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THE MANIFESTO PROJECT

Achieving Universal Health
Coverage in Ghana: Implications
for Health Systems Reform

Compilation of Issues and
Evidence on Key Sectors in Ghana

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(CDD-Ghana)

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Achieving Universal Health Coverage in Ghana: Implications for Health Systems Reform

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EXECUTIVE SUMMARY

Over two decades of sustained reforms (e.g. SWAPs, National Health Insurance, Drug Policy Reform, Structural Reforms etc.) in Ghana’s health sector have been credited with positive impacts in terms of the functioning of the health system and consequently population health outcomes. For example, there have been structural reforms leading to changes in policy formulation and implementations roles, the introduction of the National Health Insurance Scheme a major health financing reform as well as appreciable improvements in maternal health (maternal mortality, consumption of reproductive health services) and child health outcomes (neonatal, infant and child mortality and nutritional indicators such as stunting, wasting and underweight).

Following from the progress made over the years, the leadership of the health sector in Ghana have continuously put in place plans to address health system challenges with the aim of improving health outcomes. Currently the focus of the Ministry of Health’s strategy for achieving the health-related SDG (SDG 3 - Ensure healthy lives and promote well-being for all at all ages) is articulated through its overall goal of “improving access to quality, efficient and seamless health services that are gender and youth friendly and responsive to the needs of all people of all ages in all parts of the country” (Ministry of Health, 2014-2017).

Notwithstanding the efforts of the Ministry of Health to achieve the health-related SDGs through the pursuit of its overall goal as articulated above, the changing demographic and epidemiological trends in the context of Ghana’s transition to a lower-middle income country have created the conditions for increased incidence of non-communicable diseases in addition to the already existing high incidence of communicable diseases. This therefore creates a shift from a single burden to a double burden of diseases.

The emergence of a double burden of diseases is also complicated by the existence of systemic challenges particularly in the areas of:

Leadership and governance

- Appointment of leaders in the sector and
- Structural reconfiguration of the sector
- Strong country level strategies

Human resources for health

- Addressing the skills gaps for the purposes of better responding to macro-level policy needs the double burden of diseases
- Addressing inequalities in the distribution of the different cadre of health personnel

Issues for Immediate Implementation

- Appoint credible and technically competent agency heads and avoid overpoliticization of such agencies
- Recalibrate the existing fund disbursement channels to achieve a balance between speed and accountability to the center
- Put in place systems to strengthen the culture of developing nationally owned policies and strategies that align country health strategies more closely to health priorities and can be used to mobilize stakeholders for action in the sector
- Strengthen regulation in the sector but in a way that will ensure that innovation and enterprise is not stifled. This is especially important for medical products and technology ecosystem.
- Clarify service delivery approaches and define package of services for attainment of UHC
- Harness better the value of existing capital investments, especially healthcare infrastructure in addition to prioritising future investments appropriately
- Address issues related to sustainable funding for the NHIS
- Align the NHIS service package with that of defined package of services in the UHC roadmap

Issues for Medium-Term Implementation

- Create an appropriate environment for innovation and entrepreneurship in the medical products and technology ecosystem
- Reform what is currently seen as a complex and ineffective and inefficient procurement system
- Address issues related to quality of service
- Work to integrate the private health sector into the national health system to make it possible to adequately capture their contribution to the sector
- Address the human resources for health skills gap for the purposes of better responding to macro-level policy needs the emerging double burden of diseases
- Address inequalities in the distribution of the different cadre of health personnel, especially the rural/urban and north/south divide in the distribution of health staff
- Address delays in reimbursement to the NHIA and onward to health facilities
- Put in place structures to address issues of community participation
- Strengthen domestic resource mobilization for health

Issues for Long-term Implementation

- Address the structural reconfiguration challenges of the sector
- Address production inefficiencies in service delivery

Service delivery,

- Clarity in service delivery approaches and definitional of package of services for attainment of UHC
- Address issues related to quality of service
- Private sector integration into the health system
- Harnessing better value from existing capital investments and prioritising future investments
- Addressing production inefficiencies in service delivery

Essential medicines and technology

- Strengthened regulatory environment
- Appropriate environment for innovation and entrepreneurship
- Reform in procurement

Health financing

- Fund disbursement structures
- Addressing issues related to the funding of the NHIS
- Aligning the NHIS service package with that defined in the UHC roadmap
- Addressing delays in reimbursement to the NHIA and onward to health facilities

Community participation.

- Putting in place structures to address issues of community participation

It is equally important to emphasize that the Covid-19 pandemic has further exposed inherent challenges in Ghana's health system and therefore the need to act urgently. Key challenges in this regard are (1) the inability of the leadership at the health sector level to mobilize stakeholders to adequately respond to the pandemic to enhance the effectiveness of setting up a separate unit at the Presidency to manage issues related to the Covid-19 pandemic (2) Supply chain rigidities that can be compounded in crises situations and therefore compromise the ability of the health system to deliver needed care (3) Lack of appropriate communication strategies to mobilize the citizenry for behaviour change especially in this pandemic situation (3) The inability of the country's PHC system to respond to pandemics such as Covid-19 which requires mainly the deployment of PHC strategies for managing the situation of most of the victims (4) Challenges in terms of the capacity of the health workforce to respond to emergencies without necessarily compromising the quantity and quality of services supplied and (5) The fact that the configuration our major health financing mechanism (NHIS), did not anticipate the occurrence of complex emergencies such as Covid-19 and how that will be funded.

On the basis of the above challenges, we propose a phased approach (immediate, medium and long-term) to implementing any reform program which we argue should be inclusive enough to secure the relevant buy-in of key stakeholders in the health sector. The recommended approach for implementing anticipated reforms is as follows:

1.0 OVERVIEW OF THE HEALTH SYSTEM

The Ministry of Health (MoH) is at the apex of the health system with direct responsibility for policy formulation, with several other agencies responsible for policy implementation (health services delivery, financing, education and training and regulation). The delivery of health services to the citizenry is handled by Tertiary Hospitals (for all Public Tertiary Hospitals), the Ghana Health Services- GHS (for all Public Non-Tertiary Healthcare Facilities), the Christian Health Association of Ghana- CHAG (for all Mission/Religious-based Hospitals), Ghana Association of Quasi-Government Health Institutions- GAQHI (for all health facilities operated by quasi government organisations) and the private sector. The arrangement of service delivery is generally hierarchical, starting from lower level health facility such as the Community Health Planning and Services (CHPS) facilities and Health Centers at the lower level. This is followed by Polyclinics at the sub-district level, District Hospitals at the district level, Regional Hospitals at the regions and finally Tertiary and Quaternary Hospitals at the apex of the healthcare delivery system. Traditional and herbal medicine practitioners also play a key role in service delivery, even though they have not been fully integrated into the healthcare system. The main components of service delivery include primary healthcare with focus on preventive and promotive health services which is normally delivered through lower level healthcare facilities, with secondary and tertiary care delivered at hospitals; mainly Regional, Teaching and Quaternary Hospitals.

The financing of health services (purchasing of health services) takes place via three mechanisms; the National Health Insurance Authority (NHIA) (a public organisation responsible for managing the National Health Insurance Scheme- NHIS), Voluntary Private health Insurance companies (regulated by the NHIA) used by individuals and corporate organisations and finally out-of-pocket payment by individuals. With the exception of the private sector, the human resources requirement (training and compensation) for healthcare delivery is the responsibility of government of the Ghana. Education and training of the different cadre of health workforce is carried out by the Universities (supervised by the Ministry of Education) as well as other specialized institutions established and supervised directly by MoH. Regulation of the health sector in Ghana is undertaken by two set of institutions (service regulators and regulators of the professions), under the supervision of MoH. The first set of institutions are those regulating service delivery (Health Facilities Regulatory Agency and the Food and Drugs Authority), with the second set involving those regulating the different professions in the health sector (Ghana Medical and Dental Council, Nursing and Midwifery Council, Pharmacy Council and the Allied Health Professions Council).

The resource envelope for financing in Ghana is made up of reimbursements from the NHIS, government of Ghana (GOG) budget allocations, development assistance for health and individual out-of-pocket payments. GOG budget allocation is largely for the payment of emoluments of health workers and other public health commodities such as vaccines and capital

investments. Service delivery is mainly financed by reimbursement from NHIA, out-of-pocket payments and limited instances by donor funds. Support from the Global Fund, GAVI, and other development partners are largely earmarked for specific programs such as malaria, HIV, vaccines for immunization etc. Public and private channels are used for sourcing essential medicines and technologies. In the public system, the central medical stores (CMS) is responsible for the procurement and distribution of medical products. After procurement, distribution is done through the regional medical stores and onward to the districts and health facilities. The private sector supports this chain with procurement and distribution for both private health facilities, pharmacies, and over-the-counter medicine sellers. Thus, the private sector plays an important role in the medicines supply chain in the health sector both as a supplier to the central medical stores and directly to some individual facilities both within the public and private sector.

