Literature Review

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To

World Health Organization (WHO)

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List of Abbreviations/Acronyms

CHAG	Christian Health Association of Ghana
CS	cesarean section
IHME	Institute of Health Metrics and Evaluation
MMR	maternal mortality rate
MNH	maternal and newborn health
MoFEP	Ministry of Finance and Economic Planning
MoH	Ministry of Health
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NMR	neonatal mortality rate
OOP	out of pocket payment
PPP	public private partnership
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

2.1 Introduction

In most countries, the private health sector serves more than half of the population representing a major segment of the health sector and plays a significant role in the delivery of health services including sexual and reproductive health services (National Academies of Sciences, Engineering, 2018). The sector compliments the efforts of governments in increasing utilization of health services through improvement of particularly geographical access and to some extent access to finance towards the provision of quality healthcare specifically maternal and newborn care. It also has the potential of accelerating the efforts of governments towards the attainment of quality Universal Health Coverage (UHC). Among women aged 15-49 years, the private health sector contributes substantially towards the provision of family planning services in countries such as Asia (45%), the Caribbean and Latin America (44%) while sub-Saharan Africa contributes less than a third (28%) (Ugaz et al., 2016). However, the market share of family planning is more than 60% in Nigeria and the Democratic Republic of Congo (Dennis et al., 2018). One in five births in LMIC occurred with care provided by the private sector (Powell-Jackson T, Macleod D, Benova L, Lynch C, 2015).

The quality of health services varies considerably inspite of the expanding role of the private sector in many countries including Ghana. As part of efforts in accelerating progress towards the attainment of the SDGs, there is the need for continuous investment by both the public and the private sector towards increasing coverage, ending preventable deaths of mothers and newborns, and ensure that quality healthcare is provided sustainably at scale. It has become an imperative to ensure that the private sector and the public sector is effectively and sufficiently engaged to ensure the optimization of the use of the available resources to ensure the delivery of the desired healthcare outcomes. The private sector presents enormous opportunities in ensuring that coverage of and access to services are improved to meet national and international standards. Public-private engagement is defined as one involving a “deliberate, systematic collaboration of the government and the private health sector according to national health priorities, beyond individual interventions and programs” (Thomas et al., 2016; pg.V). Some of the areas of great potential that requires immediate attention and investigation includes how the private sector is engaged and contributes towards the implementation of quality of care standards, development and identification of best

practices towards the delivery of quality healthcare for mothers and newborns, and health systems strengthening.

Sometimes the private sector is not sufficiently engaged for the desired care outcomes mostly because of numerous reasons that could include the inadequate knowledge, skills and abilities; lack of tools to create and facilitate the required partnership; obstacles in the legal and regulatory environment of the country to sometimes use public sector funds to contract private providers. In order to ensure that countries such as Ghana derive the maximum benefits from the private health sector especially in the area of the provision of primary healthcare which could be adopted for maternal and newborn care as well, a 5-step engagement approach is suggested to include the following:

1. Initial communication and partnership between the public and private sector
2. Mapping of providers
3. Regulation, accreditation, or empanelment of providers and facilities
4. Contracting and payment of providers
5. Monitoring and evaluation of PHC systems or by extension MNH systems (Thomas et al., 2016).

The need for countries like Ghana to facilitate and ensure the development of effective partnerships between the public and private health sectors to ensure the provision of quality maternal and newborn care is therefore imminent and cannot be overlooked.

2.2 Ghana's health system

Ghana operates a pluralistic health system. In this system, the public sector primarily provides orthodox care while the private sector (self-financing, FBOs, CSOs, NGOs etc) provides varied types of services that include orthodox, traditional and alternative medicines (NHP, 2020). The private sector in Ghana like in India provides mainly curative health services other than preventive services mostly because of the lack of interest, personnel, compliance from patients and incentives from government (Thomas et al., 2016).

In Ghana, health service delivery is the responsibility of the GHS, faith-based organizations (FBOs) (including CHAG and Ahmadiyya Mission) and the five teaching hospitals. The quasi-government facilities is another category of healthcare providers. There has been significant expansion in the provision of health services in the last two decades particularly in the private and FBOs. Ghana has designated another level of care, the Community-Based Health Planning and Service programme (CHPS), as part of its efforts to improve geographical access to quality and safe care. The activities of private and FBOs are overseen by the GHS in regions and districts through the Regional/District Health Directorates. All FBOs, particularly CHAG, have facilities based primarily in rural and underserved areas of Ghana to facilitate the provision of primary health care. Tertiary and specialists' services are provided at the teaching hospitals and also act as main referral facilities.

