and reinsure them against random fluctuations and shortfalls in financing. The NHIF also covers health care costs for all exempt patients and supports programmes that improve access to health services.

The government recognised that universal access could not be financed by individual premium payments alone and would need to be subsidised using public funds. The NHIF is financed by a health insurance levy (a 2.5% earmarked addition to the VAT), a diversion of 2.5% of the 17.5% workers' contributions to the Social Security and National Insurance Trust Fund (SSNIT Fund) to the NHIF, premium payments from informal sector adults as well as money allocated to the fund by Parliament and from investments, grants, donations, gifts, and other voluntary contributions.

Right: Comfort, in the labour room immediately after giving birth to baby Wednesday at Achimota Hospital in Accra.

The NHIS provides what is generally acknowledged as a generous package of benefits covering: over 95% of disease conditions that afflict citizens in Ghana; outpatient attendance; inpatient care (including feeding); deliveries, including complications; diagnostics; medicines (generics); and all emergencies.

To become a member of a DMHIS, an individual needs to register with the nearest scheme or through an agent. Formal sector workers are in principle exempt from paying the premium on joining a scheme, since the 2.5% SSNIT contribution is considered their premium (see Box 1). Other exempt categories are:

- **All people under 18 years whose parents have enrolled with the scheme**[44]
- **Persons classified as indigents (impoverished), based on a means test, up to 0.5% of the total membership of any scheme**
- **People aged 70 years and above**
- **Pensioners under the Social Security Pension Scheme, and**
- **Pregnant women (since 2008)**

The NHIF pays a flat rate per "exempt" member to the scheme to which they belong. This subsidy payment started at GHc 7.2 per "exempt" member in 2005, rising by about GHc 2 per year until it stood at GHc 14 per "exempt" member in 2008.

In theory therefore, the only non-exempt group in Ghana required to pay a regular out-of-pocket premium payment are informally employed adults. The premium they pay is in theory assessed based on income and capacity to pay, with a floor of GHc 7.20 (approx US$4.60). The NHIS states that across the country the premium ranges in practice from GHc 7.20 to GHc 48.00. After registration, an individual is expected to serve a waiting period not exceeding six months and to receive a card from the DMHIS enabling them to access health care. The card is valid for 12 months after which it must be sent back for renewal.

Left: Ernestina Morgan, 28, queues for maternal health care at Achimoto Hospital in Accra, Ghana, to access the free health care facilites that are available for pregnant women.

Box 1: Why formal sector workers benefit from the NHIS for free

The government's original proposal to help finance the National Health Insurance Fund was to divert 2.5% of the 17.5% contribution made by formal sector workers to the Social Security and National Insurance Trust. On top of this, formal sector workers would pay an annual premium to become members of the NHIS.

However, in the lead up to the implementation of the National Health Insurance Act the Trades Union Congress staged mass protests against the government's intention to take money from the social security pension fund. In a bid to win back their support the government made a significant and expensive compromise. Not only would formal sector workers now automatically be eligible for membership of the NHIS without paying any annual premium, they also received a legal guarantee in the NHIS Act 650 (2003) that pension income (funded by the Social Security and National Insurance contribution) would not be affected by the contribution to national health insurance. In effect the amount diverted from the Social Security and National Insurance Trust was now considered a loan to be paid back rather than a direct contribution.

Chapter Three
Progress of Ghana's National Health Insurance Scheme

The Ghana NHIS has been lauded an early success for health insurance in developing countries by many influential international players in the health community, most notably the World Bank (see Box 2). Ghana's NHIA Chief Executive said in 2010 that the NHIS was set to become a global model.[45]

The most frequently cited cause for celebration is the rapid expansion in coverage of the scheme ahead of its own targets and faster than health insurance schemes attempted in other low-income countries.[46] Our analysis of the available data however, suggests that coverage figures used publicly by the NHIA and then recycled unchecked by international agencies such as the World Bank, are extremely misleading. Furthermore, a number of problems inherent to the design of the scheme continue to hamper progress towards universal access.

This chapter compares the official story of NHIS coverage presented by the NHIA with a more accurate account of progress to date.

3.1 Coverage of the NHIS

3.1.1 The Official Story

According to the recently published NHIA annual report, 62% of the population had registered with the NHIS as of the end of 2009. The same report states that 86.37% of those registered have 'valid ID cards'.[47]

More recent figures available on the NHIA's official website state that as of June 2010 there were 145 insurance schemes in operation under the NHIS with over 66% of the population registered as members. The NHIA further states that 59.5% of the population are card bearing members and 53.6% are 'active members' although no clarification on what defines an 'active member' is given. A further statement on the same website seems to equate registration to the scheme with free access to health care by claiming that:

> *"Some 69.73 percent of the population (2004 base population estimates) are getting treated without paying anything at the point of use, for conditions that would have cost them millions of Ghana Cedis, under the former 'Cash and Carry' system".*[48]

The World Bank has frequently confirmed in a number of official documents, press releases and staff presentations that the Ghana NHIS has achieved a coverage rate of over half of the population. At times they have claimed a coverage rate of 'nearly 60 percent' (see Box 2).

Box 2: Examples of World Bank praise for the success of the NHIS

'IDA has been instrumental in assisting the government set up to the National Health Insurance Scheme (NHIS), which today covers over 50 percent of the population's access and should translate into improved health indicators in a few years. *Source: IDA at work', August 2009. www.worldbank.org/ida http://siteresources.worldbank.org/IDA/Resources/IDA-Ghana.pdf*

'To step up the pace of progress, the [Africa] region at large could learn valuable lessons from countries that have made extraordinary progress despite the odds…Since the inception of the World Bank-financed National Health Insurance program in 2006, Ghana has made a strong effort to extend health insurance coverage to people employed in the informal and rural sectors. More than half of Ghana's population is now covered'. *Source: http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/0,,contentMDK:22658551~pagePK:146736~piPK:226340~theSitePK:258644,00.html*

'Throughout the workshop, Ghana and Rwanda were used as examples of best practice on health insurance in Africa. Within one year, Ghana successfully rolled out their social health insurance scheme creating 145 District Mutual Health Insurance Schemes (DMHIS) which covers the rich and poor alike. Today, over 60% of their population is covered'. *Source: www.healthsystems2020.org/files/2412_file_Press_release_Africa_Health_Insurance_Workshop_fin.pdf*

These coverage figures are indeed impressive and far exceed the targets set by the scheme. The aim was to reach 30-40% coverage by 2010, rising to 50-60% by 2015.[49] According to the NHIA figures the scheme is now out-performing the targets set for 2015.

A breakdown of the membership as of June 2010 is provided in Table 1. The figures suggest the membership of the scheme is progressive with the vast majority of members (over 70%) in the 'exempt' category who benefit free of charge. Estimates suggest that membership of the NHIS brings benefits including a welcome increase in utilisation – outpatient (OPD) attendance in public health facilities alone increased by 136% for NHIS members between 2007 and 2008 against an increase of only 5.71% for non-members.[50] The average out patient (OPD) attendance for an insured member in 2009 was between 1.4 and 1.5[51] visits against a national average of 0.81.[52]

Table 1 – NHIS Membership data as of June 2010

Category of membership	Number registered	Percent of total registered
Informal Sector Adults	4,546,059	29.2%
70 years and above	1,006,529	6.5%
Under 18 years	7,604,324	48.9%
SSNIT Contributors	915,924	5.9%
SSNIT Pensioners	81,604	0.5%
Pregnant Women[53]	1,051,341	6.7%
Indigents	350,035	2.3%

Source: NHIA website (October 2010)

3.1.2 The True Story

The official figures used by Ghana's NHIA are exaggerated, highly inaccurate and misleading. Two of the most significant methods used that exaggerate the NHIS coverage are detailed below:

1. Up until their most recent annual report in 2009 the NHIA inexplicably chose to calculate the proportion of the population registered under the NHIS against 2004 population figures. As the population of Ghana is growing all the time this calculation has given artificially inflated coverage data over the years. For example, in 2008 the NHIA claimed a registration rate of 61% using 2004 population figures. Had the NHIA used the 2008 population figures, the reported registration rate would have been more like 54% that year. While the 2009 NHIA annual report is more careful to measure registration against current population figures, the inflated figures used historically have already contributed to the widely held perception today that Ghana's health financing model is an extraordinary success.

2. Secondly, and more importantly, the NHIA's figures to date are rendered meaningless to policy makers, civil society and the public because they are based on the accumulated number of individuals who have ever registered with the NHIS, rather than on the total number of valid members with a valid membership card at any one particular time. The figure used by the NHIA seems to count those renewing their membership as new additional members to the scheme. It also includes those who have registered but never paid for their membership, those who paid but never received their membership card, those whose membership has expired, those who register multiple times with different schemes due to relocation or operational inefficiencies, and membership cards that were automatically renewed with the hope that the owners would pay for them but for which payment was never received.[54]

More recently the NHIA has distinguished between registration figures and cardholders and has claimed the total number of subscribers with valid ID cards for the scheme stood at 12.5 million people in 2009, representing 86% of the total registered members.[55] The language again seems purposefully misleading – a closer look at the NHIA data for 2009 reveals that the figure used is an aggregation of all ID cards issued since the scheme began and not the number of valid card holding members at any one point in time.

In 2008, Ghana's National Development Planning Commission (NDPC) undertook a survey that included an attempt to capture a more accurate estimate of NHIS valid membership. Respondents were asked to show their 'valid' ID card to the survey staff to verify their membership.[56] The findings suggested that 45% of the population were valid members of the NHIS in 2008

Box 3: When is an NHIS card a 'valid' NHIS card?

When the NHIS started operations in 2004, district schemes issued laminated ID Cards to registered members. These cards were valid for one year. Upon renewal, the member's old ID card would be retrieved and replaced with a new laminated card bearing the new expiry date. In 2007 a new NHIS ID card was introduced. The back of the card bears the following inscription:

"This card is valid for 5 years subject to yearly membership renewal"

The annual due date for renewal payments to ensure continued validity is also printed on the card.

Between 2007 and 2008 (when the NDPC survey was carried out) there was no visual indication on the ID card to confirm to survey staff whether or not membership had been renewed for that year and therefore whether or not the card was still valid. It is therefore reasonable to expect that true valid membership in 2008 was much lower than the NDPC survey suggested due to lack of renewal. While no renewal data is provided by the NHIA, interviews with one district scheme visited by ISODEC in 2008 found renewal rates were as low as 29%.[57]

In the first quarter of 2009, the NHIA introduced a system of sticking a seal on the card to indicate the period of renewal. This process was then discontinued in the 3rd quarter of 2009 due to operational difficulties. In February 2011 the use of the seal was re-introduced.

against the 61% coverage rate claimed for the same year by the NHIA. Unfortunately, this data is also of limited value for reasons explained in Box 3.

Despite repeated requests to the NHIA by the authors for more accurate up to date membership data, no response has been received to date.[58] This paper therefore attempts to provide a more accurate estimate of the true coverage of the NHIS over time.

We use publicly available data on the total premium income from informal sector adult members and estimate the total number of informal sector adult members of the scheme per year based on an average premium amount. By applying the NHIA data available on the proportion of total registration made up by each membership category, we then extrapolated from the number of informal sector adult members to estimate the total valid membership rate. For full details of the methodology used see Annex 2.

Far from outperforming the targets set for the NHIS our calculations suggest that coverage in 2009 could have been as low as 18% of the population. This is less than a third of the 62% coverage implied by the NHIA in the same year.[59] It is also still far below the NHIA reported number of so-called 'active members' (53.6%).[60]

The World Bank has recently estimated the average informal sector premium rates are as high as GHc 20-25. Applying this figure would suggest an even lower coverage rate. Other commentators have suggested that in many cases a flat rate premium of GHc 7.20 is applied where no reliable indication of the enrollee's income is available.[61] Applying the same methodology to this lower premium rate would give a coverage rate of 34%.

Table 2 and Figure 1 present a comparison of our calculations against the NHIA figures. The Figure shows clearly that the NHIS is under-performing against its targets and the initial increase in membership has been tailing off. New membership is also not increasing at the necessary pace and some of the reasons for that are explored further below. Due to the absence of accurate data from the NHIA, our figures are estimates. If there is disagreement, the burden of proof rests with the Government of Ghana.

