Targeting Inequalities in the Health Sector through Fiscal Policy

Health is increasingly recognised as a key aspect of human and economic development globally and countries are increasing investment in actions and reforms to improve health outcomes and accelerate progress towards meeting the health Sustainable Development Goals (SDGs). Unfortunately, Ghana’s health sector continues to face reoccurring challenges despite its adequate budgetary allocation to the sector. Ghana’s healthcare system needs be targeted towards the marginalised populations and less developed communities, as they continue to face challenges in access, cost and infrastructure in healthcare facilities. Hence, to ensure sound health and universal health coverage, the government of Ghana should use fiscal policies targeted at these challenges. For those in rural communities and lack National Health Insurance Scheme (NHIS) coverage, spending on healthcare remains a major challenge. Catastrophic healthcare spending, or critical spending on healthcare, pushes a household further into poverty, which is evident in poor households. The main objective of this paper is to provide an insight into the current state of investment in health sector in Ghana in a manner that will support evidence-based policymaking.

Background

Enhancing health is quite significant for human welfare and is essential to foster sustainable economic and social development. In order to provide universal health coverage and promote good health, governments need to invest in the health sector and ensure the most vulnerable are not left out. Globally, health expenditure has been projected to reach US$8.7tn by 2020, and the average Gross Domestic Product (GDP) spent on healthcare by 2020, will be around 10.5 percent. While Ghana’s current budget expenditure on health averages is perceived relatively well at 12 percent, it continues to face reoccurring challenges in the healthcare sector.

Ghana’s healthcare system requires a boost, among other things, in government expenditure as it continues to face challenges in access, costs and infrastructure. Such a boost, if spent strategically,  

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2 Defined by WHO as the ability to ‘provide all people with access to needed health services (including prevention, promotion, treatment and rehabilitation) of sufficient quality to be effective” and “ensure that the use of these services does not expose the user to financial hardship”  
3 Deloitte (undated) 2017 Global Health Care Sector Outlook
could need to reduce the inequalities that have characterised healthcare delivery when compared between cities and towns. Out of a population of 28 million, only 41 percent are covered by the NHIS. Health indicators remain dismal. For instance, the mortality rate of children under five remains endemic, and many continue to travel several kilometres from their homes to a health centre – sometimes is found to be across the rivers.

Ghana allocated an average of 12 percent of its annual budget to the health sector from 2015-2018. The 2018 budget allocated 8.6 percent on health as compared to 8 percent on public safety, 13 percent in the administration sector, and 18 percent on education. Of the total GH51,039mn budget expenditure for 2018 – solving Ghana’s health challenges is now crucial as many continue to suffer due to an insufficient healthcare system.

Access and Affordability to Healthcare

In 2004, the National Health Insurance Authority (NHIS) was introduced as a social intervention programme to provide financial access to quality healthcare to Ghanaians. The NHIS provides outpatient and inpatient services at accredited public and private facilities for everyone. Individual users can be grouped into two categories: 1) those who pay annual premiums to access facilities; and 2) those who are exempted from these premiums.

While the NHIS covers basic medical costs, individuals may be required to pay for certain procedures, medicines and services if not covered by the NHIS, or if the facility is awaiting reimbursement from the government and requires them to pay. These payments are known as Out-of-Pocket Expenditure (OOPE) or user fees. The NHIS aims to cover every Ghanaian resident, yet as of 2017, only 11,164,673, or 41 percent were registered members of the scheme.

Health Infrastructure and Resource Allocation

According to the Ministry of Health (MoH) Report on The Health Sector in Ghana – Facts and Figures (2015), there are 5,865 health facilities nationwide. These facilities include Community-based Health Planning and Services (CHPS), clinics, district hospitals, health centres, hospitals, maternity homes, emergency mine facilities, polyclinics and psychiatric hospitals. Since 2015, there have been an estimated 400 additional planned projects, which have either been completed or still in progress.
The human resource capacity, which includes doctors, nurses, midwives and other technical staff, in all 10 regions — a total of 102,019, with a disproportionate number in the Ashanti and Greater Accra regions, while the Upper East and Upper West have significantly less.\footnote{Ghana Health Service (2017) 2016 Annual Report} The doctor to patient ratio is alarming, with one doctor for 8000 patients.\footnote{Asiedu-Addo, S (2017) ‘Akufo-Addo alarmed at inadequate doctor-patient ratio’, Graphic Online, General News, August 13, 2017} Thus less number of doctors and other health workers in the three northern regions adds up to the worsening inequalities in the health sector.