Healthcare has remained an important priority for successive governments over the years. This is evidenced in various efforts at improving both geographic and financial access, increasing the quantity, quality and distribution of human resource and the annual expenditure on health (University of Ghana, 2018). Ghana took a significant step to improve the quality of its healthcare in 2016 with the development and implementation of a National Healthcare Quality Strategy (NHQS). In 2003, the Ministry of Health (MoH) developed a Private Health Sector Policy that sought to properly appreciate the significance and worth of the private sector for improved quality of care (QoC). The Health Sector Medium Term Development Policy Framework (HSMTDPF) (2014-2017) was developed two years after the revision of the Private Health Sector Policy in 2012, based on the National Medium-Term Development Policy Framework (NMTDPF) that defined the medium-term vision and development for Ghana. The NMTDPF identified seven priority areas of which one was "to enhance competitiveness of Ghana's Private Sector" (MOH, 2014, pg. i). In response to the NMTDPF (2014-2017), the health sector developed HSMTDPF to provide a basis for planning and a framework to guide the implementation of priority programs by public and private sector providers.

The MoH followed the process with the establishment of a Private Health Sector Unit and facilitated the recognition of the private sector by regularly inviting members of the private sector to annual health summits and other national health sector events (Ministry of Health, 2014). The

Unit has the responsibility of ensuring the coordination of all private sector related activities of the ministry and the implementation of the Private Health Sector Policy. It is further tasked with the responsibility of providing the needed "support to facilitate the effective and efficient implementation of the policies, programs and projects of the health sector" (Ministry of Health Ghana, n.d.). The MoH has noted modest institutional successes over the implementation period, particularly in the area of ensuring that mechanisms are available to engage public and private healthcare providers. For instance, public and private facilities have demonstrated respect for and adherence to the standards and requirements for opening health facilities.

Furthermore, the MoH's public-private partnership arrangement with the Christian Health Association of Ghana (CHAG) is working well with the latter invariably becoming an extension of the Ghana Health Service (GHS) in underserved communities. There is also the National Healthcare Quality Steering Committee (NHQSC) tasked to support the National Quality Management Unit (NQMU) to accelerate the implementation of the National Healthcare Quality Strategy, and it has a representative from the private sector. Private associations also represent health professions and providers, and private schools have contributed significantly to the supply of various categories of healthcare workers such as doctors, nurses, pharmacists, physician assistants and allied health professionals. There is also the credentialing program of the National Health Insurance Authority (NHIA) that systematically ensures that aspects of quality and patient safety are addressed in both the public and private health sectors (Ministry of Health, 2014).

Insufficient involvement of the private sector affects policy formulation, planning and program implementation in spite of the increase in collaboration since the development of the policy. Though the MoH has a private sector desk to facilitate policy coordination and dialogue between the public and private sectors, the desk has inadequate staff and resources. There are also duplication of efforts and inadequate opportunities to leverage on the experiences and expertise of the private sector, including to share best practices and to use resources efficiently. Above all, there is a lack of trust and mutual suspicion between the public and private sectors. Successful public-private partnerships are possible only when there are clearly defined roles for the private sector to play in helping to achieve Universal Health Coverage (UHC) within a strong and transparent regulatory setting (Wadge, H., Roy, R., Sripathy, A., Prime, M., Carter, A., Fontana,

G., Marti, J., & Chalkidou, 2017). It is suggested for instance that, the desired health outcomes and level of healthcare is yet to be achieved in Ghana because it has not comprehensively addressed all the key determinants of health particularly in ensuring effective multi-stakeholder collaboration and partnership with all the key actors (Ministry of Health (MoH), 2020c).