Table 2: Target, cumulative and actual coverage of NHIS, 2005-2009

Year	Population used by NHIA*	National Population Estimates†	Target coverage %	Population ever Registered	Population with Valid ID Cards	% population ever registered	% population with Valid ID Cards
2005	21,365,452	21,523,610	5	1,348,160	1,348,160¤	6.31	6.26
2006	21,877,048	22,040,177	10	3,867,862	2,409,382	18.9	10.9‡
2007	22,385,925	22,569,141	20	8,184,294	3,470,604	40.1	15.4‡
2008	22,902,598	23,110,801	30	12,518,580	4,351,826	61.3	18.8
2009	23,417,423	23,665,460	40	13,480,713	4,142,808	66	17.5

Notes:

** Population figures used by the NHIA in their latest annual report before the release of the 2010 census data. Prior to 2009 the NHIA registration rates were inflated above the figures presented here by using static population figures from 2004 to measure progress.*

† Population estimates based on the new census data released in January 2011 for 2010 with population growth rate of 2.4%.

‡ Proportion of population with valid ID cards for these years are estimated based on an assumed linear increase between 2005 and 2008 due to lack of data.

¤ For year one of the scheme (2005) we have assumed population with valid card is the same as registered population despite evidence to suggest card issue was problematic in the first year.

3.2 Challenges of Inequity, Inefficiency, Cost Escalation and Poor Governance

3.2.1 Inequity

Arguably Ghana's NHIS is designed to facilitate access for at least some vulnerable and marginalised members of the population. The NHIS provides a liberal benefits package with exemptions for older people, children whose parents are registered[62] as well as pregnant women. However, there are many characteristics of the NHIS that make it highly inequitable.

Everybody pays for health care but only a minority benefit

The principle source of funding for most social health insurance models is earmarked contributions by employees and their employers. In Ghana in 2008, 70% of the NHIS was tax financed through a 2.5% health insurance levy added to VAT. This means all Ghanaians, rich and poor, are contributing financially to the health system despite only 18% benefiting from the scheme. This large-scale exclusion is the most significant injustice of the NHIS.

Discrimination against the poorest people

Despite living on less than a dollar a day the poorest 20% of the population pay 6% of their expenditure as tax and of this nearly 15% goes into the government health budget.[63] While taxation is progressive in Ghana i.e. the rich pay a higher proportion of their expenditure as tax than the poor, this financial contribution from the poor could well be diverting already scarce resources away from other goods and services essential for their health and well-being.[64] Worse than this however, the evidence is clear that poor people lose out most when it comes to benefiting from the NHIS:

- **The original design of the NHIS made insufficient provision for those who cannot afford to pay for their health care – just 0.5% of the population. The June 2010 NHIA figures suggest that registration (not necessarily valid membership) of indigents (impoverished) is above that officially allowed by the scheme at 2.3%. However, this still falls far below the 28% of people in Ghana living in extreme poverty on less than a dollar a day.[65]**
- **Evidence shows that inability to pay NHIS premiums is given as the main reason for not joining the scheme. This is the case for 77% of individuals across the country. The proportion is even higher for rural dwellers (85%) and for poor households (91%).[66]**
- **Due to the large-scale exclusion of poor people the NHIS has been shown to be regressive.[67] Figure 2 shows that more than twice the proportion of the richest people in Ghana is registered with the NHIS compared to the poorest.[68] According to the Ghana Living Standards Survey (GLSS) in 2006 and expenditure information for 2008, only 8.1% of the poorest quintile benefits from the total hospital subsidy compared to 32.7% of the richest quintile.[69]**

Figure 1 Target, cumulative and actual coverage of NHIS

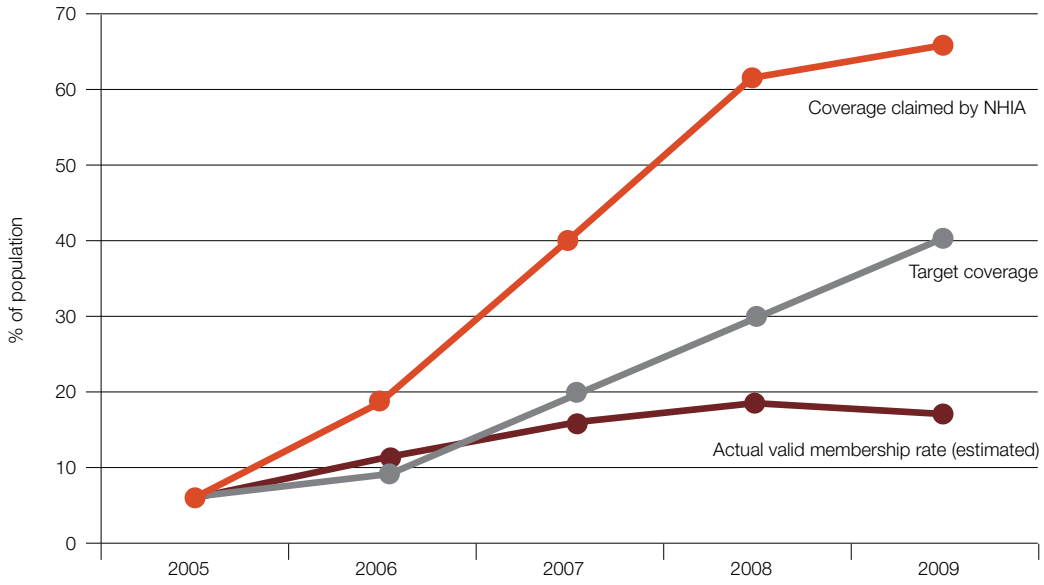
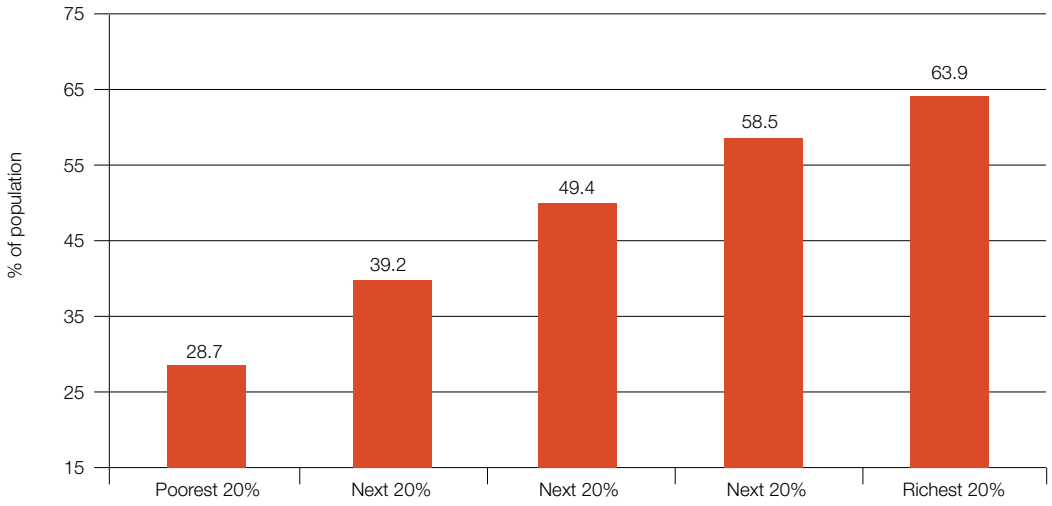
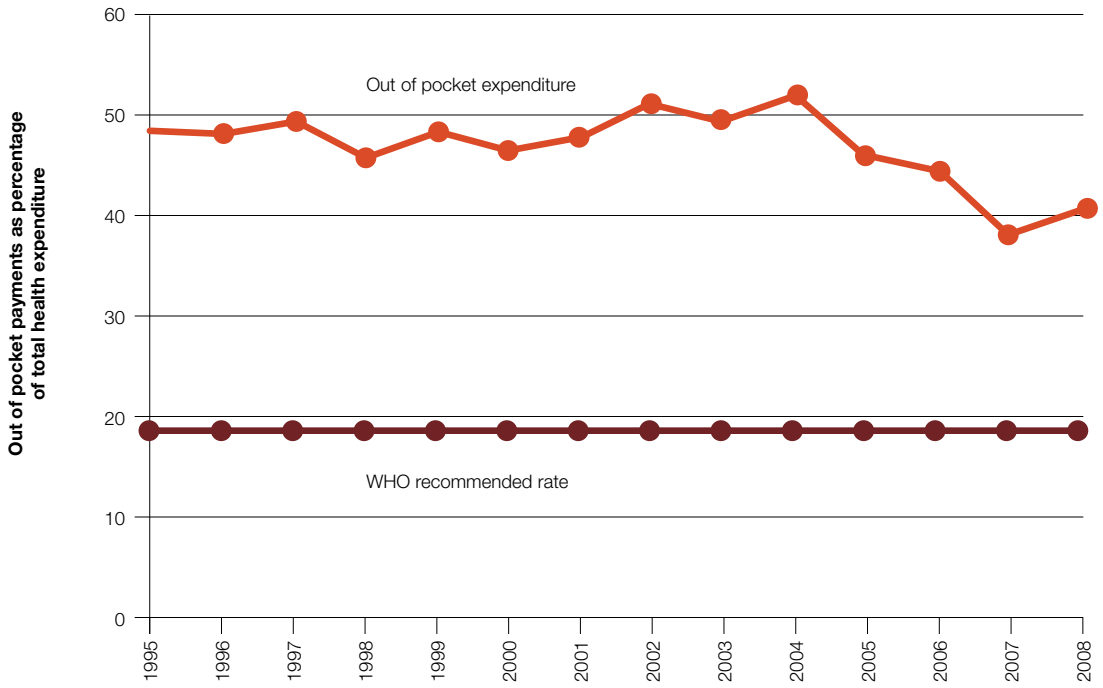


Figure 2 NHIS membership by socio-economic group (quintiles)



Source: NDPC Survey (2008)[70]

Figure 3 Out of pocket expenditure in Ghana compared to WHO recommmended rate



- **Not only are the majority of Ghanaian citizens excluded from the benefits of the NHIS, there is evidence that the non-insured now face higher user fees for 'cash and carry' health services upon which they continue to rely. More research is needed but some commentators have suggested that this tariff rise has resulted in the non-insured using fewer services and/or less expensive services.[71] Between 2007 and 2008 OPD attendance across all facilities, public and private, fell for the non-insured by 48% and continued to fall by 7% to 2009.[72]**
- **The introduction of the NHIS in 2003 did coincide with a slight reduction in out-of-pocket expenditure as a proportion of total health expenditure from just under 50% in 2003 to 40% in 2008 (see Figure 3). However, low membership of the NHIS and the continuing reliance on 'cash and carry' health care means out-of-pocket expenditure continues to make up a significant portion of total health care financing in Ghana at more than double the WHO recommended rate.[73] The risk of financial catastrophe due to ill health is therefore unacceptably high. Again it is poor people who suffer most - out-of-pocket payments are the most regressive way of paying for health as the poorest contribute a higher percentage of their income than the rich.[74]**

Despite contributing financially to the health care budget, poor people in Ghana are largely excluded from the NHIS and are being squeezed out of the formal health care system altogether. Poor people are left with no choice but to resort to home treatment including visits to chemical sellers and unqualified drug peddlers and to risk childbirth at home without qualified care. The poorest women in Ghana are more than three times more likely to deliver at home than the richest.[75] These are the only so-called 'private' health services that the poor use more than the rich.[76]

Discrimination against those in informal employment

The informal economy employs over 80% of the working population in Ghana,[77] the majority of whose income are unstable, insecure and inadequate. Despite this,

informally employed adults are the only population group required to pay premiums individually and in cash to benefit from the NHIS.[78] Not only this, despite their low incomes, informal economy workers are unfairly paying significantly more per head than any other members of the scheme. According to key informants in different districts informal sector premiums commonly fall between 15 and 25 GHc per person.[79] This compares to a government subsidy per exempt member of the scheme, including formal economy workers, of 14 GHc in 2008.

The much greater financial burden on informal economy workers not only increases the inequity of the scheme but also leads to the large-scale exclusion of informally employed adults and their children. As of June 2010 only 29% of those registered for NHIS were employed in the informal economy.[80] Again this number does not reflect true membership of the scheme, which is likely to be much less for informal sector workers as renewal figures decline due to lack of affordability. Unlike their formal sector counterparts the informally employed have no recourse to any other statutory provisions to protect their access to health care.

Skewing resources away from poor performing facilities and regions

Insurance financing is also in danger of reinforcing and perpetuating historical imbalances in the level and quality of services across different areas and regions in Ghana as reimbursement payments flow to those facilities already in a strong position to attract more patients. These tend to be higher-level facilities such as hospitals and similarly those districts and regions with higher levels of infrastructure to facilitate access.[81] The variation in registration (again not valid membership) is high – registration rates in Upper West are more than two times those in Greater Accra.[82] The poor, who are disproportionately located in rural and remote areas with poor infrastructure, are once again at an automatic disadvantage.