**Health Financing (2015-2018)**

The health sector is financed primarily by the government of Ghana, its development partners and household contributions (directly and indirectly). Other sources of funding include development partners, such as the African Development Fund, Global Fund, United States Agency for International Development (USAID) and the World Health Organisation (WHO), who support the health sector through grants, technical assistance and concessional and commercial loans.

Since Ghana attained a lower-middle income country, donor support to the health sector keeps on dwindling year by year.\footnote{PWC Budget Highlights 2017} Household contributions are made through NHIS premium payments and OOPE, or user fees, at the point of care. The budget allocations are meant primarily for infrastructure development, employee salaries and maintenance.

*Source: Ministry of Health (2015): The Health Sector in Ghana, Facts and Figures*
The NHIA, responsible for the NHIS, is funded by the National Health Insurance Levy (NHIL),\textsuperscript{17} an earmarked portion of social security taxes from formal sector workers, individual premiums, and other miscellaneous funds from investment returns, Parliament or donors. Moreover, the breakdown of revenue for the NHIA is: NHIL (70 percent); social security taxes (23 percent); premiums (5 percent); and other funds (2 percent).\textsuperscript{18}

Government budgetary allocation on health has averaged 12 percent over the past four years, noting an outlier of 20.8 percent in 2015. This outlier was attributed largely to an outstanding need to compensate employees (accounting for 60 percent of the 2015 health budget).

Other factors, such as the Ebola outbreak and the government’s commitment to build more communal health facilities and Community-based Health Planning and Services (CHPS). Overall, the government budget has largely been focussed on building infrastructure, employee compensation, claim reimbursements and promoting quality healthcare.

The 2018 budget statement, addressed the government’s agenda for health which included improving efficiency in governance and management of the health system, and to complete major regional and district hospitals.\textsuperscript{19} As part of the Abuja Declaration,\textsuperscript{20} Ghana is committed to allocate 15 percent of public spending to health.

### Table 1: Budget Allocations in Health Sector (2015-2018)

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget Allocation Health Sector (miGHC)</th>
<th>Total Budget Allocation (in %)</th>
<th>Main Health Objectives</th>
</tr>
</thead>
</table>
| 2015 | 6,740                                  | 20.8%                        | • Expand and construct CHPS zones and compounds nationwide  
• Scale up capitation to Eastern, Central, Western and Brong Ahafo regions  
• Strengthen preparedness and response to Ebola virus disease  
• Employee compensation (20% of the budget)  
• Main Challenge: Healthcare access and quality |
| 2016 | 3,386                                  | 7.8%                         | • Support for infrastructure projects  
• Increasing human resource capital  
• Main challenge: financial and geographical Access |
| 2017 | 4,226                                  | 9.4%                         | • 3% (149 ml) to be used to fund the re-institution of the Nurses Training Allowance  
• Increase human resource capital and improve infrastructure  
• Main Challenge: Expand coverage from 41% |
| 2018 | 4,422                                  | 8.6%                         | • Improving management and quality of services  
• Vaccines and Antiretroviral medicines  
• Infrastructure for regional and district hospitals and polyclinics |

*Source: Extracts from PWC Budget Highlights (2015 – 2018)*

\textsuperscript{17} The National Health Insurance Levy (NHIL) is a 2.5% value added tax on goods and services.


\textsuperscript{19} GoG 2018 Budget Statement

\textsuperscript{20} In April 2001, the African Union countries met and pledged to set a target of allocating at least 15% of their annual budget to improve the health sector.
Is Ghana on Track?