1.1 Health Sector Goals and Health-Related SDGs

The health sector in Ghana has over the last two decades implemented several reforms (e.g. SWAPs, National Health Insurance, Drug Policy Reform, Structural Reforms etc.) aimed at improving health systems and ultimately health impact and outcomes. Some of these reforms have been successful and have been linked to improvements in health and healthcare indicators over the same period (MoH, 2008a; 2008b; 2012). For example, the national maternal mortality rate (MMR) has reduced from 760/100,000 live births in 1990 to 308/100,000 in 2017 (about 59%) [WHO, 2014]. This makes Ghana's MMR one of the lowest on the African continent. The use of reproductive health services that is considered to be critical for maternal health has equally expanded over the last two decades. The latest Demographic and Health Survey (GDHS) for Ghana (i.e. GDHS 2014) suggest that the percentage of women receiving four or more antenatal visits increased from 78% in 2008 to 87% in 2014, with women delivering in a health facility also increasing from 42% in 1988 to 73% in 2014. For child health, key indicators such as infant and under-five mortality reduced by 28% and 44% respectively for the period 1998 to 2014, with under-five stunting, wasting and under-weight also reducing from 35%, 8% and 18% respectively in 2003 to 19%, 5% and 11% respectively in 2014 (Ghana Statistical Service et al., 2015).

Notwithstanding the progress made over the years, there still remain major challenges related to leadership and governance, human resources for health, service delivery, essential medicines and technology, health information systems, health financing and community participation that needs to be addressed if Ghana is to achieve the health-related Sustainable Development Goal (SDG) targets. Related to the systemic challenges is the impact of Covid-19 on Ghana's health systems. From the first detected case (2) among travelers on March 12, cases have risen steadily to 14,154 as at the 23rd of June 2020. At first, with few cases and concentrated among travelers, it was easier to keep track of the outbreak and to test, contact trace and treat the positive cases. However, with inevitable community spread, the government was compelled to institute a partial lockdown for three weeks in April, which was lifted due principally to political pressures around the economic difficulties resulting from the lockdown.

More importantly, Ghana missed a cost-effective opportunity of relying the existing primary healthcare (PHC) system to manage Covid-19; a condition that has no cure or vaccine to date and so requires mostly isolation, quarantining, community contact tracing, effective risk communications, combatting stigmatization, and other interventions that are amenable to primary level care. The non-reliance on the PHC system meant a lot more Covid-19 related stress on hospital level and other specialist care, especially diagnostic or laboratory services and intensive care units, both of which needed to be expanded to meet rising demand from Covid-19 patients. From the initial two available labs (at Noguchi Memorial Institute and the Kumasi Centre for Collaborative Research – KCCR) it rapidly became necessary to repurpose and equip additional facilities such as veterinary and health research centers around the country to provide the ten testing centers that now exist to test Covid samples nearer to the places where the samples were collected.

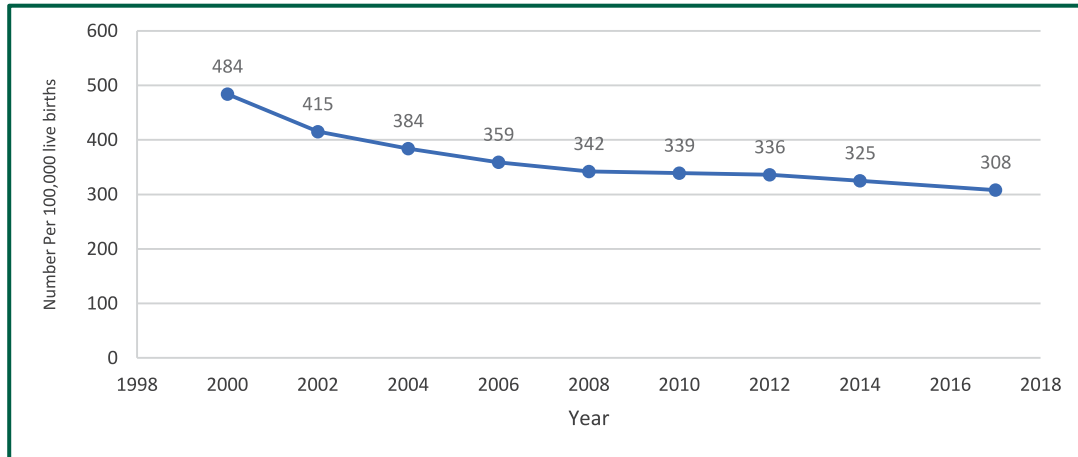
Another stress point was the rapid acquisition of test kits (the widely used RT-PCR kits), reagents and swabs, all of which have been in short supply due to the sudden global surge in demand, export bans, and stockpiling. This scarcity has been compounded by other issues like limited production capacity and a market dominated by just a few firms. There are also reports that Covid-19 has led to sharp drops in health facility attendance, due to fears of contracting the disease and health workers being more cautious themselves about not exposing themselves to Covid-19. Among other adverse impacts, it is reported that immunizations have dropped in this, with anecdotal evidence pointing to around 20 percent drop in the Greater Accra region.

The thrust of the Ministry of Health's strategy for achieving the health-related SDG (SDG 3 - Ensure healthy lives and promote well-being for all at all ages) is articulated through its overall goal of “improving access to quality, efficient and seamless health services that are gender and youth friendly and responsive to the needs of all people of all ages in all parts of the country” (Ministry of Health, 2014-2017). Consistent with MOH's overarching goal, we review Ghana's progress under the different targets set under SDG 3 as follows:

By 2030, reduce the global maternal mortality ratio to less than 70 per 100, 000 live births.

The global maternal mortality ratio is targeted to reach 70 per 100,000 live births, a number which is currently more than four times higher in Ghana. The maternal mortality ratio in Ghana has been reducing over the years albeit at a very slow rate. As shown in Figure 1, the ratio decreased from 484 per 100,000 live births in 2000 to 308 per 100,000 live births in 2017. The current level is considered to be too high and unacceptable. The need to drastically reduce this rate will require significant improvement in the maternal health services and stronger health system.

Figure 1: Trend of Maternal Mortality Ratio



Data Source: World Bank

By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births.

Table 1 shows a decreasing trend of infant mortality from 1988 to 2017. Except for 2003, where infant mortality increased, the ratio has consistently decreased from 77 per 1,000 live births in 1988 to 37 per 1,000 live births in 2017. Similarly, the neonatal mortality ratio decreased from 43 per 1,000 live births in 1988 to 30 per 1,000 live births in 1998. Unfortunately, the number of deaths increased to 43 per 1,000 live births in 2003. However, the rate dropped from 43 per 1,000 live births to 25 per 1,000 live births in 2017 (see Table 1).

The current state of mortality among children Under-5 years, infants and neonates in Ghana are quite high. Mortality among this population is higher than what is expected per the SDG target and it will take significant investments for Ghana to reach the set target by 2030. More importantly, factors such as region of residence, mother's education level and wealth have direct impact on the distribution of mortality in this population. For example, the 2017 Maternal Health Survey (GMHS) report suggest that while under-5 mortality is 42 deaths per 1,000 live births in the Greater Accra region, the Upper West region recorded 78 deaths per 1,000 live births. Similarly, among mothers with no education, the rate was 71 deaths per 1,000 live births, while mothers with higher than secondary education recorded 31 deaths per 1,000 live birth (GMHS, 2017). In terms of household wealth, the survey report suggests 68 deaths per 1,000 live births in the poorest households while in the richest households the rate was 35 deaths per 1,000 live births (GMHS, 2017). The level of inequity is evident in the disproportionate distribution of Under-five mortality.

Table 1: Trend of Under-5, Infant, and Neonatal deaths

Year	Under-5 deaths per 1,000 live births	Infant deaths per 1,000 live births	Neonatal deaths per 1,000 live births
1988	155	77	43
1993	119	66	41
1998	108	57	30
2003	111	64	43
2008	82	50	29
2014	60	41	29
2017	52	37	25

Data source: GDHS, 2014, GMHS, 2017

By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

In Ghana HIV, tuberculosis, and malaria remain endemic. Malaria in particular still leads as the cause of out-patient department (OPD) attendance. It is also one of the main causes of death among children. For HIV, between 2000 and 2015 a 57% reduction in new infections is reported while AIDS-related deaths have reduced by 33% during same period (Ali et al., 2019). Among the general population, prevalence is 1.6% (UNAIDS). Even more important, the “treat all” policy that seeks to track HIV positive patients so as to immediately put them on treatment has been included in the National HIV/AIDS Strategic Plan for 2016-2020 (Ghana AIDS Commission, 2016). Notwithstanding the progress made, there are challenges in terms of increasing the level of testing and complementing same with behavior change as well as strengthening data systems and managing key populations.