2.3 Definition of the private health sector in Ghana

In Ghana, the private health sector is defined as any non-governmental health actor including private self-financed (also referred to as for-profit), not-for-profit, and mission-or faith-based facilities involved in delivering health services directly, the supply of inputs (e.g., pharmaceuticals, equipment), health training institutions and research, informal and traditional providers, education and promotion of health and financing (Makinen et al., 2011; MoH, 2013). The private sector can thus be classified into two broad groupings: for-profit and not-for profit. The not-for-profit group includes charities, social enterprises, foundations and organizations that are non-governmental or faith-based. Social motives and profit often inform the operations of for-private organizations. The private sector can either be national or multinational; individuals, clinics or hospitals; and they can be involved as providers (hospitals or clinics), associated industries (pharmaceutical provision) or payers (insurers) (Wadge, H., Roy, R., Sripathy, A., Prime, M., Carter, A., Fontana, G., Marti, J., & Chalkidou, 2017).

The private health sector in Ghana emerged in the 1980s when there was visible deterioration of public health services due to government's inability to maintain the provision of free healthcare services. The situation further exacerbated with the World Bank and IMF prescription for the country to commence the implementation of a Structural Adjustment Program which required "government to reduce expenditure and to share cost which meant levying significant user fees for healthcare" (Adisah-Atta, 2017).

In Ghana, a public-private partnership (PPP) is defined as "a contractual arrangement between a public entity and private sector party, with clear agreement on shared objectives for the provision of public infrastructure and services traditionally provided by the public sector," (Ministry of Finance (MoFEP), 2011, pg. 2). The private sector is complementing the efforts of government in the provision of public services such as healthcare and infrastructure with its expertise and finance. Mindful of this, the government of Ghana has introduced and is implementing varied mechanisms

and reforms with respect to the laws, finance, incentives and other institutional support to encourage the private sector to provide these public goods in order *"to improve the quality, cost-effectiveness and timely provision of public infrastructure and services in Ghana"* (Ministry of Finance (MoFEP), 2011, pg. 1 italics added).

The public and private health sectors are inseparable and pursuing PPP remains a viable option to be taken by governments. In Ghana for instance, there is no policy yet against dual practice—"public sector health professionals chiefly doctors, pharmacists and nurses operate parallel private health services, charging premium rates for specialist consultation and treatment"(Aikins & A, 2017;pg.374). This practice was banned during the era of Dr. Kwame Nkrumah, the first president of Ghana but if resurfaced after his overthrow in 1966. Hence, members of staff are able to work in both the public and the private sectors simultaneously. This practice has inevitably contributed towards the expansion of the private sector in Ghana but the downside is that the public sector often suffers whenever providers have coinciding shifts. The practice also impacts on the quality and continuity of care (Aikins & A, 2017). This situation is similar in other LMIC such as India (National Academies of Sciences, Engineering, 2018).

2.4 Size and scope of the private health sector in Ghana

In Ghana, private health care is one of the fastest growing segments of the healthcare system, and private providers (i.e., non-government providers for profit individuals, facilities and businesses) are an important source of healthcare. Unfortunately, there is no consensus on the size, scope and the performance of Ghana's private. However, it is suggested that, it is the second largest provider of outpatient department (OPD) services after government providers, contributing about 42% of services (Ministry of Health (MoH) Ghana, 2014; MoH, 2013). It is believed for instance that about a third of Ghana's health sector is owned by the private sector (Institute for Health Metrics and Evaluation (IHME), 2015) while another assessment by McKinsey (2008) estimates that the private sector contributes about 50% in the provision of healthcare in Ghana. A publication by Pharmaccess foundation however shows that the private sectors share of ownership is about 38% (PharmAccess, 2016). These inconsistencies suggest the need to improve upon the collection of the requisite data on the performance of the private health sector in Ghana. Unfortunately, HeFRA, the institution clothed with the mandate to among others address such anomalies in the size, scope and performance of both the public and private sector does not even know where some of the

facilities are located (HeFRA, 2019). Presently, not all private health facilities in the country are routinely reporting the performance of their service delivery into DHIMS.