To reach a global standard for health, Ghana needs to reach certain targets in the health sector to ensure quality of life, access to health, and healthcare performance is attained. Figure 2 illustrates Ghana’s performance for Goal 3 – for ensuring healthy lives and promote well-being for all at all ages – the SDGs to be achieved by 2030. The evaluation indicators show Ghana’s current state in health. Of the 10 indicators, Ghana has successfully achieved one. About 92 percent of infants receive eight WHO’s vaccines.

Ghana scores poorly on mortality rates for the mortality rate of children under 5 (61.6 out of every 1,000 live births), maternal mortality (319 out of every 100,000 live births), neonatal mortality (28.3 out of every 100 live births).

The indicator on physician density (1 for 1000 patients), scores poorly for doctor-patient ratio. The inability to treat disease, poor health conditions, sanitation, and access to medical facilities also attribute to the low life expectancy of 54 years, and a subjective wellbeing score of 4.6 out of 10.

According to the WHO Report on ‘Health Financing for Universal Coverage’, prioritising health financing for access to healthcare and promoting quality in services is essential to meeting these targets.

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**Figure 2: Indicators and Values of SDG (3)**

- Under 5 mortality (per 1000 live births) - 61.6
- Maternal mortality (per 100,000 live births) - 319
- Neonatal mortality (per 100 live births) - 28.3
- Physician density (per 1000) - 0.1
- Incidence of tuberculosis (per 100,000) - 165
- Traffic deaths (per 100,000) - 26.2
- Adolescent fertility (births per 1000) - 65
- Subjective well-being (0-10) - 4.6
- Healthy life expectancy at birth (years) - 54
- Infants who receive 8 WHO vaccines ( %) - 92

*Source: Report on SDG Index and Dashboards (2016)*

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21 Sachs et al (2016)  
22 ibid  
23 WHO (2010)
Challenges in Health Sector

While Ghana continues to implement social interventions and strives for economic development, the health sector continues to face challenges inhibiting it from achieving its objective of quality healthcare for all and hitting SDG targets. These challenges relate to access and affordability of healthcare as well as the quantity and quality of infrastructure nationwide and lack of sufficient resources, including human capital.

Access and Affordability

Low access to healthcare

The NHIS was designed to be pro-poor, yet many of the health facilities are easily accessible to the wealthy than to the poor.\(^{24}\) Access to health facilities is high in the urban areas, while rural regions continue to lack adequate access.\(^{25}\) In the Upper East region, only 60 percent of the people are within an 8 km radius of a health facility.\(^{26}\) In riverine communities, especially located around the Volta river, the lack of communal health facilities, require persons to be transported by boat to access health facilities.\(^{27}\)

Spending significant portion of incomes on user fees

For those in rural communities and those who lack NHIS coverage, spending on healthcare remains a major challenge. Catastrophic healthcare spending, or critical spending on healthcare pushes a household further into poverty, is evident in poor communities.\(^{28}\)

About 59 percent of the population not covered by NHIS, will be required to pay user fees on basic services, along with fees for services not covered by the NHIS. Figure 1 averages out of pocket expenditure (OOPE) from 2006 to 2015, with OOPE per capita at US$29 or the equivalent to GHC120 in 2015. For those living below the poverty line, this is a substantial amount.

New disease patterns not covered in NHIS

Lifestyle changes occur with the changing Ghanaian economy. Lifestyle changes along with social and physical environment changes are changing the disease patterns both globally and nationally. By 2020, about 50 percent of global healthcare expenditures will be spent on three leading causes of death: cardiovascular diseases, cancer and respiratory diseases.\(^{29}\) In Ghana, conditions relating to hypertension, diabetes and cardiac failures have emerged on the list of top 10 causes of mortality (Table 2).

Not only specialised facilities to cater for these emerging conditions are scarce, but the NHIS does not cover all procedures pertaining to these. The NHIS does not cover procedures, such as certain


\(^{25}\) ibid

\(^{26}\) Ghana Health Service (2017)

\(^{27}\) ibid

\(^{28}\) Mills et al (2012)

\(^{29}\) Deloitte (2017)
surgeries, cancer treatments (other than breast and cervical cancer); organ transplants; dialysis; and some high-profile items, such as HIV antiretroviral drugs, which are heavily subsidised by separate National AIDS Programme.\textsuperscript{30}

Currently, there is no existing subsidy for these procedures for individuals under a certain income level.\textsuperscript{31} These lifestyle diseases make no distinction between the poor and the rich. The cost for maintenance drugs for these diseases drains the income of the poor.