3.2.2 Wasted Resources and Cost Escalation

Inefficiencies

Contrary to the efficiency gains predicted, the NHIS is unfortunately riddled with inefficiency and cost-escalation problems. These were problems acknowledged by the current government in their election manifesto[83] and has been a common experience of implementing social health insurance worldwide.[84]

The NHIS registration process is poorly managed and slow. People wishing to register are often frustrated by unprofessional poorly trained staff, long queues and repeat visits. Many Ghanaians simply do not have access to an NHIS agent near where they live. People that do register can wait months for their membership cards, without which they are not entitled to benefits. It is estimated that between 5 and nearly 10 per cent of registered members may be facing this situation at any point in time.[85] Poorly maintained records and inconsistencies also frustrate registration for formal sector employees across the country. Research in Nkoranza district for example, showed formal sector workers still paying not only registration fees but also insurance premiums when their membership is supposed to be automatic.[86] Under the new system of producing membership cards centrally, over 15% of cards produced are defective and unreadable.[87]

The administration system introduced to process over 800,000 individual insurance claims each month through 145 District Mutual Health Insurance Schemes under the NHIS is also complex, fragmented, expensive and slow. There are major delays in provider payments. As of the end of 2008 around US$34 million was owing to health facilities.[88] With a 3 to 6 month average delay in payments some health facilities have been reported to turn away insured patients.[89]

Cost escalation

Like many health insurance schemes the NHIS suffers from fraud and moral hazard with providers gaming the system to maximise reimbursement payments. In certain respects the NHIS could be seen as a provider's dream: 95% of health conditions covered with payment methods that offer few or no incentives to contain costs.

Provider payments

The use of a fee-for-service method of provider payment for medication under the NHIS has seen an increase in the number of drugs per prescription from 2.4 in 2004 to 6 in 2008.[90] This has led to phenomenal cost increases, especially as drug prices in Ghana are far above international market prices (on average 300% of the median international reference price, rising to 1000-1500% for some medicines).[91] The data also suggests the NHIA has set its provider reimbursement price levels too high so providers can make profits by procuring medicines at lower prices.[92]

From June 2008, the NHIA introduced a Diagnostic-Related Group (DRG) system that pays per care episode, according to disease groups, the level of care and provider. The 2008 Independent Health Sector Review found the DRG system led to an immediate jump

in NHIS claims, sometimes a doubling within the month. The DRG payments have also led to tariff-creep - a well-known tendency inherent in such payment systems where providers bill for the most expensive diagnosis even when they treat for the cheaper diagnosis. NHIA staff reportedly told the 2008 Independent Health Sector Review team that: *"we don't get simple malaria cases any more – all malaria is complicated".*[93]

Further analysis of the data available also indicates that overall the Government of Ghana is paying over the odds for provider services – the average reimbursement rate per health facility attendance claim for insured patients is 50% higher than non-insured patients paying for themselves in the cash and carry system.[94]

The cumulative impact is that NHIS costs are spiralling out of control. Figure 4 shows a dramatic increase in outpatient costs since the DRG payment system was introduced in 2008. The cost per claim rose from GHc 8.48 to GHc 19.29 in just one year between 2008 and 2009 (see Figure 4). Total NHIA expenditure on claims payments has increased 40 fold between 2005 and 2009 from GHc 7.6 million to GHc 308 million.[95]

Curative over preventative health care

A serious cause of cost escalation and of concern for the health of the nation is the gradual shift of resources in the health sector away from preventative health in favour of institutional care under the NHIS. From 2006 to 2008, while claims payments for curative health were sky-rocketing, the government subsidy to the District Health Administration responsible for preventative health levelled off in real terms in 2006 and 2007 and fell in 2008.[96] By only reimbursing curative care the NHIS presents no incentive to facilities to incorporate preventative health into their services. Not only does this lead to an unwelcome increase in health problems it also increases costs for the health sector as a whole.

Private providers cost taxpayers more

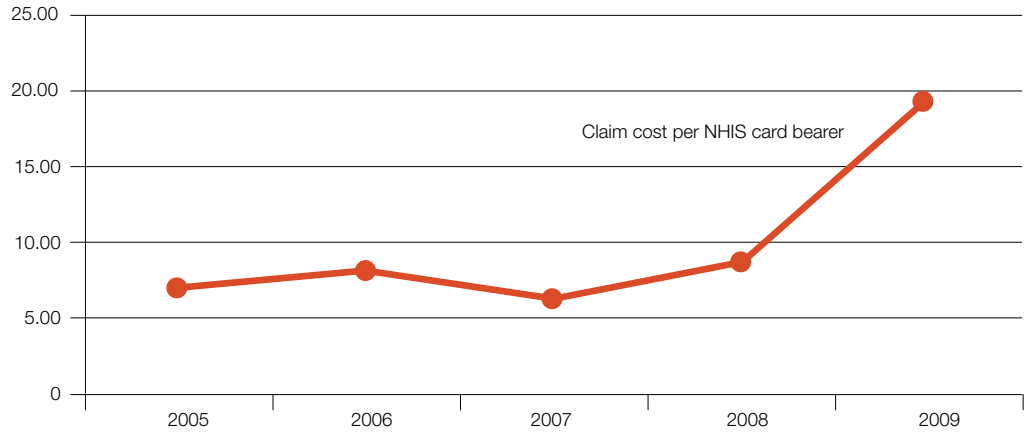
An increasing number of private providers have been accredited under the NHIS with the argument that this will widen access. However, with no clear justification, the government reimburses private providers at a higher rate than public providers. Figures available show that the average cost per claim by private providers to the NHIF is nearly three and a half times higher than for public facilities.[97] Significant savings could be made if private providers were paid at the same rate as public providers (see Table 5).

3.2.3 Governance and accountability

Since the introduction of the NHIS the health sector has unfortunately been dogged by ambiguous accountability arrangements, a distinct lack of transparency and institutional conflict. Problems exist at every level.

There are constant public disputes between the NHIA and providers as well as the Ghana Health Service regarding persistent delays in payments to providers.

Figure 4 Outpatient costs per card bearer



Source: Author's analysis of NHIA data

Providers blame the inefficiency of the NHIA while the NHIA places the blame on the providers, citing late submission of claims and fraudulent practices that require vetting. The NHIA faces severe constraints managing claims effectively, 'never mind acting as an active purchaser' to ensure health care is appropriate and effective.[98] At the district level health insurance managers frequently lack the medical, management and insurance skills necessary to hold their own in negotiations with providers, including in the verification of claims.

At the national level the NHIA's lack of transparency is of great concern. In their own evaluation Witter and Garshong reported that routine NHIA data is treated as confidential; information on the DMHIS rarely filters up to national level; and annual and financial reports are not circulated in a timely way.[99] No NHIA planning documents are available and there appears to be no monitoring and evaluation.[100]

Information on funding flows in and out of the NHIF is very difficult if not impossible to obtain. A public expenditure tracking study in 2007, found inconsistencies in the amounts released by the SSNIT to the NHIF, as well as in onward payments from the NHIA to district schemes. The 2008 Independent Health Sector Review found that 45% of funds received by the NHIA were not accounted for. With no explanation the reviewers were left with no choice but to assume these constituted overhead costs. Financial reports that did exist lacked information on how transferred funds to facilities were spent.[101] In the most recent Independent Review the NHIA failed to provide any financial data at all.[102]

There have also been reports of Members of Parliament receiving funds from the NHIA to supposedly construct health facilities in their constituencies without any consultation or open discussion on how that fits within the wider health sector infrastructure development program.[103] At the start of 2010, news broke that the former NHIA Chief Executive was to be charged for embezzling public funds and for presiding over a flawed accounting system. Reports stated however, that the NHIA was reluctant to prosecute.[104]

Confusing institutional arrangements and unclear lines of responsibility between the Ministry of Health and the NHIA contribute to the NHIA's ability to avoid public accountability. Some of these problems arise from the original Act and the legislative instrument of the NHIS as described by Witter and Garshong:

> *Some articles refer to the role of the Minister – for example, in Article 2.2.h, it refers to the NHIA as making 'proposals to the Minister for the formulation of policies on health insurance', which implies that the Minister exercises oversight. Others refer to the role of Parliament, for example, in approving allocation of funds (78.1.c). Others again reflect the role of the President, for example, in appointing the Executive Secretary of the NHIA (92.1). The Chief Executive has taken this to mean that he is ultimately responsible to the President, rather than to the Minister of Health, and cooperation and information sharing between the NHIA and the MoH has not been strong.*[105]

As the NHIA is responsible for managing a large public budget as well as the individual contributions of NHIS members, its poor transparency and accountability is unacceptable. The blurred lines of accountability for the NHIA considerably reduce the authority of the Minister of Health to call the NHIA to account[106] and the institutional conflicts waste time and resources and detract policy makers from the overall goal of scaling up to achieve universal access. Responsibility for stopping the political infighting and immediately addressing the unacceptable lack of transparency and accountability of the NHIA and other health sector actors rests squarely with the President of Ghana. This should start with an immediate call for the NHIA to publish all its financial and membership data.

Chapter Four
Realising a vision – health care for all, free at the point of use

With less than two years left before the next general election in Ghana, urgent action is needed from the President and his government to implement their election promises and scale up to achieve universal access. Realising this vision requires the removal of all financial barriers including annual premium contributions to the NHIS and the complete abolition of the cash and carry system. Crucially it also requires a simplification of the health financing architecture itself as well as a rapid expansion of government health services to meet increased demand and improve quality and equity. All this can be paid for with increased public investment in the health sector from both domestic resources and international aid.

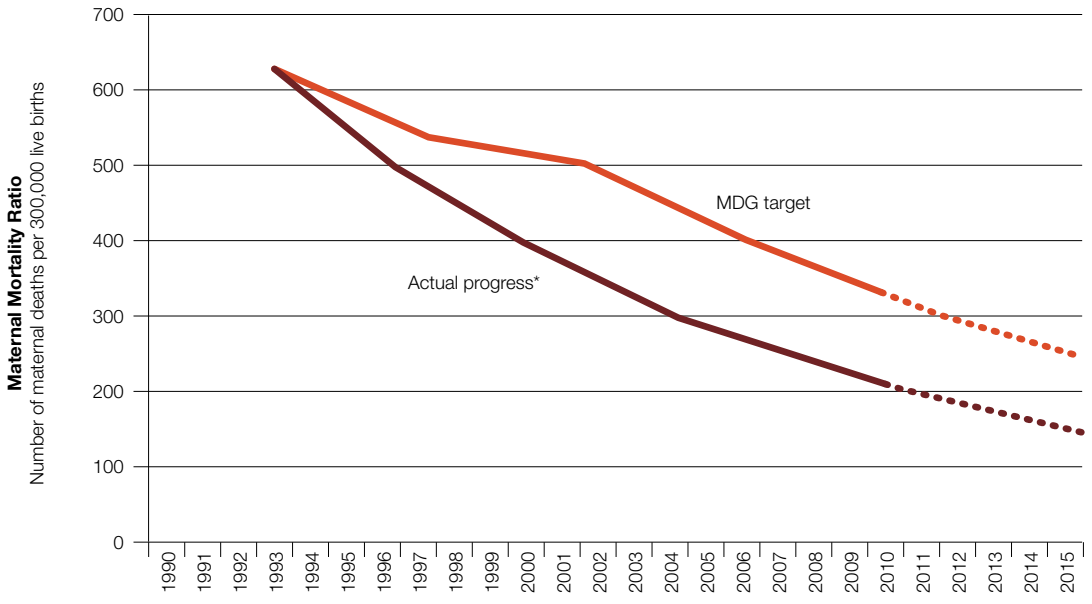
Progress firstly requires learning from advances made and recognising ongoing challenges and failures. Thankfully the health sector enjoys a high level of political commitment. Ghana is one of the few countries in the margins of meeting the Abuja commitment to invest 15% of the government budget in the health sector. The health sector's share of the budget rose from 8.2% in 2004 to 14.6% in 2009.[107]

Beginning with the first Five-Year Programme of Work in 1997 improvements have been achieved in expanding physical access to basic health care and average OPD attendance has increased considerably from 0.49 in 2000 to 0.81 in 2009.[108] Significant advances have also been made in the number and distribution of nurses across the country.