By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

For the past few years non-communicable diseases in the form of hypertension, diabetes, cancers, etc. have contributed to several premature mortality and disabilities. Non-communicable diseases now account for about 43% of all deaths in Ghana. Additionally, NCDs constantly feature in the top ten causes of death in the Ghana (CDC Ghana, 2019). Non-communicable diseases are viewed as one of the main public health problems in Ghana, especially giving their devastating impact on households and the economy. Thus, urgent attention is needed to address NCDs.

Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

The abuse of narcotic drugs, alcohol and other substance remains a public health challenge in Ghana particularly among the youth. It is estimated that the prevalence of the abuse of narcotic substances among adolescents is 12.7% - 25% (Doku et al., 2012). Alcohol per capita (15+) consumption in liters of pure alcohol is estimated to be 2.7 (WHO, 2018). Alcohol, narcotic

drugs, and other substance abuse create additional challenges including domestic violence, mental health and injuries leading to disabilities and deaths. A recently launched policy on alcoholism in Ghana aims to control the abuse of alcohol and its related harmful effects by targeting areas such as increasing taxes on alcoholic drinks, regulating availability and marketing and drink-driving counter measures.

By 2020, halve the number of global deaths and injuries from road traffic accidents.

Road traffic accidents and injuries are major contributors to deaths and disabilities in Ghana. It is estimated that between 1991 to 2018, 46,284 people were killed in road traffic-related accidents (RTRA). Annual average deaths resulting from RTRA is 1,714 with higher than average and increasing figures recorded in the past five years. For example, deaths resulting from RTRAs has consistently increased from 1,802 in 2015 to 2,341 in 2018. Reported injuries in 2016 alone was 10,438 (National Road Safety Authority, 2018). This put a lot of pressure on health resources, especially the emergency and trauma units of hospitals. With the aim to halve these deaths and injuries by 2030, tremendous efforts in terms of investments in the required human capital, infrastructure and the systems will be essential.

By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.

The desire to make sexual and reproductive healthcare services universally accessible is critical to empowerment of women and consequently economic development (Glasier et al., 2006; Fathalla et al., 2006). The need to improve access to interventions such as family planning and maternal health care in meeting unmet demand for sexual and reproductive healthcare services is considered to be vital. In terms of family planning, currently 25% of married women age 15-49 years use a modern method of contraception. On the other hand, 30% of currently married women have an unmet need for family planning, 17% have an unmet need for spacing, and 13% have an unmet need for limiting (Ghana Statistical Service, 2015). There is also appreciable level of knowledge on family planning methods, with 80% of women aged 15-49 years who are not currently using any method of family planning with knowledge of where family planning commodities can be obtained (Ghana Maternal Health Survey, 2017). Childbearing among teenage women has decreased from 23% 1988 to 14% in 2017, while the general fertility rate stands at 3.9%, a decline from 6.4% in 1988 (Ghana Maternal Health Survey, 2017). It is important though to emphasize that there is widespread inequality in access to family planning and other reproductive health commodities, especially between rural and urban populations.

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Different governments have designed and implemented various health system measures aimed at achieving UHC. Historically, the free health care implemented post-independence by the

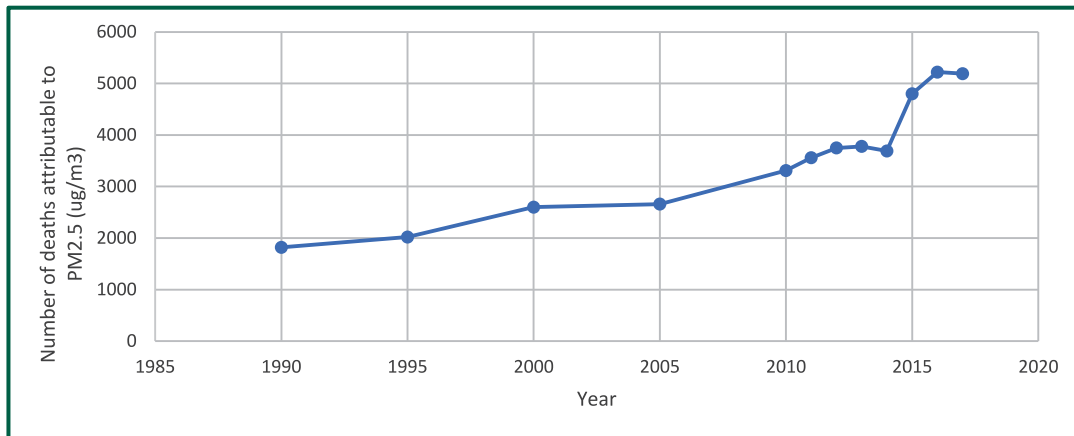
Nkrumah government, community-based health insurance, and the introduction of the National Health Insurance Scheme (NHIS) have all played key roles at one point or the other in improving financial access and consequently utilization of healthcare services. On the other hand, the introduction of user fees in the late 1960s and then sharply increased in the 1980s, even with exemptions for vulnerable groups in and 1998, had notable and adverse impact on health care utilization (Waddington and Enyimayew, 1989; Nyongator and Kutzin, 1999).

More importantly, since the declaration of “Health for All” in 1978, Ghana has operationalized primary health care in an attempt to achieve access to quality essential healthcare services. For example, the introduction of community-based health and planning services (CHPS), physician assistantship programs, etc. This notwithstanding, the current vehicle for financing health services across the different population groups (NHIS) has substantial challenges (strategic, structural, operational and political) that needs urgent attention. For example, at the strategic level, there are key questions on the package of services the NHIS should finance in addition to the sustainability of its resource envelope. At the structural level, there are equally questions around the existing structure of the scheme and more importantly how it is related to the center (MOH). At the operational level there have been several calls to address operational inefficiencies of the scheme. Finally, and very important is the question of how to gain the attention of the political executive and yet avoid the overpoliticization of the agency, especially in its hiring and resource management.

By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Pollution in all forms have been a problem for Ghana and therefore posing a serious risk to the health of the population. Environmental pollution in the form of air, water and soil affects both human health and that of other living organisms. It is reported that pollution related deaths contributed about 16% of deaths in Ghana in 2016 (Government of Ghana Health and Pollution Action Plan, 2019). In Figure 2, the number of deaths attributable to PM2.5 has rapidly increased from 1,820 in 1990 to 5,190 in 2017. Particularly, indoor and outdoor air pollution is considered to be highly fatal, only second to malnutrition as risk that can result in death. According to the Lancet report as quoted in the Health and Pollution Action Plan of Ghana (2019), pollution related diseases cost Ghana between \$226 and \$300 million in productivity losses in 2015.

Figure 2: Number of Deaths Attributable to Air Pollution (PM_{2.5}) in Ghana



Data source: Health Effects Institute

Strengthen the implementation of the WHO Framework Convention on Tobacco Control in all countries, as appropriate.

Government of Ghana has made efforts to consolidate this Framework by implementing local policies and strategies. Regulations in terms of availability and marketing of tobacco products in the country are being strengthened. Recent amongst them is the ban on smoking at public places.

Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full, the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

Regarding support for research and development of vaccines and medicines, very little has been done locally. There are inadequate research centers across the country, whereas the few that exist are under-resourced. Funding for research in Ghana is inadequate as government fails to allocate significant funds for research and development even for the universities and established research centers. A substantial proportion of resources dedicated to funding research in the country are sourced from development partners. Currently, there is discussion for research and development funding to be raised to a minimum of 1% of GDP from the 0.3%.

Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.

As part of reforms over the last two decades, the MOH has implemented several policies that have been successful in reducing the levels of health worker attrition specially to developed countries and also attracting talents who ordinarily would not decide to work in Ghana's health sector. Key in this includes substantial improvements in compensation and other incentives, opportunities for further professional development through the establishment of the professional colleges of surgeons, nurses and midwives, pharmacist etc. Notwithstanding these improvements, there are still major challenges in the human resources for health front. First, the inadequate number and the right mix of the different health professional needed to run the sector. For example, Ghana falls short of the recommended 23 doctors, nurses and midwives per 10,000 population established by the World Health organisation as essential for the delivery of essential maternal and child health services (MOH, 2018; WHO, 2010). Added to the numbers challenge is inequity in the distribution of the existing staff across and within regions of the country. Existing evidence (Snow et al., 2012) suggest that Greater Accra has the largest concentration of clinical staff, followed by Ashanti, with Upper West having the lowest. Where population density is accounted for, Greater Accra has the highest number of health professional per 1,000 population, followed by Upper West, with Northern region having the lowest (Snow et al., 2012). In addition to the numbers and distribution, upsurge in the incidence of NCDs makes it important for Ghana to train a new crop of highly specialized cadre of healthcare workforce who will be able to manage the demand occasioned by rising incidence of NCDs.

Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

Diseases such as the current Coronavirus Disease, 2019 (Covid-19) and the outbreak of Ebola six (6) years ago strengthens the case to build capacity locally and effectively build partnership that will enhance early warning, risk reduction and management of health risks with respect to epidemics and pandemics.

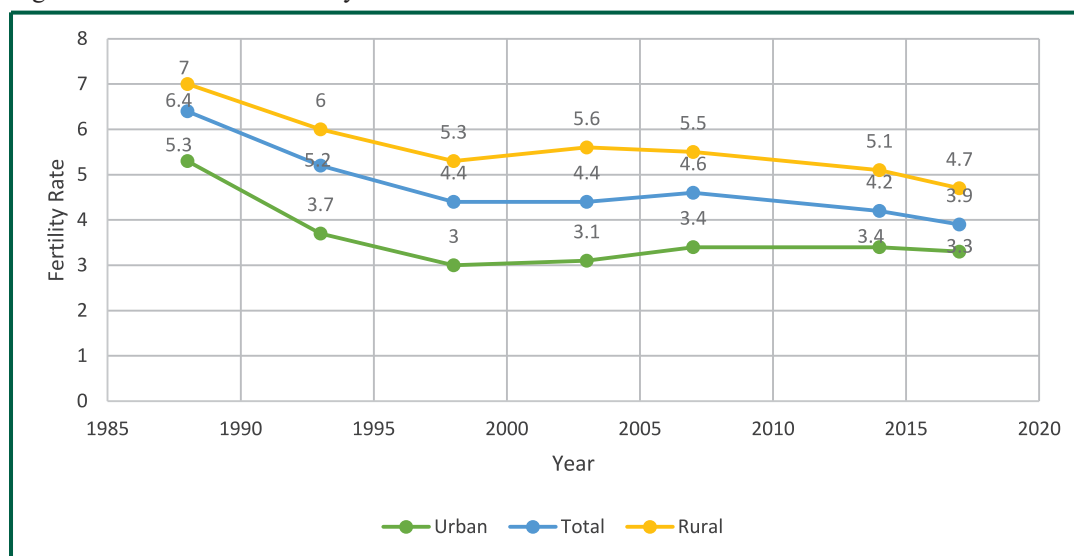
2.0 DEMOGRAPHIC, ECONOMIC AND EPIDEMIOLOGICAL TRENDS IN GHANA

Having discussed healthcare outcomes in-line with the health-related SDG targets, this section discusses the demographic, economic and epidemiological context within which any potential reforms in health systems can take place.

2.1 Demographic Trends

Ghana has experienced significant and rapid population growth in the past 50 years. According to the Ghana Statistical Service (2020), the population of Ghana increased from 8.6 million in 1970 to an estimated 31 million in 2020. There are currently more females than males, with the population being youthful (i.e. over 57% of the population below 25 years). On the contrary, the fertility rate has declined from 6.4 in 1988 to 3.9 in 2017, although at a much slower rate in the past three decades and plateaued between 1998 and 2007 (see figure 3). Fertility rates are however higher in rural areas compared to urban centers. The birth rate has also declined from 47.3 per 1,000 people in 1960 to 29.4 per 1,000 people in 2018 (World Bank, 2020).

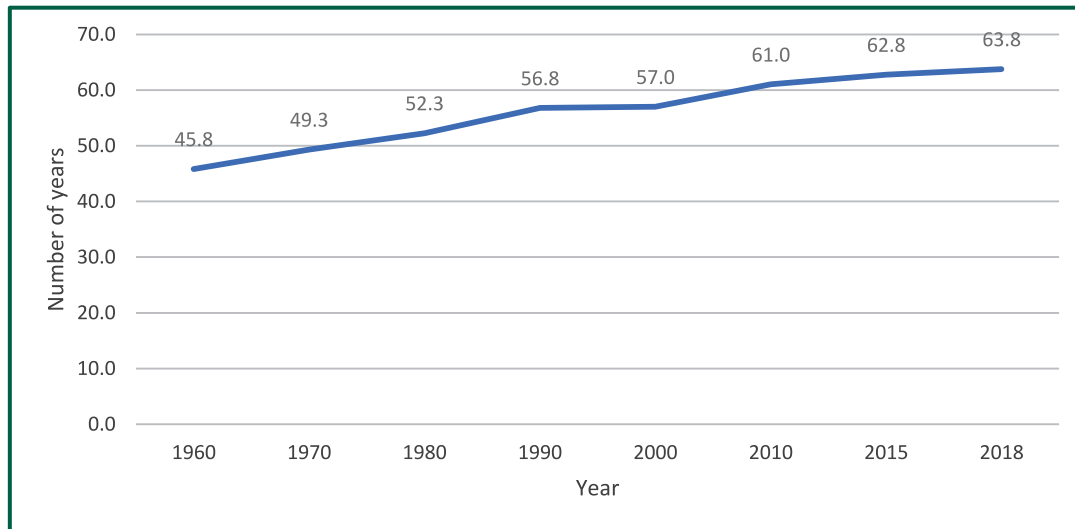
Figure 3: Trend in Total Fertility Rate



Data source: GDHS, GMHS

Besides fertility and birth rates, life expectancy has also increased, with life expectancy at birth (LEB) in 2018 being an average of 64 years, with females (64.8 years) living longer than their male counterparts (63.7 years) (World Bank, 2020). Figure 4 below shows trends in LEB between 1960 and 2018. The crude death rate has equally decreased from 18.5 per 1,000 people in 1960 to 7.3 per 1,000 people in 2018 (World Bank, 2020).

Figure 4: Trend of Life Expectancy in Ghana

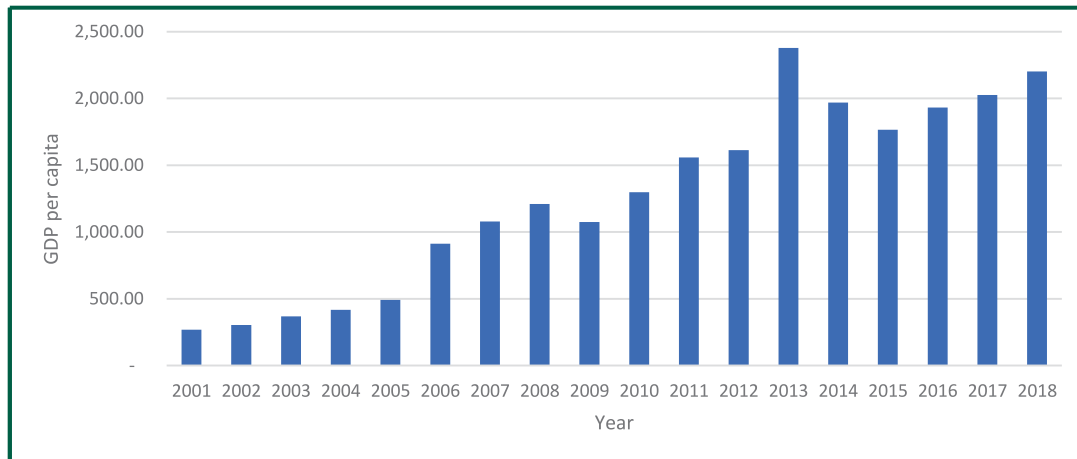


Data source: World Bank

2.2 Economic Trends

Ghana attained a lower middle-income status in 2008. This was after the country's gross domestic product (GDP) per capita was rebased to account for structural changes in the composition of the GDP and thus the GDP per capita reached the \$1,026 - \$3,995 set by the World Bank for entry into the lower middle-income bracket. This was achieved over several years of increasing economic growth. Consequently, since 2001, the GDP per capita has increased from \$269.01 to \$2,202.31 in 2018 (see Figure 5). The effect has been an improvement in the economic status of the population, with significant reduction in poverty. It is estimated that between 1991 and 2012, the poverty rate declined more than half, from 52.7% to 21.4%, while the extreme poverty rate declined even more quickly, from 37.6% to 9.6% during the same period (Molini & Paci, 2015). The transition and improved economic status coupled with urbanization have had its own impact on the population. With the current urban population estimated to be more than 56%, lifestyle generally have been affected and coupled with other risk factors these have facilitated an epidemiological transition to chronic non-communicable diseases.