**Table 2: Top Ten Causes of Mortality among Admitted Patients (2015-2016)**

<table>
<thead>
<tr>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia</td>
<td>Cerebrovascular Accident</td>
</tr>
<tr>
<td>1084</td>
<td>1440</td>
</tr>
<tr>
<td>Anaemia</td>
<td>Pneumonia</td>
</tr>
<tr>
<td>909</td>
<td>1354</td>
</tr>
<tr>
<td>HIV</td>
<td>Septicaemia shock</td>
</tr>
<tr>
<td>786</td>
<td>2025</td>
</tr>
<tr>
<td>Malaria</td>
<td>HIV</td>
</tr>
<tr>
<td>604</td>
<td>1042</td>
</tr>
<tr>
<td>Congestive Cardiac Failure</td>
<td>Anaemia</td>
</tr>
<tr>
<td>585</td>
<td>933</td>
</tr>
<tr>
<td>Sepsis</td>
<td>Congestive cardiac failure</td>
</tr>
<tr>
<td>558</td>
<td>679</td>
</tr>
<tr>
<td>Respiratory distress syndrome</td>
<td>Hypertension</td>
</tr>
<tr>
<td>518</td>
<td>588</td>
</tr>
<tr>
<td>Respiratory failure</td>
<td>Liver diseases</td>
</tr>
<tr>
<td>518</td>
<td>573</td>
</tr>
<tr>
<td>Liver diseases</td>
<td>Diabetes</td>
</tr>
<tr>
<td>459</td>
<td>429</td>
</tr>
<tr>
<td>Encephalopathy</td>
<td>Birth asphyxia</td>
</tr>
<tr>
<td>302</td>
<td>405</td>
</tr>
<tr>
<td>All other Diseases</td>
<td>All other Diseases</td>
</tr>
<tr>
<td>8358</td>
<td>7885</td>
</tr>
</tbody>
</table>

Source: Ghana Health Service Report

**Infrastructure and Resource Allocation**

**Sanitation and Disease Prevention**

Disease prevention and sanitation remains a challenge in the health sector. Preventable diseases, such as malaria and diarrhea continue to dominate the diseases plaguing Ghanaians. The provision of adequate water, sanitation and hygiene (WASH) in communities is essential in providing basic healthcare services and preventing these diseases.

**Hospitals in Rural Areas**

Recent major infrastructure projects of regional and district hospitals that are yet to be completed remain at a standstill in the rural areas, while projects in the urban and more populated regions are complete and some still not in use.\textsuperscript{32} Three major health facilities have been completed in the Greater Accra Region, namely the University of Ghana Medical Centre, Bank of Ghana Hospital and the International Maritime Hospital. Meanwhile, facilities in the rural regions, such as the Wa Hospital, in the Upper West Region, Nsawkaw Hospital, in the Brong Ahafo Region and Salaga Hospital, in the Northern region, are awaiting completion.\textsuperscript{33}

\textsuperscript{30} NHS Website


\textsuperscript{32} Allotey, G.A (2018) ‘We’ll summon officials over ‘abandoned’ health facilities – Yieleh Chireh’, CitiFMonline, January 23, 2018

Lack of Resources and Human Capital

Investment in the training and deployment of doctors, nurses and other technical staff is a challenge at the national level. The doctor to patient ratio at 1 to 8000, and insufficient deployment of human resources continues to plague the healthcare sector as long as infrastructure and rural development remains low. This ratio is greater in the rural areas where there are less doctors per patient.