As a consequence of these welcome efforts some important gains in health outcomes have been achieved. Between 2002 and 2009 malaria deaths were reduced by 50% for children under five.[109] The TB treatment success rate has seen an upward trend reaching 85% in 2009 with a target set for 90% by 2013.[110] Child and infant mortality are also improving after years of stagnation, with a decline in mortality of 27% and 32% respectively between 2000 and 2009.[111]

However, this progress is not enough. Ghana remains off-track to achieve the health MDGs. Communicable diseases such as malaria, HIV and AIDS, tuberculosis and vaccine-preventable diseases remain amongst the main causes of child mortality and progress on reducing

Figure 5 Ghana's progress on maternal mortality against the MDG target to reduce deaths by 75%



*Broken line represents projected figures based on a continuation of the rate of progress achieved since the MDGs were agreed in 2000 - an annual rate of -4.36%. Source: WHO Global Health Observatory

deaths is stagnating. The country remains prone to outbreaks of meningitis, cholera and guinea worm and faces new challenges with a rise in non-communicable diseases including cancers, heart disease and diabetes.[112]

While OPD attendance has improved, averages fall far below the generally accepted minimum of 3 per person per year for basic universal coverage. Skilled birth attendance actually fell from 44.5% in 2006 to 35.1% in 2007, before rising again to 45.6% in 2009.[113] Family planning coverage is also unacceptably low at 31%.[114] Figure 5 captures the insufficient progress made to date on maternal health. If current rates of progress continue, Ghana will not achieve the MDG target on maternal health until 2027.[115] To meet the goal by 2015 the government must act now to triple the current rate of decline of maternal deaths to just over 13%.[116]

Huge inequities in health financing and delivery of services across the country and between rich and poor Ghanaians persist. This combined with the inefficiencies, cost escalation and poor governance of the NHIS mean that welcome increases in government investment in health care are not translating to proportionate improvements in access and health outcomes.

It is time for stage three of health care reform in Ghana:

4.1 Step 1: Health Financing Reform

4.1.1 Abolish user fees and annual premium payments

The experience of Ghana echoes that in many countries around the world. Where direct payments and co-payments for health care exist, no matter how small, they deter access and create impoverishment.[117] In Ghana fees have also contributed to the commercialisation of the health care system with providers increasingly oriented and motivated by financial reward rather than a public ethos of caring for and treating the sick. Annual financial contributions to the NHIS in the form of premium payments constitute another financial barrier to access, create a highly inequitable and unfair system and contribute relatively little to the overall health budget.

Access to health care for every individual in Ghana free at the point of access is now a shared vision across civil society and government. The National Democratic Congress (NDC) committed as part of its election manifesto in 2008 to implement a *'universal health insurance scheme which will reflect the universal contribution of all Ghanaian residents to the Scheme.'* The NDC also committed to ensure *'Our universal Health Insurance Scheme will guarantee access to free health care in all public institutions'.*[118]

Box 4: The government promised single lifetime payment

While in opposition the current government recognised the limitations of the NHIS annual premium payment system and that it was not affordable to the majority of Ghana citizens. Their election manifesto and first budget promised to move instead to a single lifetime payment or registration fee. At the UN General Assembly in September 2009 the President publicly reiterated his commitment to move to a single life-time payment in 2010 as well as free care for pregnant women, children and the elderly. Since then debates about the merits and possibilities of a one-off payment have ensued:

The ILO took the debate in one direction calculating an actuarially based single lifetime payment that as such would be beyond the means of even the wealthiest Ghanaians and many agree would never work. On the other side the Government of Ghana has been exploring a more progressive nominal registration fee (ideally no more than the cost of the card). A third argument is to question the logic and progressive outcomes of introducing a single lifetime fee altogether particularly given that an affordable fee for all would be so low that it would an insignificant financial contribution to the health sector budget. As with user fees in some countries, the cost of collecting the fee might actually be higher than the value of the fee. If the government does pursue the single lifetime payment one solution to avoid expensive administration may be for the government, in partnership with its external development partners, to pay for the fee on behalf of all citizens currently over 18 years old to ensure speedy national coverage.

Pregnant women and those with infants gather to discuss their issues with a local midwife in Kunkua Village in the Bongo District of the Upper East Region Photo: Abbie Trayler-Smith/Panos

The government must now implement this promise and commit to a clear plan to remove the requirement of regular premium payments, abolish fees in the parallel 'cash and carry' system and make health care free at the point of delivery for all by 2015. Options on the path to full implementation of free health care could include free care first for the poorest regions, services up to district hospitals, and government and mission facilities as Ghana's majority providers. Within the next six months the government must prepare for and fully implement their already overdue promise to make health care free for all people less than 18 years of age, regardless of their parent's NHIS membership status.

The government must also establish a clear time-bound plan to reduce out-of-pocket payments as a proportion of total health expenditure to the WHO recommendation of between 15% and 20%.[119]

4.1.2 Establish a National Health Fund

The fragmentation, inefficiency and sheer cost of the current insurance architecture already points to the need for significant simplification. The change away from a premium-based health financing model automatically renders obsolete much of this architecture and many of the functions of the NHIA. An overhaul of the insurance bureaucracy is recommended to reduce the much-reported institutional conflict between the GHS, the NHIA and the Ministry of Health. The core functions of the NHIA that remain relevant should be incorporated into the Ministry of Health.

At the same time the National Health Insurance Fund should be transformed into a National Health Fund to pool fragmented and opaque budgets and funding streams available to the health sector and to ensure comprehensive cross-subsidisation of health finances across the entire population. The purpose of the fund should be expanded to cover infrastructure and other capital and recurrent expenditure for the health system.

A move to prospective payments to District Health Authorities and facilities, as opposed to retrospective claims, would permit more substantive reform and bring needed incentives for cost containment. In this regard government plans to test capitation payments is to be welcomed. To ensure successful implementation, and not repeat the problems of past reforms, sufficient planning and preparation to overcome foreseeable challenges is critical (see Box 5).

4.1.3 Demand transparency and accountability

To improve accountability and transparency the management of the National Health Fund should be placed under the clear jurisdiction of the Ministry of Health with a clear legal responsibility to publish timely and comprehensive accounts of both income and expenditure, including regular tracking surveys to monitor spending at all levels of the system. Regular published accounts from the Ministry of Finance must also be enforced indicating disbursements to the health sector against commitments made. These actions will allow citizens of Ghana, organised civil society and parliamentarians to monitor the performance of the health sector and government and hold them to account.

Box 5: Capitation payments

Capitation requires that the government negotiate a fixed price per citizen to be paid upfront to a given health care provider to cover their health costs over a given period. In that case, the provider benefits if fewer citizens in their catchment area fall ill and visit them, and lose out if more people attend the facility for care. Capitation gives providers a predicable amount of income and an inherent incentive to invest in preventative health.

Under current institutional arrangements responsibility for preventative health in Ghana lies with District Health Authorities. Careful planning is therefore required to better integrate at least some preventative health services at the facility level. Other important issues the government will need to plan for include a system that caters for the high number of transient workers in Ghana, the introduction of an effective yet flexible gatekeeper system, and most importantly, strengthened accountability and improved management to counteract any potential problems of providers under-serving patients in their catchment area to save costs.

Nurse Linda Mbe, age 24 on a Ghana Health Service motorbike

Women meet with health workers at Achimota Hospital in Accra where free health care facilities have been available for pregnant women since 2008.

4.2 Step 2: Rapid expansion and improvement of government health services

To meet the goal of universal access in Ghana urgent expansion and improvement of government health services is required. Medical facilities are unevenly distributed across the country, with most rural areas lacking basic facilities such as hospitals and clinics as well as doctors, nurses and essential medicines.[120] One quarter of the population live over 60km from a health facility where a doctor can be consulted.[121] In 2008 skilled birth attendance ranged from 84.3% of deliveries in the Greater Accra Region to only 27.2% in the Northern Region.[122] The regions with the lowest level of health care provision, and hence the greatest problems in public health, include Upper East, Northern and Central. These disparities should be urgently addressed through equitable investment and distribution of workers, infrastructure and medical equipment. The government must also significantly scale up service delivery across the country as a whole in order to meet increased demand as a result of removing direct payments.

Many of these challenges have already been publicly recognised by the government. They should now put a clear time-bound commitment and plan in place to ensure all citizens have access to a decent quality health facility staffed by a qualified health worker within 8km of their home.[123] Essential components of a comprehensive health service equity and expansion plan should include:

4.2.1 Scaling up of Community-based Health Planning and Services (CHPS)

CHPS was first initiated in Ghana in 1999 as a national health policy initiative to improve accessibility (especially geographical), efficiency and quality of primary health care across Ghana. The model of mobile community-based care consists of a resident Community Health Officer (CHO) posted to Community Health Compounds

located in one village but providing services across 5-10 villages. The CHO is supported by a professional and auxiliary nurse, midwives, and one or two volunteers and provides services including family planning, health education, and outreach clinics for childhood immunisations as well as acting as a referral link to district health facilities. The model is widely regarded as evidence based and a welcome step away from vertical and selective programmes and towards a sector wide approach that integrates health-care planning, services and budgets.[124] The model of service delivery was viewed as part of Ghana's long-term commitment to the Alma Ata 'Health Care for All' Declaration.[125]

Unfortunately, despite an initial surge of progress between 1999 and 2005, the planned output of the CHPS appears to have lost momentum in large part due to inadequate resources and investment as well as ongoing human resource shortages.[126] [127] [128] Of an estimated 6,400 CHPS zones required nationwide only 500 have been made functional to date, of which only 300 are complete with a compound for the Community Health Officer. Overall implementation has been only 31% of the planned output.[129]

The Government of Ghana should re-commit to CHPS as the backbone of national efforts to deliver primary health care for all and the foundation of a functioning referral system. A time-bound capital and recurrent investment and operational plan must be put in place to scale up and establish the target number of CHPS zones so that every village across Ghana has access to a functioning CHPS.

4.2.2 Expansion of secondary and tertiary health care facilities

Beyond CHPS the latest Independent Review of the Health Sector in Ghana is critical of the low priority given to the need to build new and rehabilitate existing health infrastructure.[130] Table 3 presents significant identified gaps in infrastructure at the secondary and tertiary level reported by the government in 2007.[131]

Table 3: Gaps identified in secondary and tertiary care in 2007

Level	No. of facilities needed	Current situation	GAP
Sub-district Health Centres	6 health centres x 138 districts = 828	488	340
District Hospitals	138	72	66
Regional Hospitals	10	10	0
Ambulance Stations	138	19	119
Teaching hospitals	4	2	2

Source: Ghana Ministry of Health (2010)[132]

Respective health sector reports since 2007 have contained next to no information to document progress towards meeting these identified shortfalls in infrastructure.[133] Progress may well have been made but the lack of monitoring prevents analysis of ongoing need. Having said that the latest Independent Review of the Health Sector found that execution across the capital budget for health has been poor and is currently contributing little to the achievement of the health MDGs.[134]

Recent and further forthcoming research identifies government Health Centres/Clinics and District hospitals and services as the only level of care where benefits of inpatient and outpatient services are more equally distributed between the richest and poorest patients in Ghana.[135] Urgent action to fill the large identified gaps for these services is crucial if Ghana is to redress current inequity in the system. However, the government should also use the forthcoming research on the benefit-incidence of health facilities to formulate a strategy to improve the equity performance of regional and teaching hospitals.[136]

Finally in order to scale up and reduce inequities as soon as possible it is recommended that the Government of Ghana prioritise action to improve and scale up public service providers over private providers. Together with the Christian Health Association of Ghana (CHAG) the government already provides the vast majority of formal health care services across the country.[137] While significant efforts are required to reduce existing inequities in access to government services, forthcoming research suggests the private sector in Ghana is furthest from reaching poor people at scale with qualified care. The data suggests that for costly inpatient services the distribution of benefits for the poorest people in Ghana is three times higher in the public than the private sector.[138]

A growing body of international research reaffirms that despite their serious problems in many countries, publicly financed and delivered services continue to dominate in higher performing, more equitable health systems. No low- or middle-income country in Asia for example has achieved universal or near-universal access to health care without relying solely or predominantly on tax-funded public delivery of services.[139] In line with this evidence Ghana should prioritise investment in the expansion of public health care services whilst also continuing to improve regulation of the private health care sector.

4.2.3 Health workers

The human resources objective of the Ministry of Health is *"to ensure adequate numbers and mix of well motivated health professionals distributed equitably across the country to manage and provide health services to the population."*[140 141] While the government has made significant progress in key areas, including the introduction of a new salary structure in 2006, a number of challenges must be addressed if the MoH is to achieve this objective. Key issues outlined in the 2007-2011 Human Resources Strategy include: inadequate numbers, inequitable distribution of health workers, low motivation, and high levels of attrition.

The government should be congratulated for reaching its target nurse to population ratio for 2009 from approximately one nurse per 2000 people in 2006 to one nurse per 1000 people in 2009.[142] The progress has been attributed to Ghana's human resource allocation quota system and the establishment of nurse training schools in all regions.[143] Unfortunately numbers and distribution still fall far short of WHO recommended rates and shortages of midwives are acute.

Progress is now urgently needed to address the unacceptable shortfall in numbers and distribution of doctors. In the Health Sector Programme of Work 2007-2011, the government outlined plans to double the doctor to population ratio from 0.1 per 1,000 to 0.2 per 1,000 by 2010. However, figures for 2009 place the total number of doctors at 2,082,[144] representing a doctor to population ratio of just 0.09 per 1000 (or 1:11,649) – worse than in 2007.