Figure 5: Trend of GDP per Capita in Ghana



Data source: World Bank

2.3 Epidemiological Trends

Communicable and infectious diseases such as HIV, tuberculosis (TB), malaria, cholera, measles, chicken pox, typhoid, etc. have been some of the main disease conditions in the country. malaria, TB, and HIV in particular have been among the leading cause of OPD attendance and also a major cause for death. However, the trend has changed significantly with the emergence of chronic non-communicable diseases (NCD). More worrying is the fact that, Ghana now carries a double burden of disease (communicable and non-communicable diseases- NCDs).

The burden of NCDs is increasing in Ghana and is attributable to several risk factors which are commonly identified with lifestyle (e.g. poor nutrition, sedentary lifestyles, stress), ageing, etc. Ghana faces a risk of increasing incidence of NCDs given the substantial reduction in poverty and movement into the middle class over the last couple of years. Additionally, improvement in life expectancy (about 14% of the population to be elderly by 2050- Mba, 2010) means more people will live longer, with its associated chronic conditions.

While cardio-vascular diseases, diabetes and cancers constitute majority of NCDs in Ghana, they also constitute a major cause of morbidity, disability and mortality. Cardiovascular related diseases such as hypertension, stroke, ischemic heart disease were part of the top ten (10) causes of death in Ghana in 2018 (CDC, Ghana, 2019). It is equally interesting to note that, while some studies in the 1950s showed diabetes prevalence of 0.02% among adults (Dodu, 1958), recent studies report rates of 6.4% - 13.9% (Asamoah-Boaheng et al., 2019; Sarfo-Kantanka et al., 2014). Another NCD challenge in Ghana are different forms of cancers (Breast, cervical, liver prostate, and colorectal cancers). According to the Global Cancer Observatory (2019), the incidence of new cases of cancer in 2018 was 22,823 in Ghana. Unfortunately, these numbers will continue to rise due to changing lifestyles and therefore contribute significantly to mortality and disability. For instance, in 2018 cancer specific deaths were estimated to be 15,089 (Global Cancer Observatory, 2019) an increase of 44% of the 10,500 cancer deaths reported by WHO in

2012 (WHO, 2014). Women are in particular disproportionately affected as one of every three new case of cancer reported was either breast or cervical cancer (Global Cancer Observatory, 2019).

Another major trend in Ghana's epidemiology is the incidence of injuries. It is estimated that while 53% of the non-fatal disease burden is made up of communicable, maternal, perinatal, and nutritional conditions, NCDs and injuries constitute 41% and 6% respectively (Institute of Health Metrics and Evaluation, 2012). This represents a significant shift from the past fifty (50) years when this burden was predominantly communicable diseases. Injuries for example have become a common menace to lives in Ghana. Various forms of injuries through domestic and workplace accidents have been on the ascendancy. Worse yet, road traffic accidents are a major cause of these injuries with significant increase in the number of injuries recorded over the past 10 years.

3.0 HEALTH SYSTEM'S CHALLENGES

Having discussed healthcare outcomes in line with the health-related SDG targets and relevant demographic, economic and epidemiological context, we will now turn attention to examining the current health systems challenges as they pertain to Ghana. Understanding Ghana's health systems challenges will be an essential part of the process of developing potential reforms to address systemic bottlenecks in the sector and consequently position the country to achieve the health-related SDG targets. The discussion of health systems challenges follows the WHO health system framework consisting of leadership and governance, essential medical products and technologies, health information systems, human resources for health, service delivery and health finance. (WHO, 2007). Given that the constituents of the WHO building blocks address mainly supply-side constraints, we have added community participation to address demand-side constraints as below:

3.1 Leadership and Governance

The main leadership and governance challenges are contextual in nature. Factors such as institutional rules and regulations and funding constrains the power of managers and therefore their ability to act (Aberese-Ako et al., 2018). The following are some of the key challenges that may be relevant for the purposes of developing a potential reform program.

- The structural configuration of the health sector is complex and fragmented with several autonomous agencies, with a relatively weak central or Ministerial-level coordination and leadership.
- These factors constitute major risks to coherent policy formulation and the implementation of any policy reform in the health sector, resulting in major inefficiencies. These complexities have also often resulted in turf battles between the MOH and its main agencies, especially GHS, NHIA and CHAG.
- The boundaries between political and bureaucratic authority and functions is becoming too blurred and has capacity to compromise objectivity and the ability of the sector to function for the good of citizens.
- A major issue here is the way key leaders in the sector are politically appointed and how their closeness to the center of power sometimes makes it difficult to ensure accountability from the entities the political appointees lead
- The current structure also means that agencies have direct access to funds without recourse to the center. This from a power perspective tends to compromise the ability of the center to exert control and influence, monitor behavior and ensure accountability

- The current structural rigidities in the sector also compromise harmonization, coordination and alignment of strategies for delivering interventions that will ultimately improve population health
- Absence of a strong country level strategy that becomes that rallying point to harmonize resources and efforts to the achievement of health sector objectives is problematic. It is important though to state that the MOH is currently leading a process to developing a UHC roadmap which is expected to serve this purpose and is almost complete

Perhaps due to the unprecedented nature of the pandemic, the Covid-19 response has been directed from the Presidency and not from the MoH. It is nevertheless a reflection of the weakness of the sector's leadership, that it was necessary to set up a completely new unit in the Presidency with several advisory groups to direct the national response. The MoH has not even been able to cobble together an effective way to combat stigma or to mobilize the health donor community with whom they should have the closest working relationship than the Presidency to support the emergency operations of the response.

3.2 Essential Medical Products and Technologies

The role of essential medical products in a strong health system cannot be overemphasized. Individuals are expected to have access to affordable quality medical products, although this is not totally the case in Ghana. The following challenges are key in this area:

- There is wide disparity in terms of distribution of medicines and medical products across the country. Inefficiencies attributed to the Central Medical Stores with respect to procurement challenges that always result in shortage of medical products (NHIA, 2015). For example, according to IHME et al. (2015), ARV stock-outs are common, with 30% of hospitals experiencing stock-outs of at least one ARV
- Procurement inefficiencies in the public sector has resulted in the reliance on the expensive private sector (Arhinful, 2003) for some medicines. In a recent study, it was found that over 90% of maternity clinics and pharmacies reported procuring all of their essential medicine stocks from private sources, while 70% of private clinics indicated the same (Institute for Health Metrics and Evaluation, Ghana Health Service, 2015)
- Cost of medicines in particular have been the main cost driver for the NHIS with anti-malarial being over 20% of total medicines cost (Aikins & Koram, 2017). This is a potential threat to sustainability of the scheme. With the demographic and epidemiologic trends discussed above, there is the need to pay attention to drugs needed for conditions of ageing
- Lack of the right environment for innovation and entrepreneurship for medical products and technology to flourish.

- Weak regulatory environment that can constrain access to relevant, quality and affordable medical products and technology.

Covid-19 has driven an emergency need to obtain supplies like Personal Protective Equipment (PPE), test kits, and reagents for responding to the pandemic.

3.3 Health Information Systems

Health information at the population and national levels has improved over the years, particularly with the availability of several surveys (Demographic and Health Surveys -DHS, Ghana Living Standards Survey- GLSS, Multiple Indicator Cluster Survey- MICS and Maternal Health Survey- MHS) that makes it possible to have access to good quality data for robust analysis and decision-making. While these datasets provide important information for decision making, Aikins and Koram (2017) highlight some challenges that may be important for developing a potential reform program:

- The challenge of standardization of institutional records on disease incidence, morbidity and mortality (e.g. death registration)
- The challenge of aligning similar data across institutions (e.g. utilization of services as captured by GHS and NHIA, health workforce statistics captured by GHS and WHO)
- The challenge of appropriately tracking health financing sources and disbursement
- Additionally, Ghana seems to be behind current trends in e-health and m-health as well as digitization of health records. These have been largely hindered by lack of infrastructure, inadequate expertise, inadequate funding among others. With governments efforts to digitize the economy, attention should be given to health in this regard

Besides adequate risk communications to enable the public to behave appropriately so as to minimize the public health impact of Covid-19, the pandemic has brought into sharp focus the need for other communication tools necessary for the management of the national response, in particular three kinds of apps – contact tracing, testing and case management. The system has responded with mixed results to these needs and challenges. Risk communication do not seem to have been very effective as health workers known to work at Covid-19 treatment or isolation centers face stigmatization¹. Similarly, the contact tracing Apps development and rolled out have been bogged down in some controversy, while testing and case management Apps seem to have been deployed more quickly and effectively.