This challenge needs to be addressed as medical professionals lack the incentives to work in the rural areas, where development remains low. Additionally, resource availability in the facilities and laboratories discourages doctors' adherence to international best practices and clinical guidelines when caring for patients. In a study conducted on antenatal service delivery in Accra, some hospitals were found to be lacking blood transfusion service and referred patients who needed the service. Evidence of broken down equipment and poor inter-district and inter-facility collaboration in service delivery was identified as a challenge.

Raising Revenue Domestic Funding

For the NHIS, Ghana is the only country in the world to finance its health insurance scheme primarily through value added tax (VAT) revenue – the NHIL. While this ensures NHIS revenue automatically correlates with economic development, a disadvantage to this economic model is that revenue does not increase as coverage expands. Therefore, the government needs to take this into account, while raising revenue for the health sector. Table 3 provides a list of suggestions by the WHO for domestic financing/fundraising for the health sector.

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34 Asiedu-Addo, S (2017)
35 Amoakoh-Coleman, M et al (2016) Public health facility resource availability and provide adherence to first antenatal guidelines in a low resource setting in Accra, Ghana, BMC Health Serv Res, Vol. 16, pp. 505
36 ibid
37 ibid
Table 3: Domestic Options for Innovative Financing (WHO Suggestions)

<table>
<thead>
<tr>
<th>Options</th>
<th>Fund-raising potential&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Assumptions/examples</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special levy on large and profitable companies – a tax/levy that is imposed on some of the big economic companies in the country</td>
<td>$5–$55</td>
<td>Australia has recently imposed a levy on mining companies; Gabon has introduced a levy on mobile phone companies; Pakistan has a long-standing tax on pharmaceutical companies</td>
<td>Context specific</td>
</tr>
<tr>
<td>Levy on currency transactions – a tax on foreign exchange transactions in the currency markets</td>
<td>$5–$55</td>
<td>Some middle-income countries with important currency transaction markets could raise substantial new resources</td>
<td>Might need to be coordinated with other financial markets if undertaken on a large scale</td>
</tr>
<tr>
<td>Diaspora bonds – government bonds for sale to nationals living abroad</td>
<td>$5</td>
<td>Lowers the cost of borrowing for the country (patiotic discount); have been used in India, Israel and Sri Lanka, although not necessarily for health</td>
<td>For countries with a significant out-of-country population</td>
</tr>
<tr>
<td>Financial transaction tax – a levy on all bank account transactions or on remittance transactions</td>
<td>$5</td>
<td>In Brazil there was a bank tax in the 1990s on bank transactions, although it was subsequently replaced by a tax on capital flows to/from the country; Gabon has implemented a levy on remittance transactions</td>
<td>There seems to have been stronger opposition from interest groups to this tax than others (32)</td>
</tr>
<tr>
<td>Mobile phone voluntary solidarity contribution – solidarity contributions would allow individuals and corporations to make voluntary donations via their monthly mobile phone bill</td>
<td>$5</td>
<td>The global market for postpaid mobile phone services is US$ 750 billion, so even taking 1% of that would raise a lot of money; relevant to low-, middle- and high-income countries (33)</td>
<td>Establishment and running costs could be about 1–3% of revenues (33)</td>
</tr>
<tr>
<td>Tobacco excise tax – an excise tax on tobacco products</td>
<td>$5</td>
<td>These excise taxes on tobacco and alcohol exist in most countries but there is ample scope to raise them in many without causing a fall in revenues</td>
<td>Reduces tobacco and alcohol consumption, which has a positive public health impact</td>
</tr>
<tr>
<td>Alcohol excise tax – an excise tax on alcohol products</td>
<td>$5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excise tax on unhealthy food (sugar, salt) – an excise tax on unhealthy foodstuffs and ingredients</td>
<td>$5</td>
<td>Romania is proposing to implement a 20% levy on foods high in fat, salt, additives and sugar (34)</td>
<td>Reduces consumption of harmful foods and improves health</td>
</tr>
<tr>
<td>Selling franchised products or services – similar to the Global Fund’s ProductRED, whereby companies are licensed to sell products and a proportion of the profits goes to health</td>
<td>$5</td>
<td>Selling franchised products or services from which a percentage of the profits goes to health</td>
<td>Such a scheme could operate in low- and middle-income countries in ways that did not compete with the Global Fund</td>
</tr>
<tr>
<td>Tourism tax – a tourism tax would be levied on activities linked largely to international visitors</td>
<td>$5</td>
<td>Airport departure taxes are already widely accepted; a component for health could be added, or levies found</td>
<td>The gain would vary greatly between countries depending on the strength of their tourism sector</td>
</tr>
</tbody>
</table>

<sup>a</sup> $, low fund-raising potential; $5, medium fund-raising potential; $55, high fund-raising potential.