A 2007 MoH policy and strategy document on human resources set a staffing norm of one Medical Officer per 5,800 people.[145] In order to have achieved the agreed norm by 2011, an additional 2322 doctors would be needed (representing an increase of 112% from current levels). Even when this target is achieved Ghana is still far from its stated aspiration to achieve staffing levels equivalent to an average middle-income country by 2015.[146] To meet this target would require nearly 50,000 additional doctors or an increase on current levels of over 2000%.[147]

The shortage of doctors in rural areas is especially acute and staff incentives schemes such as the Deprived Area Incentive Allowance have done little to improve geographical equity overall.[148] In 2009 just 4% of the country's doctors were practicing in the three Northern Regions while 43% were based in the Greater Accra Region.[149]

Sanatu Mohamadu (25) was rushed to the nearest hospital 80km away after suffering from a ruptured uterus. Not only could she have died during the long journey but her husband Mohammad also feared that he might be thown in jail if Sanatu received treatment they could not afford. They did not know about the free health care for expectant mothers, and may not have risked the dangerous journey had Mohammed not been so desperate to save his wife and child. Tamalgu community in the Savelugu Nanton District in the Northern Region of Ghana.

Attempts to achieve required staffing norms have been further complicated by problems with attrition. The health sector has been disproportionately affected by external migration (‘brain drain’) - the 2006 World Health Report reported that 22% of all doctors and 12% of all nurses trained in Ghana were working in OECD countries.[150] Interventions to address external migration have had some success.[151] These include: the establishment of the Ghana College of Physicians and Surgeons to provide in-country post-graduate training; increases in health worker salaries; and initiatives like the ‘brain gain’ project.[152]

There is also now growing concern over the loss of skilled and experienced workers who are reaching retirement age. According to Independent Health Sector Review for 2009, some 14,439 health workers will reach the mandatory retirement age in the next ten years.[153]

Ghana produces an estimated 400 new doctors each year[154] and while efforts have been made to expand existing health training institutions and set up new institutions, capacity remains inadequate in terms of infrastructure, teaching staff, and funding.[155] [156]

The government must now urgently review the reasons for poor progress to date on training, recruiting and retaining doctors in Ghana and look to learn from countries such as Malawi where pooled funding from development partners has helped increase the number of physicians by 516% between 2004 and 2009.[157] Or Ethiopia where in just a few years 32,000 community health workers have been trained and deployed.[158] A comprehensive review of health worker gaps across other cadres including health sector managers, pharmacists, and midwives is critical to inform a new and fully costed human resources strategy from 2012 to 2016.

4.2.4 Access to affordable quality medicines

Access to affordable quality medicines, including free essential medicines, is a critical component of any universal health care plan. External development partners must give the government of Ghana significant and sustained support to use its negotiating power to lower medicine prices by at least 50%.[159] Action must also be taken to tackle significant inefficiencies along the supply chain, including a mark-up of over 100% applied by the Central Medical Stores (CMS) and high mark-ups at the facility level.[160]

Depleting drug stock levels at facility level indicate blocks and leakages along the supply chain described by the Ghana Health Service as a medicine crisis caused in large part by inefficiencies and lack of accountability of the CMS.[161] In this regard the MoH, again in partnership with experienced external agencies such as UNICEF, must urgently act to address leakages along the supply chain and regularly monitor drug supplies at facility level.

Poor quality or 'sub-standard' medicines pose a serious threat to public health in Ghana, as in all countries. Under the guise of addressing this problem, some rich countries are pushing for new intellectual-property rules and a reliance on police action to keep substandard medicines out of reach. Such an approach will not ensure consistent medicine quality. Worse, it threatens to undermine access to legitimate, affordable generic medicines. It is imperative that Ghana reject externally driven efforts such as the Anti-Counterfeiting Trade Agreement (ACTA)[162] that aim to remove internationally agreed flexibilities for developing countries to protect public health that are built into the TRIPS agreement.[163] Instead Ghana should promote generic competition, including by implementing TRIPS flexibilities in national laws. Generic medicines can be as little as 20% of the price of the originator drug and have meant millions more can access treatment for diseases, especially HIV and AIDS.[164] To improve quality and safeguard the health of citizens the government should build the capacity of the drug-regulatory authorities.

4.2.5 Information systems

Sound reliable information is the foundation of effective decision-making across the health sector and is rightly identified as one of the six essential building blocks of health systems. Research for this report alone demonstrated the fragmented, duplicative, confused and contradictory nature of health information in Ghana with different institutions presenting differing records of progress. In the case of membership figures for the NHIS different teams within the NHIA were collecting data using different methodologies and presenting wildly differing pictures of progress made. Aside from undermining evidence-based decision-making, such fragmentation constitutes enormous inefficiencies and is a drain on the public purse.

Simplification of the institutional architecture as described above should help bring better co-ordination to information systems. However, a comprehensive plan in partnership with external development partners is needed to build a workable, effective and transparent system that works for all stakeholders in the sector including hospital managers down to community health offices as well as the general public. A first step will be to identify and tackle duplication in information gathering.

Information Communication Technologies (ICT) can play an important role in improving and standardising the information system itself but also in improving the efficiency and performance of health financing and service delivery. The latest Independent Review of the Health Sector in Ghana suggested that in some parts of the health system state of the art technology is being introduced at high cost without first getting the basic infrastructure and communication channels working. Silofication of ICT use is also a problem. The NHIA have made expensive investments in ICT at the facility level for example, but these can only be used for health insurance data collection. A co-ordinated approach is needed to ensure that at no extra cost such investments work for collecting and transferring patient information, morbidity and mortality data, introducing additional services such as telemedicine, for continuous education of health staff and for internet use as an incentive for staff to live and work in rural and remote locations.[165]

4.2.6 Empowerment of patients and civil society

The government must do more to recognise and respond to patients and civil society as partners in the goal to achieve universal access to quality health care. Full access to information across the sector, including financial data would be a significant step towards this goal. The government at all levels should open channels for patients and civil society, as well as health care workers, to report their concerns and experiences and demand that improvements be made. Feedback on what action is taken in response should be in the public domain. District level ombudsmen to represent patient concerns to facilities and district level officials might be one model to consider. At the national level civil society should be considered a valued partner in the planning and decision making process.

4.2.7 Tackling the social determinants of health

A broad range of factors determine good health, many of which are not necessarily under the direct management of the Ministry of Health or other health sector actors. These include infrastructure, especially roads, water and sanitation, working and living conditions, nutrition and education as well as the overall distribution of money, power and resources. Failure to address these determinants can undermine the objectives set for the health sector.

Good health is determined by many factors including education. Fuseina Yakubu carrying her school books and food bowl, Wovogu Anglican Primary School, Tamale. Photo: Helen Palmer/Oxfam

For example, in Ghana the introduction of free antenatal and delivery care led to welcome increases in utilisation of pre-natal health care services. Unfortunately the impact on assisted deliveries has been less than expected.[166] Among the non-financial reasons cited for this are distant health facilities, poor road conditions, lack of easily available transport, some social traditions and the role of Traditional Birth Attendants.[167] In Ghana skilled birth attendance is most unevenly distributed across regions and ethnicities, but education levels also yield a 2.5 fold difference in access at the extremes.[168]

This example alone demonstrates the need to tackle broader social determinants of health in Ghana. Low levels of literacy, gender inequality, poor sanitation, under-nutrition, alcohol abuse, sedentary life styles and unhealthy diets all also contribute to ill health and high mortality rates.[169] Only 13% of Ghanaians have access to basic sanitation[170] and poor environmental sanitation accounted for 70% of OPD attendances in 2008.[171]

The Ministry of Health acting alone cannot hope to tackle all these determinants. A co-ordinated approach across all ministries within Ghana to protect and improve the health of the population is required.[172] A practical step forward in the short-term is for all ministries to conduct a health audit of their policies and operational plans to identify immediate and low-cost actions that could be taken to improve the health impact of their activities.

Chapter Five
Financing the vision – How much it will cost and how to pay for it

5.1 What will it cost?

It is crucial for the government of Ghana in consultation with civil society to develop a homegrown, comprehensive costing estimate of universal and equitable coverage based on an ambitious plan to expand services and improve quality. Per capita expenditure on health in Ghana as of 2008 was US$28. While there are currently no comprehensive estimates of what this figure would have to rise to in order to provide an essential package of health care to every Ghanaian, in the interim, informed estimates can be made from existing studies:

Actuarial studies conducted as part of the government's commitment to implement a one-time premium payment for NHIS estimated the total amount required to pay health care providers for services rendered to NHIS clients (assuming 100% coverage) and the associated administrative costs by 2018 would be GHc1.7 billion, or US$1billion.[173]

This estimate compares to a crude calculation of total cost based on the historic WHO/World Bank recommended minimum per capita expenditure of US$40 (in today's prices) per year. When this figure is applied to the projected population in Ghana in 2015,[174] the target date for the MDGs, the total cost of universal coverage amounts to GHc 1.7 billion or US$1.1 billion.

However, in the latest World Health Report[175] the WHO has revised its recommendation and states that developing country governments will need to spend US$60 per capita by 2015 to achieve the MDGs. This estimate, while still not ideal, provides a more realistic expenditure target that gives allowance for much of the investment needed to scale up and improve the health care system in Ghana and ensure it can deliver to all. The total cost using this preferred method amounts to GHc 2.6 billion or US$1.6 billion by 2015. This would result in a per capita expenditure of just over two times the figure for 2008.

The following section demonstrates that by 2015 Ghana could be spending at least US$54 per capita and be well on the way to achieving the WHO recommended amount.

5.2 How to pay for it by 2015

It is already widely understood that Ghana's NHIS is not financially sustainable and significant changes are needed. The Government of Ghana must now invest in exploring concrete and progressive solutions to raise the additional financing required. Some discussions and proposals have already been made including an increase of the NHIS VAT levy by 0.5% and a single lifetime payment (see Box 4). These and further options must be evaluated against their contribution to equity and overall financial contribution. Two facts are clear, business as usual is not financially viable; and, even if the government moves to a single lifetime payment, it will not contribute significant funds to the overall health budget if its goal is to increase equity and access. These issues are explained in turn.

Business as usual not financially viable

Back in 2006 the International Labour Organisation (ILO) estimated that, under the current financing arrangements, the NHIS would enter into a deficit situation within the first 4 to 5 years of scheme operation, and especially as population coverage rises beyond a certain point.[176] Aside from the already discussed problems of inefficiency and cost-escalation that undermine the financial viability of the NHIS, a large part of the problem lies in the way the NHIS is funded.

An unintended consequence of the NHIS financing model is that, unlike other typical social health insurance systems, the NHIS has an income base that is not directly or principally linked to the number of enrollees. Exceptions to this are the SSNIT contribution, which represented less than a quarter of income in 2008, and the premium paid by informal sector workers, which represented less than 5% of income in 2008 (see Table 4). The vast majority of NHIS revenues, approximately 70% in 2008, come directly from the NHIS VAT levy, which is entirely unconnected to the NHIS membership rate.

The NHIS's heavy reliance on tax funding erodes the notion that it can accurately be described as social health insurance and in reality is more akin to a tax-funded national health care system, but one that excludes the vast majority of the population. Furthermore, the majority of those uninsured today cannot afford to finance their own health care above what they already pay as tax. Achieving health care for all in Ghana will therefore require a greater reliance on additional alternative sources of financing.

The government-promised single lifetime payment

It is clear that an actuarially based single lifetime payment, i.e. calculated based on the risk of ill health faced by each individual member, is not practical, equitable or politically feasible. On the other hand, while a move to a one-off nominal registration fee based on the cost of a membership card would be a welcome

Table 4 Funding sources of NHIS in Ghana for 2006 and 2008

Source of NHIF income	% of NHIF income in 2006	% of NHIF income in 2008
National Health Insurance (VAT) levy	76%	69.5%
Social security contributions of formal sector workers	24%	23.2%
Premiums paid by informal sector members	0.01% (est.)	5.1%
Other (Investment income)	n/a	2.2%

Source: Ghana Health Sector Review 2007 (for 2006 figures); ILO actuarial analysis 2009 (for 2008 data)

step away from annual premiums; such a fee would in reality contribute a negligible amount to the overall health sector budget.

Therefore, regardless of whether or not the single lifetime registration fee is implemented the increase in expenditure required to achieve health care for all will have to be found elsewhere.

Our calculations suggest that financing universal health care in Ghana can be achieved from three key sources: savings generated from reduced inefficiencies in the health sector, additional revenue from improved economic growth and progressive taxation, and improved external development aid. These sources, combined with a continued commitment to allocate 15% of total government revenues to health would mean Ghana could increase its per capita expenditure on health by 200%, and be well on the way to spending the WHO recommended US$60 per capita by 2015.