¹See see <https://www.businessghana.com/site/news/general/214289/Health-workers-in-COVID-19-treatment-centers-still-facing-stigmatization>.

3.4 Service Delivery

- Need for clarity on what constitutes Ghana’s approach to delivering services to the population. A focus on Preventive and Promotive, or curative services? And what does that mean for achieving country level objectives for population health?
- To what extent does the definition of the package of services contained in the UHC roadmap make an effective and strong case for redressing the traditional bias against PHC including preventive and promotive care, and take into consideration the emerging double burden of disease in Ghana
- To what extent are non-traditional areas like mental health covered in the defined package of services towards UHC
- Although there is long-standing advocacy for optimizing traditional medicine in the Ghanaian setting to complement health service delivery, this has not been fully realized. There is mistrust between orthodox and traditional medicine practitioners, even with well-developed policy frameworks that aim to guide the course of integrating traditional medicine into the mainstream health care delivery
- What is being done now to ensure that the UHC roadmap has been developed will not suffer setbacks like previous reforms but be implemented as planned and effectively monitored
- There are major challenges with the quality of services delivered across the board (primary to tertiary). Patients and their family members continually report on poor satisfaction with service quality (Adusi-Poku et al., 2015; Gadeka & Esena, 2020), with the Ghana Health Service in particular facing legal battles with aggrieved patients and their families, mostly with cases of alleged medical negligence
- There are substantial production inefficiencies in service delivery especially within public sector health facilities. A recent study estimating efficiency scores for all facilities found that efficiency scores were relatively low across all health facilities, with 82% of facilities scoring 50% or lower. Again, only 5% of health facilities recorded efficiency score of 80% or higher in 2011 (IHME et al., 2015).
- There are major challenges with harnessing the value of existing investments in infrastructure to improve service delivery. This can be important in creating fiscal space for investments in other areas of the health system that are equally crucial, especially technology and essential commodities
- The private sector is now a key player in terms of service delivery. There is however no systematic process in place to capture their inputs and output so as to have data on them for the purpose of planning

In terms of the impact of Covid-19, the disease has highlighted the poor state of the country's PHC system, and accentuated the reliance on hospitals and specialized laboratories as well as the shortage of intensive care units (ICUs). Isolation and treatment centers have been designated reasonably quickly and in line with the initially low case count of the country. Moving forward, it would be interesting to see how the system deployed would cope with sharply increased caseloads if the current trends continue.

3.5 Human Resources for Health

Overall, there has been improvement in the health workforce as earlier indicated. Yet serious gap exists in terms of some specific categories that are essential for comprehensive and universal access to health care. The major challenges of this building block are as follows:

- There are important analytical skills' gaps at the policy level. This is key both in the development of stronger and appropriate policies at the higher level, and the implementation of same to achieve both allocative and technical efficiency.
- There are stark inequalities in the distribution of health personnel across the country with the rural and northern zones of the country having disproportionately lower levels of all category of health staff compared to places like Kumasi and Accra as earlier discussed.
- Many allied health professions are increasing in number including physiotherapists, dieticians, psychologists, physician assistants, etc. However, the pathway that fully integrates these professionals into the healthcare delivery system is unclear, especially with employment.
- Besides the issue of inequality, there are gaps in availability of some category of highly skilled and specialized medical personnel much needed to deal with the emerging shift towards NCDs, mental health and social care particularly for the aged.

The advent of Covid-19 has also exposed some challenges in the human resources front. For instance, some cadre of health personnel were redeployed from their normal routine to be able to respond to the Covid-19 pandemic. This meant the need to scale down or in some instances suspend certain services. Additionally, with some health workers infected by Covid-19, the need for adequate protection for staff (PPEs) has become an urgent issue. Besides reducing the staff available to treat patients, this situation also demoralizes staff and leads to undesirable knock-on effects on health care quality for all other services as well.

3.6 Health Financing

The Health Sector Medium Term Development Plan II report warns of financing challenges (MOH, 2015), suggesting that 71% of expenditure on preventive and public healthcare is

sourced from development partners, with 29% from government and the NHIA. Ghana's transition to lower-middle income status means that support from development partners to the health sector will continue to dwindle. An effect that is already being felt with gaps in areas such as vaccine financing. Key challenges in financing include the following:

- There is high level of out-of-pocket payments which limits financial access to health care. The current 40% NHIS enrollment (Atim & Amporfu, 2016) suggest that significant proportion of the population pays out-of-pocket, a problem that does not only limit access to healthcare but also plunge individuals and households into poverty.
- There are also reported cases of illegal “co-payment” that NHIS active cardholders are made to pay (Abuosi et al., 2016; Dalinjong et al., 2018; Aryeetey et al., 2016; Agyepong et al., 2016). Often, these credentialed healthcare providers blame it on unrealistic tariffs paid by the NHIS for medicines and services, as well as chronic delays in reimbursement of submitted claims (Dalinjong et al., 2018; Ashigbie et al., 2016; Agyepong et al., 2016).
- There are reported inefficiencies in the operation of the NHIS that threaten its sustainability. The inefficiency is believed to emanate from the three key parties involved in the operation of the scheme (NHIS, providers and subscribers). The NHIA is seen as operationally being inefficient, especially with wasteful and cost-escalating provider payment methods, and high overhead expenditures, well over the medical loss threshold of 10 percent for a social health insurance scheme. Healthcare providers on the other hand have been accused of fraudulent behavior, ranging from over diagnosis and over prescription (Alhassan et al., 2015). Other moral hazards from subscribers have also been reported (Debpuur et al., 2015; Akum & Akudugu, 2016).
- There are equally delays in reimbursement of provider claims which is becoming perennial.
- The NHIS system is designed to pay for curative care and not to invest in a strategic way in prevention and promotion including outreach services.
- Resource mobilization for health necessarily did not take into account that a pandemic might be affecting the population. As a result, the financial response has been ad-hoc and included resort to donors and public appeals for donations.

3.7 Community participation

- Communities have a critical role to play both in producing health care and in effective health information. Greater involvement of the community in the health system could help to tackle some of the challenges posed today by the Covid-19 crisis for instance, but community mobilization is essential for traditional pillars of the health system such as vaccinations.

- In Ghana, it is reported that inadequate gender-diversity in community leadership and management styles limits broad-based empowerment especially women, young people and marginalized men and their participation in health programs such as CHPS (Baatiema et al., 2013)

4.0 RECOMMENDATION FOR REFORMS

In the context of the situational analysis on healthcare outcomes discussed in Section 1, the changing demographic, economic and epidemiological trends in Section 2 and health systems weaknesses identifies in Section 3, the following are proposed as potential reforms to be pursued for the purposes of achieving the health-related SDG targets. The proposals for reform are woven once again around the health system's blocks plus the community element. This approach is based on the assumption that adverse outcomes discussed both in the outcomes situational analysis and evolving epidemiological trends are mainly symptoms of problematic health systems. Thus, addressing the health systems-related challenges will ultimately result in reversing trends of adverse outcomes. The specific proposals include:

4.1 Leadership and Governance

- There is the need for a structural re-configuration of the health sector to reduce the level of complexity and fragmentation, risk to coherent policy formulation and implementation and as well strengthen the center to enhance better coordination and reduce turf battle among agencies especially GHS, NHIA and CHAG
- As part of the reconfiguration exercise, there will be the need to deliberately implement system that better identifies the boundaries between political and bureaucratic authority and functions in order not to compromise objectivity and the ability of the sector to function for the good of citizens
- There will be the need to reform the way key leaders in the sector are appointed (politically) and how their closeness to the center of power sometimes makes it difficult to ensure accountability from the entities the political appointees lead
- There will be the need to reform the funds disbursement structures. The current structure means that agencies have direct access to funds without recourse to the center. This from a power perspective tends to compromise the ability of the center to exert control and influence, monitor behavior and ensure accountability
- Although the MOH has recently developed a UHC roadmap to guide the implementation of health policies, there will be the need for a strong country level strategy that becomes the rallying point to harmonize resources and efforts for the achievement of health sector objectives
- The health sector leadership should seize the unprecedented opportunity offered by Covid-19, where the attention of the highest authorities of the country, including the President and the Minister of Finance, are focused as never before on the sector, to argue

for greater attention to address the long-term challenges of the sector, including adequate resource allocations.