**Way Forward**

To ensure adequate finances and resources are going to the health sector, increasing expenditure should not be seen as simply pumping additional funds into the health sector, but targeted financial allocations, with a focus on quality over quantity, addressing inequalities in the sector and ensuring
that the poor have access to their medical needs. The government of Ghana should therefore focus on the following aspects:

**Increasing Human Resources for Health (HRH)**

Health begins with health workers. According to the WHO, the density threshold for physicians (including doctors, nurses and midwives) should be 34.5 skilled health professionals per 10,000 people\(^{39}\) (or a ratio of 3.45 to 1000). Countries, such as Argentina, Azerbaijan, Georgia and Qatar have gone above and beyond this threshold with physician densities 3.9, 3.4, 4.3 and 7.7 to 1000, respectfully.\(^{40}\)

In tackling this challenge, the focus should not only be on the availability of health workers but also on the accessibility, acceptability, quality and performance of these workers, with the geographical distribution in mind. The WHO\(^{41}\) explains: “By availability, adequate supply of health workers, with required competencies to match the health requirements of the population is referred to”.

**Accessibility** is also critical as it implies equitable distribution across urban and rural areas ensuring access to under-served populations. **Acceptability** refers to the health workforce characteristics (for example, sex, language, culture, age, etc.) and their ability to treat all patients with dignity and promote a demand for services. **Quality** refers to the skills, knowledge and behaviour of health personnel, assessed, according to professional norms and as perceived by users of health services”.

The government also needs to focus on health worker retention. This would involve incentivising health functions and giving them a role in the decision-making processes. The voice, rights and responsibilities of health workers must play a central role in developing by implementing sound policies and strategies towards universal health coverage.\(^{42}\)

**Increasing coverage of NHIS focusing on the poor**

Targeted spending for the expansion of NHIS coverage will cut OOPE for low income individuals. This might require community outreach and further health education in the rural and marginalised communities.

**Providing subsidies to the poor for chronic failure procedures not covered by NHIS**

The changes in the disease patterns will continue to burden the poor over time, if not tackled. While education and lifestyle intervention in the community, capacity building of health professionals, health system framework, and development of appropriate government policies are necessary, low income individuals who already have these diseases need financial alleviation.

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\(^{39}\) WHO (2014) Global Key Messages, Available at: http://www.who.int/workforcealliance/media/key_messages_2014.pdf

\(^{40}\) Sachs et al (2016)

\(^{41}\) WHO (2014)

\(^{42}\) ibid
Using renal failure as an example, it is predicted that, by 2030, 366 million adults worldwide will have diabetes, the majority of whom will be living in lower-middle-income country (LMIC).\textsuperscript{43}

Diabetes if poorly managed, can lead to renal failure, which requires dialysis. Countries, such as Malaysia and Thailand currently provide subsidies, to some or all of their populations. The Malaysian government provides fully-subsidised dialysis treatment to approximately 50 percent of patients, with additional funding from Non-governmental Organisations (NGOs) and self-funding.\textsuperscript{44} And Thailand’s 30 baht scheme fully subsidises the procedure to all those on the scheme.\textsuperscript{45}

**Conclusion**

Investing in the health sector achieves an overall healthy economy and a healthy population. By doing so, life expectancy will increase, poverty will reduce, jobs will be created, and gender equality improved. To attain a quality standard of healthcare, the government of Ghana needs to prioritise the poor, and find alternatives to secure revenue for the healthcare sector. Targeted spending in a prioritised manner will also boost development in the healthcare sector.