5.2.1 Savings as a source of additional financing

In its latest World Health Report the WHO provides a conservative estimate that between 20% and 30% of existing health resources are being wasted due to inefficient and inequitable use. This report builds on a strong foundation of evidence to suggest that Ghana is no exception. The NHIS is bleeding millions of Ghana Cedis each year due to large-scale inefficiencies, cost escalation, corruption and institutional conflict. Rectifying these problems will bring significant gains firstly by generating savings that can be ploughed back into improving and expanding service delivery, and secondly by ensuring the most effective use of additional resources invested in the health sector in the future.

Putting an exact price tag on potential savings from the existing system is not possible due to the complex nature of the health sector and the lack of transparency in the current reporting of costs, particularly for the NHIA. However, we attempt to estimate some possible significant savings for further consideration and exploration in Table 5. Such savings arise from both tackling problems identified in the current health system and net gains made from further investments in preventative health.

Table 5 Potential Savings that could contribute towards financing universal health care

Description of potential saving	Est. amount of savings (GHc million)	Est. amount of savings (US$ million)
Remove health insurance bureaucracy and incorporate remaining relevant functions of NHIA into the Ministry of Health: A shift away from annual premium payments and introducing prospective budgets for providers eliminates the need for much of the current insurance bureaucracy, saving millions each year. It was estimated in 2008 that 45% of the funds transferred to the NHIA alone is spent on overheads.[177] Slimming down the NHIA and incorporating its remaining relevant functions under the management of the MoH could potentially reduce such overheads to a more acceptable 15%. We apply this percentage reduction in cost to the total NHIA expenditure in 2009 of GHc 435 million.[178]	131	83
Fraud and leakages: No official estimates exist on the proportion of claims that are fraudulent though some commentators claim it could be as high as 50%. The NHIA's basic level clinical audits[179] for 2009 found 13% of claims were unjustified. It is therefore reasonable to assume that auditors with specialist medical training would recover the cost of at least 20% of claims.[180] The total cost of claims in 2009 was GHc 308.15 million.[181] There can be no doubt that significant leakages in public expenditure exist across the health sector as a whole. The last public expenditure tracking survey conducted in 2000 revealed that only 20% of non-salary public expenditure reached facilities.[182] An up-to-date survey is recommended to identify further possible savings.	62	40
Access to medicines: Through better negotiations with suppliers and reducing unnecessary cost escalation along the supply chain the price of medicines could be reduced by at least 50%.[183] In 2009 claims for medicines amounted to GHc 129 million.[184]	65	42
Reduce payment to private providers. Clinical audit data for 2009 indicates that the NHIA is paying private providers 3.4 times more per claim than for public providers. Private providers claimed 25% of the total claims payments in 2009.[185] The total claims bill in 2009 was GHc 308.15 million.[186] Paying private providers at the same rate as public providers would produce substantial savings.	54	35
Family planning and other population activities. Family planning services are not included as part of the current package of benefits under the NHIS. USAID calculations estimated that if family planning was included a net savings of GHc 11 million would be realised by the year 2011, rising to GHc 18 million by 2017.[187] These savings would mainly arise from reduced costs in maternal and childcare, including deliveries, post natal and infant care. USAID estimates that the use of any amount for family planning leads to three times that amount being saved in avoided antenatal, delivery and newborn care.	18	12
Prevention measures: Malaria accounts for 38% of all outpatient attendances and 36% of all admissions.[188] There were a total of 16.6 million insured OPD cases in 2009, with a per capita cost of GHc 10.11, and 973,000 inpatient claims with a per capita cost of GHc 75.69.[189] Reduction in malaria cases by 50% as a result of increased bed net distribution and other preventative measures would have saved the government GHc 44 million in 2009. Similar investments in preventative health including especially water and sanitation to reduce incidence of diarrhea and typhoid could yield much more.	44	28
Total savings per annum of just the examples provided here	***374***	***239***

The total savings estimate for the health sector is GHc 374 million or US$239 million based primarily on 2009 NHIA expenditure information. Moving away from a health insurance administration alone could save US$83 million each year - enough to pay for 23,000 more nurses.[190]

When applied to the population in 2008 when per capita expenditure on health was US$28, the saving amounts to US$10 per capita or 36% of total government health expenditure. Applied to current (2010) and projected 2015 population figures the total savings value amounts to US$9.8 and US$8.8 respectively.[191] Such figures suggest that reported government expenditure on health in 2008 of US$28 per capita is in real terms only worth a maximum of US$18 per capita.

5.2.2 Fairer taxation for increased revenues for health

Of the many different approaches that exist to fund the provision of universal health care, general taxation remains the most dependable and commonly used mechanism. Indeed, no low or middle-income country has ever achieved universal or near universal pro-poor access to health care without relying predominantly on tax-based financing. Tax-based financing holds the greatest potential for equitable redistribution of a nation's resources from healthy to sick and from rich to poor.

Ghana's NHIS is of course already 70% funded by taxation – an earmarked levy on the VAT. While VAT in Ghana does exclude a large range of goods consumed by low-income households, it is now verging towards proportionality and is at significant risk of becoming regressive.[192] While discussions are underway about increasing the levy to raise additional funds for health there are a large number of more progressive and as yet untapped tax sources for the government to urgently pursue, including the significant oil revenues expected from 2011.

Using IMF figures we calculate that fairer taxation of Ghana's own resources, particularly from its extractive industries, could yield hundreds of millions of additional Ghana Cedis for health. Investing these resources back into health will in turn yield further gains by ensuring the healthy and productive workforce needed for healthy and sustainable economic growth.

Our calculations:

The International Monetary Fund (IMF) estimates that tax revenue by 2013 will be 25.7% of GDP, or US$8.47 billion.[193] This is an increase from 22.6% in 2010 with oil revenues making up a large share. The IMF does not make an estimate for 2015. We have assumed that this figure remains the same through to 2015.

Non-tax revenue (such as royalties for natural resources) we have assumed will reduce slightly by 2015 to 2% of GDP. This gives a total revenue figure for the Government of Ghana in 2015 of 27.7% of GDP or US$9.1 billion.

Both tax and non-tax revenue estimates include revenues from oil, estimated at around 5% of GDP in 2013, with 4.2% of this being used for spending on projects under the Shared Growth Fund.

Assuming a continued commitment by the Government of Ghana to spend a minimum of 15% of government revenues on health we know that tax and non-tax revenues would generate 15% of US$9.1 billion for health. This equals US$1.4 billion or US$50 per capita as applied to the projected population for 2015.

Achieving tax revenue increases of this kind will require concerted government investment and action to tackle poorly conceived tax incentives, tax avoidance and evasion by large firms, particularly transnational corporations. Dramatic failures to effectively tax extractive industries and ensure transparency would need to be reversed, and measures taken to capture resources from untaxed high-income earners within the informal economy. Based on research available some examples of potential progressive components of the projected increase in tax revenues are shown in Table 6.

The examples listed in the table present calculations undertaken by other researchers and tax economists. We have simply applied a 15% allocation of revenues identified in such research to indicate what resources could be available for the health sector. The examples shown here alone amount to US$8 per capita additional health expenditure when applied to the 2015 projected population. Of course fairer domestic taxation not only raises revenues for health but increases government capacity to increase investment overall, including in other essential services such as education and water and sanitation.

5.2.3 The value of better quality aid

The calculations on savings and additional fairer taxation of domestic resources demonstrate that Ghana holds real potential, in the long-term, of self-financing free and public health care for its citizens. However, to realise this potential, and ensure a successful transition requires the continued and improved support from external development partners for the medium-term.

Ghana has a good reputation amongst the international donor community as a progressive country, where real development results have been achieved over the last decade. However, like many developing countries, it still

Table 6 Examples of options for raising additional revenue to finance universal care

Source of additional revenue	Estimated amount for health GHc million (15% of total revenues identified)	Estimated amount for health US$ million (15% of total revenues identified)
Oil revenues tax A mid-point of estimated oil revenues expected is US$1 billion[194] or GHc 1.46 billion.	220	150
Property tax Taxation of property and rental income could raise revenues worth an estimated 1-2% GDP.[195] 1.5% GDP in 2009 would have contributed GHc 345 million additional revenues.	52	35
Corporate tax In 2006, corporate tax was reduced from 32% to 25%. Corporate tax provides a very small proportion of total tax revenues and corporations have enjoyed a boom over the past 5 years. It is considered reasonable to marginally increase corporation tax to 27.5% (still below the pre 2006 level). Total corporate income was GHc 1.2 billion in 2009.[196] An additional 2.5% would have yielded GHc 56 million in 2009, when the total taxable corporate income would have been GHc 2.2 billion.[197]	8	5
Forestry Reversing the free zone status of existing forestry firms would raise 0.5% GDP in additional revenue.[198] Applied to the 2009 GDP this would raise US$78 million or GHc 117 million. Even a moderate improvement in the enforcement of a sustainable level of logging would add further revenue gains of approximately US$15-25 million or GHc 30 million.[199]	23	15
Royalty tax on mining Revenue lost since lowering royalty tax on mining is estimated at US$68 million per year[200] or GHc 102 million.	15	10
Total	***318***	***215***

needs more if it is to meet the MDGs and especially if it is to help bridge the financing gap on health in the interim. Cutting the quantity of aid to Ghana now would undermine the gains achieved to date and risk the country's graduation away from external assistance altogether.

Ghana also requires better quality aid. More long-term and predictable support direct to the government's budget where possible is not only vital to help continue to build and strengthen a universal, more efficient, accountable and effective public health system, it is also critical for improving public financial management and taxation systems so the country can be self-sufficient in the future.

Aid for health in Ghana comes through three main channels – general budget support, sector budget support and earmarked grants and loans for health. Together these amounted to GHc 305 million or US$193 million in 2009.

The good news is that Ghana already receives a significant portion of its overall aid as general budget support. Multi-donor budget support in 2009 amounted to US$525 million or 34.62% of all aid flows to the country and almost double what it received in 2003.[201] As the government allocated 14.6% of its general revenues to health in 2009 this means its external development partners contributed GHc 120 million or US$77 million to Ghana's health sector in the same year via general budget support.

A study by the Overseas Development Institute has shown that the move to budget support by donors has improved the predictability of aid financing, reduced transaction costs of aid, and has helped to deliver real results in health, education and beyond.[202] Increasing general budget support in Ghana is an excellent step in the right direction, and whilst there is still need for

improvements in the way it works, all donors should increase their support to this instrument, in particular, the Netherlands, France and Canada who have recently reduced direct support to the government.[203]

Part of the general budget support is from the EC in the form of a 6 year MDG contract, which is one of the most innovative and predictable sources of budget support, linked to MDG outcomes. The EC should explore increasing the size of this commitment.

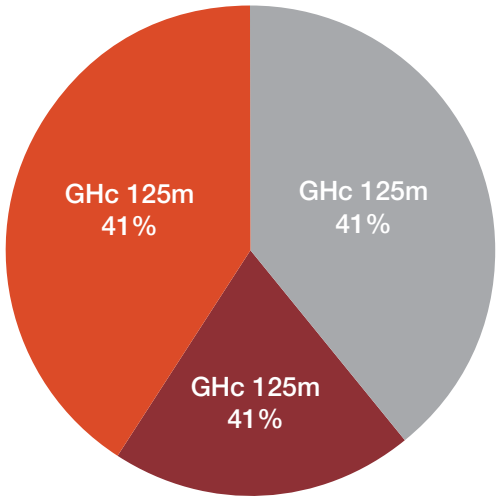
Donor performance to improve the quality of health specific aid in Ghana has been more mixed with some concerning trends in the wrong direction. In Ghana health sector budget support amounted to GHc 60 million or US$38 million in 2009[204] and 19% of all aid for health (see Figure 6). Health sector budget support is very useful in that it is earmarked to health but allows flexibility for the government to direct the funding to where it is most needed. This form of support, along with general budget support, is the only type of aid that can be used for essential recurrent expenditure, such as health worker salaries, so critical for Ghana's health service expansion. That said, the most recent Independent Health Sector Review highlighted the extent to which sector budget support funds were in fact earmarked in Ghana, meaning significantly less flexible funding available, especially at district level.[205] The same review noted increasing fragmentation between external actors in Ghana's health sector. For example, there were a total of 67 missions in 2008 by donors regarding health – more than one a week, typing up valuable government time. Furthermore, the proportion of health specific aid provided as sector budget support has fallen in recent years.

The trend of declining quality of health aid to Ghana reduces its value and performance and needs to be rapidly reversed. Donors should work in co-ordination with each other and use Ghana's own systems and procedures wherever possible. Donors should seek to increase the amount of sector budget support they are giving, preferably by making direct contributions to the proposed National Health Fund, and keep earmarking to a minimum. At least 50% of aid to the health sector should be provided as sector budget support by 2015.