4.2 Essential medical Products and Technologies

- There is the need for government to create the right environment for innovation and entrepreneurship for medical products and technology to flourish.
- There will be the need to strengthen regulation in this space to ensure access to relevant, quality and affordable medical products and technology.
- Optimal regulatory mechanisms that neither compromise innovation drive nor make it difficult to secure access to needed medical products and technology in the short-term will be key.
- Reforms in existing procurement systems (e.g. the framework contracting) will equally be important in improving technical efficiency and value for money. This will be key in reducing procurement abuses and therefore the cost of commodities and the cost of care.
- The Government should work through regional organisations like ECOWAS/WAHO and the AU, as well as UN agencies, to accelerate the procurement of essential supplies for the Covid response

4.3 Service Delivery

- There is the need for clarity on what constitutes Ghana's approach to delivering services to the population. A focus on Preventive and Promotive, or curative services? And what does that mean for achieving country level objectives for population health?
- There will also be the need to address the question of how the definition of package of services contained in the UHC roadmap make an effective and strong case for redressing the traditional bias against PHC including preventive and promotive care, and take into consideration the emerging double burden of disease in Ghana
- There will also be the need to examine the extent to which non-traditional areas like mental health are covered in the defined package of services towards UHC
- Questions of what is currently being done to ensure that the roadmap will not suffer setbacks like previous reforms but be implemented as planned and effectively monitored will also be crucial in any reform program
- There is the need to pay great attention to the quality of services delivered across the board (primary to tertiary).

- There is also the need to find a long-term solution to production inefficiencies in service delivery especially within public sector health facilities. For example, do we make these hospitals autonomous and self-sustaining and ensure that they are paid the full market costs of producing their services?
- Existing investments in infrastructure should be properly harnessed for improved value before considering additional investments. This can be important in creating fiscal space for investments in other areas of the health system that are equally crucial, especially technology and essential commodities.
- The private sector is now a key player in terms of service delivery. There is the need for a systematic process to capture their inputs and output so as to have data on them for the purpose of planning.
 - a. It will also be important to help the private sector to align their activities and actions with the overall sector strategy. This means that they should be seen as a key partner in the delivery of service and therefore the achievement of sector objectives
 - b. The role of the private sector in achieving sector goals should not only be better articulated, but there should also be clarity in terms of how the state intends to help them to achieve that
- The Covid-19 crisis should serve as a clarion call to invest significantly in making PHC facilities more attractive to the public so as to provide ambulatory care closer to where people live and to avoid the situation where there is a huge drop in facility attendance because most Covid-related care is provided at hospitals where the public has fears to go to during a pandemic.

4.4 Human Resources for Health

- There will be the need to pay attention to important analytical skills' gaps at the policy level. This is key both in the development of stronger and appropriate policies at the higher level, and the implementation of same to achieve both allocative and technical efficiency
- There will also be the need to address stark inequalities in the distribution of health personnel of all category across the country to ensure that the gap between the rural and northern zones of the country and that of the urban south are appropriately reduced.
- As a matter of urgency, there will be the need to put in place a plan that will seek to address that the skills gaps and more importantly to position Ghana to meet the skills demands of the shifting burden of disease (from communicable to non-communicable diseases).

- There is a need for even greater efforts to procure essential supplies to protect health staff to manage the Covid-19 pandemic, as well as to provide accommodation for health staff working in Covid-related facilities to self-isolate when they have reason to suspect exposure to the virus, so as to protect their families too.

4.5 Health Financing

- There will be the need to have a country level conversation on how to better fund the NHIS given that it will be the vehicle to drive any reform in the health sector that is aimed at ultimately improving population health
 - What reforms are needed to synchronize expenditure growth with revenue sources and financing mechanism
 - Reform the NHIS to address wide-spread abuse and inefficiencies that emanates from design and operational defects
- There is the need to align the NHIA package of services with the package of services defined at the country level as being what is required to achieve improvements in population health. This should then become what the NHIA will pay for
- There is the need to address perennial delays in reimbursement of claims by the NHIA. Specifically address:
 - Defective claims processing procedures both by providers and the NHIA,
 - Inefficiencies in the operational processes of the NHIA
- There will be the need to address delays in the release of funds from MOF to NHIA. This is also related to the nature and source of funding and requires strong political commitment from the political executive
- The Covid-19 crisis makes it probably prudent that future health sector planning, including actuarial models, should take pandemic preparedness into account

4.6 Community participation

- The covid-19 pandemic has dramatized the role of communities in health as never before. Risk communications, behavior changes, adherence to safety regulations and protocols, stigmatization, contact tracing, quarantining etc. all these response activities require active community support and roles to be effective. More attention ought to be paid to the role of communities in producing health and related communications would greatly improve the performance of the health sector as a whole

5.0 CONCLUSION

The study sought to examine challenges in Ghana's health sector and identify opportunities for reform. The analysis preceding this section suggest that several years of reform, especially within the last two decades have resulted in positive outcomes both in processes and population health outcomes. Additionally, there are currently on-going efforts in-terms of policy planning and implementation aimed at achieving the health-related SDGs albeit with not so impressive outcomes. Notwithstanding the progress made so far, demographic and epidemiological trends in the context of transition from a lower income to lower middle-income status creates opportunities for increased incidence of NCDs leading to double burden of disease. There are also systematic challenges related to leadership and governance, human resources for health, service delivery, essential medicines and technology, health information systems, health financing and community participation that if not addressed have the potential of constraining the ability of Ghana to achieve the health-related SDGs. In this direction, the study recommends a phased approach to implementing the recommended reforms. This will include reforms that will should be targeted for immediate, medium-term and long-term implementation as follows:

Issues for Immediate Implementation

- Appoint credible and technically competent agency heads and avoid overpoliticization of such agencies
- Recalibrate the existing fund disbursement channels to achieve a balance between speed and accountability to the center
- Put in place systems to strengthen the culture of developing nationally owned policies and strategies that align country health strategies more closely to health priorities and can be used to mobilize stakeholders for action in the sector
- Strengthen regulation in the sector but in a way that will ensure that innovation and enterprise is not stifled. This is especially important for medical products and technology ecosystem.
- Clarify service delivery approaches and define package of services for attainment of UHC
- Harness better the value of existing capital investments, especially healthcare infrastructure in addition to prioritising future investments appropriately
- Address issues related to sustainable funding for the NHIS
- Align the NHIS service package with that of defined package of services in the UHC roadmap

Issues for Medium-Term Implementation

- Create an appropriate environment for innovation and entrepreneurship in the medical products and technology ecosystem
- Reform what is currently seen as a complex and ineffective and inefficient procurement system

- Address issues related to quality of service
- Work to integrate the private health sector into the national health system to make it possible to adequately capture their contribution to the sector
- Address the human resources for health skills gap for the purposes of better responding to macro-level policy needs the emerging double burden of diseases
- Address inequalities in the distribution of the different cadre of health personnel, especially the rural/urban and north/south divide in the distribution of health staff
- Address delays in reimbursement to the NHIA and onward to health facilities
- Put in place structures to address issues of community participation
- Strengthen domestic resource mobilization for health

Issues for Long-term Implementation

- Address the structural reconfiguration challenges of the sector
- Address production inefficiencies in service delivery

We further recommend that in pursuing the above recommendations there should be a conscious attempt to pursue an all-inclusion policy to as much as possible seek the buy-in of relevant stakeholders in the sector. This will be important to ensure that reforms will be appropriately implemented and will not suffer the fate of other reforms that started and could not be completed merely for lack of buy-in from stakeholders.

REFERENCES

Aberese-Ako, M., Agyepong, I. A., & van Dijk, H. (2018). Leadership styles in two Ghanaian hospitals in a challenging environment. *Health policy and planning*, 33(suppl_2), ii16-ii26.

Agyepong, I. A., Abankwah, D. N. Y., Abroso, A., Chun, C., Dodoo, J. N. O., Lee, S., ... & Park, J. (2016). The “Universal” in UHC and Ghana’s National Health Insurance Scheme: policy and implementation challenges and dilemmas of a lower middle-income country. *BMC health services research*, 16(1), 504.

Aikins, A. D. G. (2007). Ghana's neglected chronic disease epidemic: a developmental challenge. *Ghana medical journal*, 41(4), 154.

Aikins, A. D. G., & Koram, K. (2017). Health and Healthcare in Ghana, 1957–2017. The economy of Ghana sixty years after independence, 365. Available at: https://www.researchgate.net/publication/313643435_Health_and_Healthcare_in_Ghana_1957-2017 [accessed Jun 16 2020].

Akum, F. A., & Akudugu, M. A. Assessing Insured Clients Moral Hazard at Bawku Municipality on National Health Insurance Scheme.

Alhassan, R. K., Nketiah-Amponsah, E., Akazili, J., Spieker, N., Arhinful, D. K., & De Wit, T. F. R. (2015). Efficiency of private and public primary health facilities accredited by the National Health Insurance Authority in Ghana. *Cost Effectiveness and Resource Allocation*, 13(1), 23.