At the same time other donors such as the PEPFAR, a US government health initiative, and many NGOs operate completely outside the government's Programme of Work. Pressure should be put on them to align behind the government's plans and pool funding wherever possible.

In our projections for health spending available to the Government of Ghana in 2015, we have assumed

Figure 6 Aid modalities for health in 2009



Source: MoH Programme of Work 2009[206]

that donor support will decline overall as a proportion of total government income as revenue from oil starts to increase. The IMF project that total donor aid will decline rapidly from a peak of 11% of GDP in 2009 to 3.8% in 2013.[207] Of this, 2% of GDP comes as official transfers, i.e. through government or under the auspices of government in some way. We have assumed that this 2013 figure will remain the same to 2015 based on our recommendation that aid quality improvements in the form of increased budget support for health will help counteract the overall expected decline in aid levels. We have also assumed that the government will allocate at least 15% of government revenues (including revenues from aid) to health in 2015 in line with the Abuja commitment. This means donor aid to health could fall from US$7 per capita now to around US$4 in 2015.

5.2.4 Total potential government expenditure on health in 2015

Added together taxation, non-tax revenue and grants give a total government revenue of US$9.78 billion in 2015, or 30% of GDP. Total government expenditure will of course be higher than this in 2015, as the government will continue to resort in part to borrowing. The IMF projects a budget deficit in 2013 of 3.5% of GDP. However, we have chosen not to count this

Table 7 Sources of government spending on health in 2015

Source	Total revenue US%	15% allocation to health US$	Per capita health spending US$
Tax and non-tax revenues	8.4 billion	1.4 billlion	50
Aid (on budget)	659 million	99 million	4
Total	**9 billion**	**1.5 billion**	**54**

Source: Author's calculations based on IMF figures[208]

additional money as the majority is taken up in servicing foreign and domestic debts (3.2% in 2013). This means that government discretionary spending - that is what it has left to spend once it has serviced its debts, is more likely to be closer to the revenue figure of 30% of GDP.

We have assumed that by 2015 government spending on health will have reached the minimum 15% Abuja target. With projected income levels a 15% allocation to health would amount to US$1.47 billion in 2015 or 4% GDP. In 2015 the population of Ghana will be 27.3 million people. This means that Ghana will be able to spend US$54 per capita on health in 2015 (Table 7).

We have already suggested that due to large-scale inefficiencies within the health sector, the real value of government expenditure in 2008 was only US$18 per capita as opposed to the reported US$28. If recommended efficiency savings are made this means the government will be able to achieve a real increase in per capita expenditure on health between 2008 and 2015 from US$18 to US$54 – a 200% increase.

Pregnant women and those with infants gather to discuss their issues with a local midwife in Kunkua Village in the Bongo District of the Upper East Region

Chapter Six
Conclusions and Recommendations

Conclusion

Thankfully the Government of Ghana and its external development partners still hold the keys to build a universal health care system that delivers for all and is the envy of Africa. The level of government commitment to health signalled by year on year increases of investment is laudable but will only translate to commensurate improvements in health outcomes if bold action is taken to overhaul the health insurance bureaucracy and move to a fairer system of free health care for all financed by progressive taxation and good quality aid.

With less than two years left before voters in Ghana return to the polls, urgent and sustained action is now required from the President and his Government to deliver on their election promises. Doing so will deliver the foundation for a healthy economy into the future, that will in turn provide even more resources to improve the health of all Ghanaians.

Recommendations

For government:

- Commit to a clear plan to remove the requirement of regular premium payments, abolish fees in the parallel 'cash and carry' system and make health care free at the point of delivery for all by 2015
- Within the next six months implement the overdue commitment to make health care free for all people under 18 years old and publish a clear time-bound plan to reduce out-of-pocket payments as a proportion of total health expenditure to the WHO recommendation of between 15% and 20%
- If a single lifetime payment is pursued, ensure it is a nominal fee and preferably no more than the cost of the membership card. Pool fragmented funding streams for the health sector and transform the National Health Insurance Fund to a National Health Fund under the clear management of the Ministry of Health
- Demand the immediate publication of all NHIA financial and valid membership data. Going forward the publication of timely and comprehensive financial accounts across the health sector, including transfers between the Ministry of Finance and the Ministry of Health should be legally mandated
- Commit to rapidly expanding and monitoring the health system so that all citizens have access to decent quality health care within 8km of their home
- Make Community-based Health Planning and Services (CHPS) the backbone of national efforts to deliver primary health care for all. Redress shortages and inequities in secondary and tertiary facilities, human resources for health and medicine supplies
- Prioritise scaling up and improving the equity performance of public providers (including CHAG) over private health care providers, especially for inpatient care
- Work across ministries to build a co-ordinated plan to address the social determinants of health especially water and sanitation and education
- Move quickly to address inefficiencies across the health system and capture savings outlined in this report amounting to 36% of current government expenditure on health
- Take action and seek support to tackle: ill-conceived tax incentives; tax avoidance and tax-evasion; failures to effectively tax extractive industries and ensure transparency; and untaxed high earners in the informal economy
- Increase and sustain government spending to health to a minimum of 15% of total revenues. Aim to spend at least US$54 per capita by 2015 with a time-bound plan to reach the WHO recommended US$60 per capita
- Establish regular household surveys to collect information on health care coverage and equity as well as out of pocket payments, to monitor progress over time

The Labour Ward at Achimoto Hospital in Accra, Ghana.

For External Development Partners

- Stop presenting Ghana as a health insurance success story or use inaccurate accounts of Ghana's progress to promote the introduction of health insurance in other low-income countries
- Support and do not block government and civil society efforts to transform health financing to a universal system free at the point of delivery and financed from general revenues and international aid
- Provide co-ordinated support for Ghana to rapidly expand government health care provision across the country, particularly in the most deprived and remote regions and districts
- Continue to give aid to the health sector in Ghana, and ensure that by 2015 at least 50% of earmarked aid for health is given as sector budget support.
- Reduce fragmentation of aid and facilitate the longer-term graduation of Ghana away from development assistance by increasingly using Ghana's own country systems and processes, including procurement where possible
- Work with the government and Ministry of Health to improve governance and transparency including

through timely and accurate publication of financial information and coverage data to ensure funds are used judiciously and as planned

- Support the government to improve monitoring and evaluation systems to improve health systems information to better inform decision making in the sector, particularly for equity goals
- Assist the government to reduce inefficiencies across the health sector and invest in preventative health
- Provide sustained technical and financial support to Ghana to improve tax capture from domestic resources and tackle tax avoidance and tax evasion

For Civil Society

- Civil society organisations should improve and increase collaboration to exert collective pressure on the government and other stakeholders to push for universal health care free at the point of use
- Act together to hold governments to account by engaging in policy development, monitoring health spending and service delivery, and exposing corruption
- Continue to build more evidence on the sustainability and feasibility and benefits of tax-financed universal health care in Ghana.

Appendices 1&2

Appendix 1: Health System Organisation and Structure

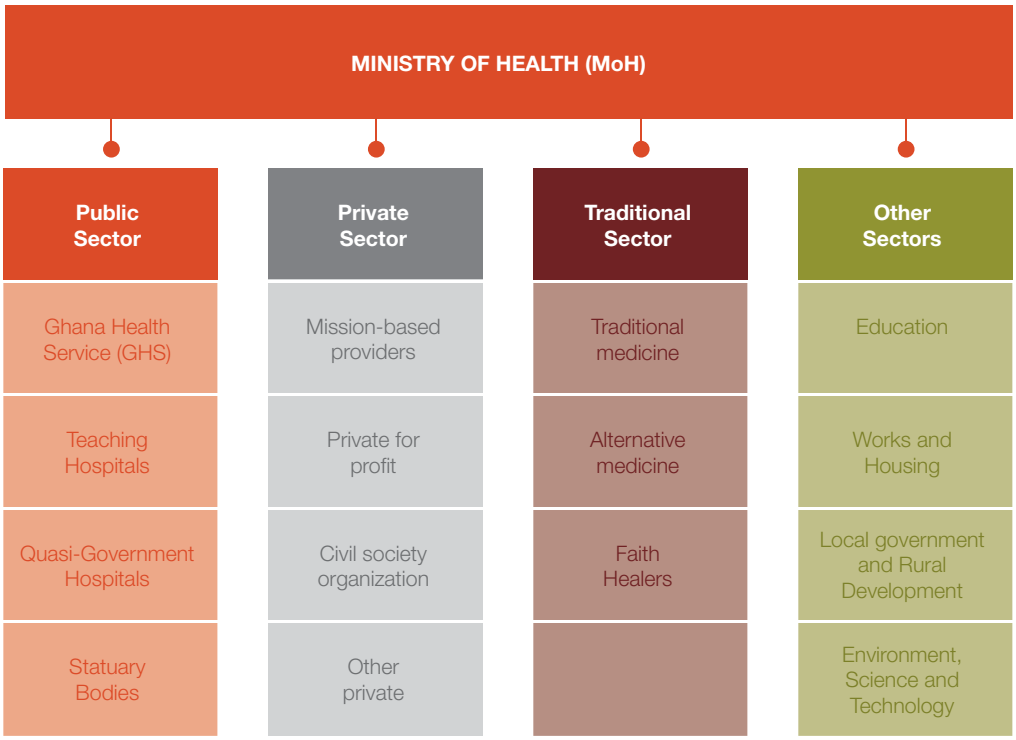
The Ministry of Health (MoH) leads the health sector and is responsible for policy development, planning, donor coordination and resource mobilisation. There are a variety of providers in public, private and informal sectors. The Ghana Health Service (GHS) is the largest agency of the Ministry and is "an autonomous Executive Agency responsible for implementation of national policies under the control of the Minister for Health through its governing Council - the Ghana Health Service Council".[209] The GHS is responsible for service delivery, continues to receive public funds and thus remains within the public sector. However, its employees are no longer part of the civil service.[210] The GHS is organised in five levels: national, regional, district, sub-district and community.

There are three autonomous teaching hospitals. Non-public sector providers account for 40% of patient care, including a coalition of nongovernmental organizations (NGOs) and the Christian Health Association of Ghana (CHAG), Catholic mission hospitals, and private for profit providers.

Levels of the health system

1. Community: This is the lowest level of health service delivery, mainly through outreach staffs who come to provide Maternal and Child Health Services. At the community level are also herbalists, traditional birth attendants and/or retail drug peddlers. A new addition at this level is the Community Health Planning Services, under which a nurse is resident within the community and attends to health care needs of the community.

Figure 1 The Ministry of Health in relation to the other actors of the Health System[211]



Source: Adapted from Ghana Service Provision Assessment 2002 by Dr Chris Atim

2. Sub-districts: These are sub divisions of districts, serving a population within a geographical catchment of between 15 000 to 30 000. From a central location which hosts a health centre, health staff administer the comprehensive package of curative and preventive care to people within the catchment.

3. Districts: This is the lowest decentralised level of the health system administration that manages budgets, commonly called Budget Management Centres (BMC). District hospitals provide a comprehensive range of care, with most carrying out major surgeries. District hospital provides support to sub-districts in various respects including referral and emergencies and training etc.

4. Regional: This is referral level for district hospital; In addition to general care, regional hospitals also provide specialised clinical and diagnostic care to a large extent.

5. Tertiary: This is the apex of the referral system.

6. National: MoH/Ghana Health Service providing policy and strategic direction.

Appendix 2: Determination of Ghana's NHIS Actual Coverage

Problems with the data

The author examined all available NHIS coverage data from various reports including official reports of the NHIA, MoH and other third party research reports. None provide accurate or even estimated data for the number of active valid NHIS members. All official data that is available consistently reports cumulative membership – the number of people who have received an ID card since 2005. This fact is confirmed by the recent Independent Health Sector Review for the MoH's Program of Work for 2009 which is clear that reported NHIA figures represent an accumulation of individuals who have been issued one or more IID cards in the past.[212]

Research for this report revealed that the NHIA database has several shortcomings that negatively affect data integrity. The system is unable to:

1) Remove registration records of people who have died or migrated out of Ghana from the system

2) Reconcile multiple registration by some individuals, a practice which is common across Ghana as a result of the poor administration of ID card processing and issuance.

3) Exclude people who fail to renew their membership for a particular year from being counted as a member for that year

4) Determine who is registering for the first time, or who is registering again after lapsing for one or more years, or renewing from the previous year

Though the system can generate data on the number of ID cards for any given period or year, this has never been published in any report. What the NHIA reports itself as 'Valid ID card holders' is misleading as it actually refers to the cumulative number of all people who have been issued an ID card.

The search for better data

The author sent a letter dated 6th September 2010 to the NHIA requesting a meeting to discuss the data issues of this research. The NHIA followed with a call scheduling a day for the meeting, but later cancelled the meeting due to busy schedules of the officers. The author followed again with another letter in December 2010, and addressed to the Director of Operations, requesting for membership data in the following format:

Year	New Members Registered	Renewals (From previous year)	Total Membership

The author followed up, and the operations department officially referred the request to the ICT department (Data section) for action. This team advised that it was not possible to get renewals for the various years, but that the figures for the number of valid ID card holders for each year was available. The data officers compiled the information but could not release without formal authorization from the head of ICT. While pursuing this data it became apparent that even within the NHIA there were three data streams (ICT, Operations and Actuarial) which each had wildly different NHIS coverage data.

In the absence of appropriate validated data from the NHIA there was little choice but to extrapolate and make reasonable estimates on the true number of active valid members of the NHIS. The methodologies used are as follows:

Methodology used for this report

Coverage figures were carefully analyzed, and the following facts have been established:

1) The NHIA has a rigorous system of ensuring that informal sector contributions are paid before any ID Card can be processed or renewed, whether for renewal, or for a new registration.

2) Different District Schemes charge differently for informal sector adults joining or renewing their membership with the NHIS. The cost of premiums ranges between GHc10 and GHc22. The larger and wealthier districts in the middle and southern belt of the country charge between GHc20-GHc22, but the average premium for all schemes is estimated by different studies to be between GHc13 and GHc17.

3) The total amount of premium collected in any given year is determined directly by the total number of informal sector adults registering or renewing their members in that year. This is because informal sector adults are the only membership category to pay premiums directly to the scheme.

4) Looking across the cumulative registration data provided by the NHIA between 2005 and 2009 there is relative consistency in the proportion of total membership made up by each membership category. Any differences in proportions between the years amounts to only a few percentage points.

Bearing these facts in mind, we then proceed step by step to estimate a more accurate number of NHIS valid ID card holders.

Step 1: Estimation of Valid Informal Sector Adults:
For the years 2008 and 2009 we know that total premium income accruing to the NHIA was 5.1% and 3.8% respectively as a proportion of total income. Table 1 presents this data and shows the total income from informal sector premium payments.

Based on the knowledge of the total premium income accruing to the NHIA for a given year, and the average premium for an informal sector adult member, we divided income by average premium to find the total number of informal sector adult members for 2008 and 2009. We used the low estimate of the average premium (GHc13) to give a higher estimate of membership rates, and the high estimate of the average premium (GHc17) to give a lower membership estimate. Table 2 presents the information and results.

Step 2: Estimation of membership for other categories based on NHIA registration data
From the NHIA registration data we know that informal sector adults made up 29.8% and 29.4% of accumulated registration figures in 2008 and 2009 respectively. We also know the numbers for other membership groups as a proportion of accumulated registration. We therefore used the new estimates of informal sector membership to calculate the overall 'valid' membership coverage for 2008 and 2009 as well as a breakdown of each membership category. The data is presented in Table 3 for 2008 and 2009. Again we calculated both low and high estimates for each membership group and overall.

The calculations give us an estimated total 'valid' membership rate in 2008 of between 14.4% and 18.8%. For 2009 the estimated total 'valid' membership rate is between 13.4% and 17.5%.

Step 3: Applying step 1 and 2 above to some but not all membership categories
We feel confident that our higher estimate of overall membership in 2008 and 2009 is a fair and generous assessment of true progress in the NHIS extrapolated from the NHIA's own registration data (especially given World Bank estimates that the average informal sector premium is more like GHc 20-25).[213] However, we have also shown in Table 4 that even if we do accept NHIA's registration data as 'valid' membership figures for all categories except informal sector adults, SSNIT contributors and children, the revised 'valid' membership estimates only rise to between 20% and 24% in 2008 and between 21% and 24% for 2009. See Table 4.

Table 1 Premium income from the informal sector

	Total NHIS income	Premium income from the informal sector as a proportion of total income (%)	Total income from informal sector premium payments
2008	330772958.73	5.1	16,869,421
2009	416679307.94	3.8	15,833,814

Source: NHIA 2009 Annual Report

Table 2 High and low estimates of informal sector adult 'valid' membership of NHIS

	Total NHIS income	Total number of informal adult members if average premium is GHc13	Total number of informal adult members if average premium is GHc17
2008	16,869,421	1,295,103.38	990,373.18
2009	15,833,814	1,217,985.69	931,400.82

Source: NHIA 2009 Annual Reportand NHIA

Table 3 High and low estimates of 2008 and 2009 'valid' membership

	2008 registration proportions (%)	Applying 2008 registration proportions to true number of informal adults paying GHc13 premiums and extrapolating to other membership categories	Applying 2008 registration proportions to true number of informal adults paying GHc17 premiums and extrapolating to other membership categories	2009 registration proportions (%)	Applying 2009 registration proportions to true number of informal adults paying GHc13 premiums and extrapolating to other membership categories	Applying 2009 registration proportions to true number of informal adults paying GHc17 premiums and extrapolating to other membership categories
Informal adult	29.76	1,297,648	992,319	29.4	1,217,986	931,401
SSNIT contributors	6.38	278,192	212,735	6.1	252,711	193,250
SSNIT pensioners	0.52	22,674	17,339	0.53	21,957	16,791
Children aged 18 years and below	50.52	2,202,862	1,684,541	49.44	2,048,205	1,566,274
Adults aged 70 years and above	7.04	306,970	234,742	6.67	276,325	211,308
Indigents (impoverished)	2.4	104,649	80,026	2.32	96,113	73,498
Pregnant women	3.36	146,509	112,036	5.54	229,512	175,509
Total		**4,360,376**	**3,334,405**		**4,142,808**	**3,168,030**
Total population		23,110,801	23,110,801		23,665,460	23,665,460
Proportion of total population (%)		**18.9**	**14.4**		**17.5**	**13.4**

Table 4 High and low estimates for 2008 and 2009 'valid membership' using NHIA cumulative registration data for all categories except informal adults, children and SSNIT contributors

	2008 registration proportions (%)	Applying 2008 registration proportions to true number of informal adults paying GHc13 premiums and extrapolating to other membership categories	Applying 2008 registration proportions to true number of informal adults paying GHc17 premiums and extrapolating to other membership categories	2009 registration proportions (%)	Applying 2009 registration proportions to true number of informal adults paying GHc13 premiums and extrapolating to other membership categories	Applying 2009 registration proportions to true number of informal adults paying GHc17 premiums and extrapolating to other membership categories
Informal adult	29.76	1,297,648	992,319	29.4	1,217,986	931,401
SSNIT contributors	6.38	278,192	212,735	6.1	252,711	193,250
SSNIT pensioners		65,653	65,653	0.53	21,957	16,791
Children aged 18 years and below	50.52	2,202,862	1,684,541	49.44	2,048,205	1,566,274
Adults aged 70 years and above		881,725	881,725	6.67	276,325	211,308
Indigents (impoverished)		300,923	300,923	2.32	96,113	73,498
Pregnant women		421,234	421,234	5.54	229,512	175,509
Total		**5,448,236**	**4,559,130**		**4,142,808**	**3,168,030**
Total population		23,110,801	23,110,801		23,665,460	23,665,460
Proportion of total population (%)		**24**	**20**		**24**	**21**

Endnotes

Endnotes

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17. The World Bank has frequently promoted Ghana as a success story of health insurance and a potential model for other countries to follow, see Box 2.

18. In 1969 a new conservative government came to power and attempted to institute for the first time some partial cost recovery in health and education. The move made the government unpopular and contributed to its downfall after only a couple of years in power. The experience arguably deterred subsequent governments in the short-term from re-introducing cost recovery for health. Other failed attempts to introduce user fees were the Konotey-Ahulu Committee, appointed to investigate hospital fees in 1970 and whose recommendations for full cost recovery were never implemented; and the Ghana Medical Association's call in 1981 for bringing back user fees at health facilities, which met a similar fate.

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58. For an explanation of our search for data and the methodology used to estimate valid membership rates see Annex 2

59. National Health Insurance Authority 2010, op. cit..

60. NHIA summary statistics http://www.nhis.gov.gh/?CategoryID=309 Last accessed 1 March 2011

61. Akazili, J. (2010) 'Who Pays for Health Care in Ghana', SHIELD (Strategies for Health Insurance for Equity in Less Developed Countries) Information Sheet http://web.uct.ac.za/depts/heu//SHIELD/reports/SHIELD_Ghana_WhoPays%20forHealth care.pdf, last accessed 24 February 2011

62. This was seen as a major improvement over what was commonly practiced under community health insurance, where every person in the household including children and babies were required to pay the premium to benefit. It should be noted that the government has more recently committed to decouple membership of children altogether from their parents so that all those under 18 are automatically exempted from payment. However, this commitment has yet to be implemented in practice.

63. Akazili 2010, op. cit..

64. Ibid.

65. The World Bank (2009) 'World Development Indicators 2009: Poverty headcount ratio at national poverty line (% of population)' http://data.worldbank.org/indicator/SI.POV.NAHC, last accessed 23 February 2011

66. National Development Planning Commission 2009, op.cit..

67. Gyapong, J., Garshong, B., Akazili, J., Aikins, M., Agyepong, I., and Nyonator, F. (2007) 'Critical Analysis of Ghana's Health System: With a focus on equity challenges and the National Health Insurance', SHIELD Workpackage 1 Report NDPC

68. 'Registration' is used here to refer to the number of people captured in the NDPC 2008 survey who were in possession of a NHIS card. As already discussed the validity of the card is open to question as there was no visual indication on the card to verify renewal.

69. ISODEC (2009) 'Programme Budgeting in the Education, Health and Water Sectors in Ghana', Accra: ISODEC

70. National Development Planning Commission 2009, op. cit..

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73. World Health Organisation 2010, op.cit., p.42: It is only when the reliance on direct payments falls to less than 15-20% of total health expenditures that the incidence of financial catastrophe routinely falls to negligible levels.

74. Forthcoming research by Akazili in 2011 will present more detailed figures on benefit-incidence of health care financing in Ghana. Akazili 2010, op. cit,.

75. Author's calculation based on figures presented in Garshong, B. (2010) op cit.

76. Garshong 2010, op. cit..

77. For instance, the GLSS 5 survey found that only 17.6% of the currently employed adults were formal sector employees. See Ghana Statistical Service (2008) 'Ghana Living Standards Survey, Report of the Fifth Round (GLSS 5)'

78. See Box 1 for an explanation of why formal sector workers benefit automatically from the NHIS through the SSNIT contribution but in fact incur no additional cost from this contribution.

79. Interviews conducted for this report with NHIA operations' staff and DHMIS managers, October 2009.

80. NHIA summary statistics http://www.nhis.gov.gh/?CategoryID=309 Last accessed 1 March 2011

81. Witter and Garshong 2009, op.cit..

82. National Health Insurance Authority (2010) op. cit.

83. National Democratic Congress 2008, op.cit..

84. Joint NGO Briefing Paper 2008, op. cit..

85. National Development Planning Commission 2008, op. cit..

86. Health Systems 20/20 2009, op.cit..

87. Author's discussions with Osu Clottey Scheme, July 2010

88. Ibid.

89. There is no evidence on how widespread this is to date but articles such as on September 3rd 2009 suggest some hospitals are switching back to a cash and carry system in view of the indebtedness of the insurance scheme.

90. Witter and Garshong 2009, op.cit..

91. Ministry of Health Ghana 2010a, op.cit..

92. Ibid.

93. Ministry of Health Ghana 2009a, op.cit..

94. Average charges for outpatient and inpatient attendance per capita in public facilities (including CHAG facilities) are GHc9.09 for insured patients as compared to GHc6.04 for non-insured patients. Source: Author's analysis based on data obtained from CHIM and NHIA

95. National Health Insurance Authority 2010, op.cit..

96. Ibid.

97. Calculated based on the clinical audit data provided by the NHIA showing that the private sector accounts for 25% of total claim payments and that the average price per claim in all facilities (public and private) is GHc14.53 compared to only GHc9.09 in public facilities alone.

98. Witter and Garshong 2009, op.cit..

99. Ibid.

100.Ibid.

101. Ministry of Health Ghana 2009a, op.cit., footnote 24

102. Ministry of Health Ghana 2010a, op.cit..

103. Presentation by Dr Koku Awonor Williams, Regional Director of Health Services for the Upper East Region, at a round table meeting on Universal Access to health organised by Oxfam GB, Ghana; on the 17th March 2010 at the Coconut Grove Regency Hotel, Accra.

104. 'Ex-NHIA boss to be charged for causing financial loss' 2 February 2010, http://news.myjoyonline.com/health/201002/41482.asp, last accessed 24 February 2011

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106. Ministry of Health Ghana 2010a, op.cit..

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