Ali, H., Amoyaw, F., Baden, D., Durand, L., Bronson, M., Kim, A., ... & Swaminathan, M. (2019). Ghana’s HIV epidemic and PEPFAR’s contribution towards epidemic control. *Ghana medical journal*, 53(1), 59-62.

Ali, H., Amoyaw, F., Baden, D., Durand, L., Bronson, M., Kim, A., ... & Swaminathan, M. (2019). Ghana’s HIV epidemic and PEPFAR’s contribution towards epidemic control. *Ghana medical journal*, 53(1), 59-62.

Aryeetey, G. C., Nonvignon, J., Amissah, C., Buckle, G., & Aikins, M. (2016). The effect of the National Health Insurance Scheme (NHIS) on health service delivery in mission facilities in Ghana: a retrospective study. *Globalization and health*, 12(1), 32.

Asamoah-Boaheng, M., Sarfo-Kantanka, O., Tuffour, A. B., Eghan, B., & Mbanya, J. C. (2019). Prevalence and risk factors for diabetes mellitus among adults in Ghana: a systematic review and meta-analysis. *International health*, 11(2), 83-92.

Ashigbie, P. G., Azameti, D., & Wirtz, V. J. (2016). Challenges of medicines management in the public and private sector under Ghana's National Health Insurance Scheme—a qualitative study. *Journal of pharmaceutical policy and practice*, 9(1), 6.

Atim, C., & Amporfu, E. (2016, September). Review of the Ghanaian NHIS: What Lessons Have We Learned?. In th Conference of the African Health Economics and Policy Association Rabat (Vol. 26, p. 29). Available at: https://afhea.org/docs/presetationspdfs/Chris%20Atim%20-%20Review%20of%20the%20Ghanaian%20NHIS-%20What%20Lessons%20Have%20We%20Learned_.pdf (accessed 17th June, 2020).

Baatiema, L., Skovdal, M., Rifkin, S., & Campbell, C. (2013). Assessing participation in a community-based health planning and services programme in Ghana. *BMC health services research*, 13(1), 233.

Bosu, W. K. (2010). Epidemic of hypertension in Ghana: a systematic review. *BMC public health*, 10(1), 418.

Center for Disease Control and Prevention (2019). Global Health , Ghana Available at https://www.cdc.gov/globalhealth/countries/ghana/pdf/Ghana_Factsheet.pdf (accessed on 4th June, 2020).

Center for Disease Control and Prevention (2019). Global Health, Ghana Available at https://www.cdc.gov/globalhealth/countries/ghana/pdf/Ghana_Factsheet.pdf (accessed on 4th June, 2020).

Curry, L., Taylor, L., Chen, P. G. C., & Bradley, E. (2012). Experiences of leadership in health care in sub-Saharan Africa. *Human resources for health*, 10(1), 33.

Dalinjong, P. A., Wang, A. Y., & Homer, C. S. (2018). Has the free maternal health policy eliminated out of pocket payments for maternal health services? Views of women, health providers and insurance managers in northern Ghana. *PLoS One*, 13(2), e0184830

Debpuur, C., Dalaba, M. A., Chatio, S., Adjuik, M., & Akweongo, P. (2015). An exploration of moral hazard behaviors under the national health insurance scheme in Northern Ghana: a qualitative study. *BMC health services research*, 15(1), 469.

Dodu, S. R. (1958). The incidence of diabetes mellitus in Accra (Ghana); a study of 4,000 patients. *The West African Medical Journal*, 7(3), 129-134.

Ghana AIDS Commission. (2016). Ghana National HIV and AIDS Strategic Plan 2016-2020. Accra: GAC.

Ghana AIDS Commission. (2016). Ghana National HIV and AIDS Strategic Plan 2016-2020. Accra: GAC.

Ghana Statistical Service (GSS) Ghana Health Service (GHS) and ICF International (2015). The 2014 Ghana Demographic and Health Survey (DHS) Key Findings. Rockville: GSS, GHS, and ICF International.

Ghana Statistical Service (2020) Population and Housing Census. Available at: https://www.statsghana.gov.gh/nationalaccount_macros.php?Stats=MTA1NTY1NjgxLjUwNg==/webstats/s679n2sn87 (accessed 11th June, 2020)

Ghana Web (2020). Ridge hospital sued for GHS5m over wife, baby's death. Available at: <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Ridge-hospital-sued-for-GHS5m-over-wife-baby-s-death-973648> (accessed 17th June, 2020).

Global Cancer Observatory (2019). Cancer in Ghana. Available at: <https://gco.iarc.fr/today/data/factsheets/populations/288-ghana-fact-sheets.pdf> (accessed on 14th June, 2020).

Health Effects Institute (2019). State of Global Air 2019. Available at: <https://www.stateofglobalair.org/data/#/health/plot> (accessed on 15th June, 2020)

Institute for Health Metrics and Evaluation (2015). Health Service Provision in Ghana: Assessing Facility Capacity and Costs of Care. Seattle, WA.

Institute for Health Metrics and Evaluation. 2010 global burden of disease study. 2012; Seattle: University of Washington. Available from: <http://www.healthmetricsandevaluation.org/gbd/visualizations/gbd-cause-patterns>

Karikari, G., Huber, L. L., & Lohrmann, D. K. (2019). Is Ghana ready for geriatrics? Medical students' interest and intention toward geriatric specialization in Ghana. *Innovation in Aging*, 3(Suppl 1), S299.

Kwamie, A., van Dijk, H., & Agyepong, I. A. (2014). Advancing the application of systems thinking in health: realist evaluation of the Leadership Development Programme for district manager decision-making in Ghana. *Health research policy and systems*, 12(1), 29.

Laar, A. K., Adler, A. J., Kotoh, A. M., Legido-Quigley, H., Lange, I. L., Perel, P., & Lamptey, P. (2019). Health system challenges to hypertension and related non-communicable diseases prevention and treatment: perspectives from Ghanaian stakeholders. *BMC health services research*, 19(1), 693.

Mba, C. J. (2010). Population ageing in Ghana: research gaps and the way forward. *Journal of aging research*, 2010.

Ministry of Health (2008). Independent Annual Review of the Health Sector Programme of Works for 2007. Accra: Ministry of Health, Ghana.

Ministry of Health (2008). Pulling Together, Achieving More: Independent Review of the Health Sector Programme of Work 2008. Accra: Ministry of Health, Ghana; 2009. 25.

Ministry of Health (2012). Private Health Sector Development Policy. Accra: Ministry of Health.

MOH (2015) Staffing norms for the health sector. Volume 1: Clinical and support staff. Ministry of Health, Accra Ghana

Molini, V., & Paci, P. (2015). Poverty Reduction in Ghana: Progress and Challenges. World Bank, Washington, DC. © World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/2273> (accessed on 12th June, 2020)

National Road Safety Authority (2018). Statistics - Road Safety Overview. Available at <http://www.nrsc.gov.gh/index.php/statistics> (accessed on 4th June, 2020).

Nyonator, F., & Kutzin, J. (1999). Health for some? The effects of user fees in the Volta Region of Ghana. *Health policy and planning*, 14(4), 329-341.

Rifkin, S. B. (2014). Examining the links between community participation and health outcomes: a review of the literature. *Health policy and planning*, 29(suppl_2), ii98-ii106.

Snow, R., Herbst, C. H., Haddad, D., Kwansah, J., Antwi, J., & Ekey, V. F. (2012). The distribution of health workers. *Toward Interventions in Human Resources for Health in Ghana*, 49.

Waddington, C. J., & Enyimayew, K. A. (1989). A price to pay: The impact of user charges in Ashanti-Akim district, Ghana. *The International Journal of Health Planning and Management*, 4(1), 17-47.

WHO (2010) WHO Global Atlas of the world workforce. World Health Organisation, Geneva

World Bank (2020). Death Rate, Crude (per 1,000 people) Ghana. Available at: <https://data.worldbank.org/indicator/SP.DYN.CDRT.IN?locations=GH> (accessed 12th June, 2020)

World Health Organization (2014) - Cancer Country Profiles, 2014. Available at https://www.who.int/cancer/country-profiles/gha_en.pdf?ua=1 (accessed on 14th June, 2020).

World Health Organization (2014). Trends in maternal mortality: 1990 to 2013 Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. Geneva: WHO.

World Health Organization (WHO) (2007). Everybody's business - strengthening health systems to improve health outcomes: WHO's framework for action. WHO; Geneva. http://www.who.int/healthsystems/strategy/everybodys_business.pdf



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