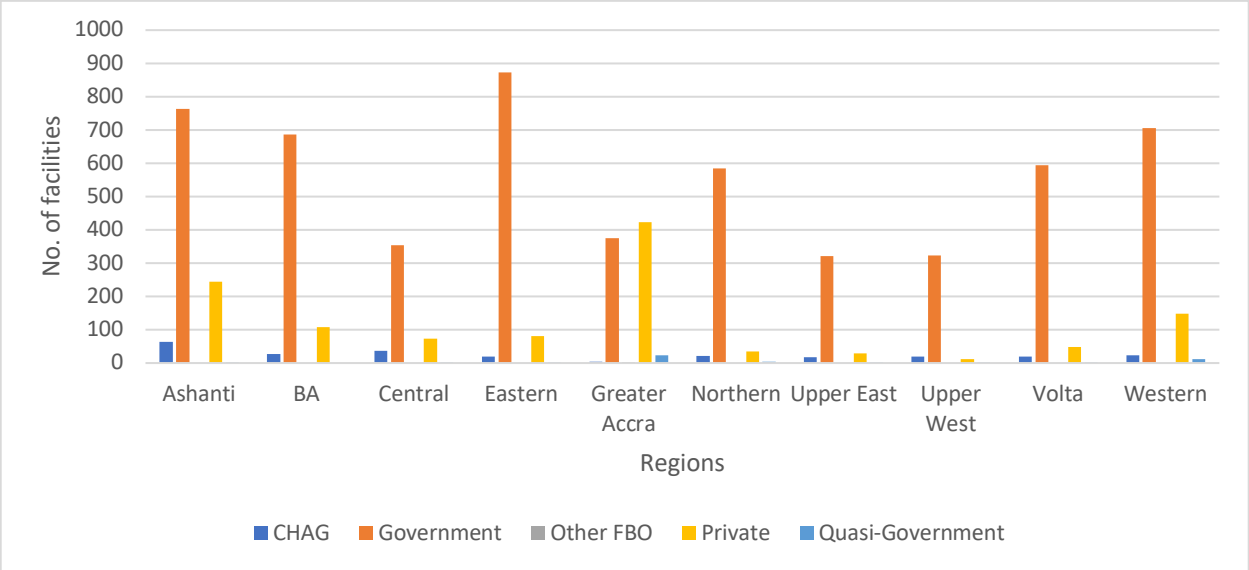
A large number of informal providers also practice in Ghana, and the scarcity of accurate and reliable data makes it difficult to give the true size and scope of these providers. Globally, the size of the informal private sector varies from "55% in Uganda, 70% in rural India and as high as 87% in Bangladesh" (National Academies of Sciences, Engineering, 2018, pg. 170-172).

Between 2007 and 2011 for instance, there was a 65% increase in inpatient visits in private facilities other than a 44% increase in regional referral hospitals in Ghana (IHME, 2015). In 2017, the public sectors share of outpatient services declined to 59% while that of CHAG and the self-financing private sector's share were 28% and 21% respectively. There has also been an observed decline in the per capita outpatient attendance by about 8% over the 2016 performance of 58% (MOH Ghana, 2018). The Christian Health Association of Ghana (CHAG) which is the largest Faith-Based private sector network contributed 22.0% and 32.1% to the national outpatient and inpatient attendance respectively (Christian Health Association of Ghana (CHAG), 2019). They have made the most significant contribution to the provision of healthcare and investments in the rural areas (Aikins & A, 2017).

Interestingly, the private sector's services and share keep growing, contributing significantly to improved geographical and financial accessibility to quality and safety. Out of the 7,089 total hospital beds in 2016, 20.5% was owned by the private sector. Of this total, the self-financing private sector owns 16.9% while the CHAG owned 3.6% respectively. This figure is about a 2% increase from that of 2012. This figure could however be more for the private facilities (faith-based and self-financing) because the authors admit that, "data for quasi-government, Islamic and private hospitals are incomplete". Less than 5% (i.e. 3.6%) of this was however owned by the CHAG (Ghana Health Service, 2018; WHO, 2013). The public sector's share of the health sector has however seen a considerable increase from 75% in 2013 to about 79.0% in 2016 (GHS, 2017). In view of this, the private sector lags behind the public sector in terms of aggregate demand for healthcare services because of the elaborate and extensive network of infrastructure of the public sector in Ghana. The role of the public sector continues to increase. Government recently for

instance announced the construction of 88 district hospitals in 2020 to cater for the approximately 88 districts that are without one (Ministry of Health (MoH), 2020a). The role of the public sector healthcare systems however seems to be declining because of the eroding trust and confidence of the public in the quality and safety of care being provided in recent times (Anabila et al., 2019).

Figure 1: Distribution of health facilities by ownership in Ghana

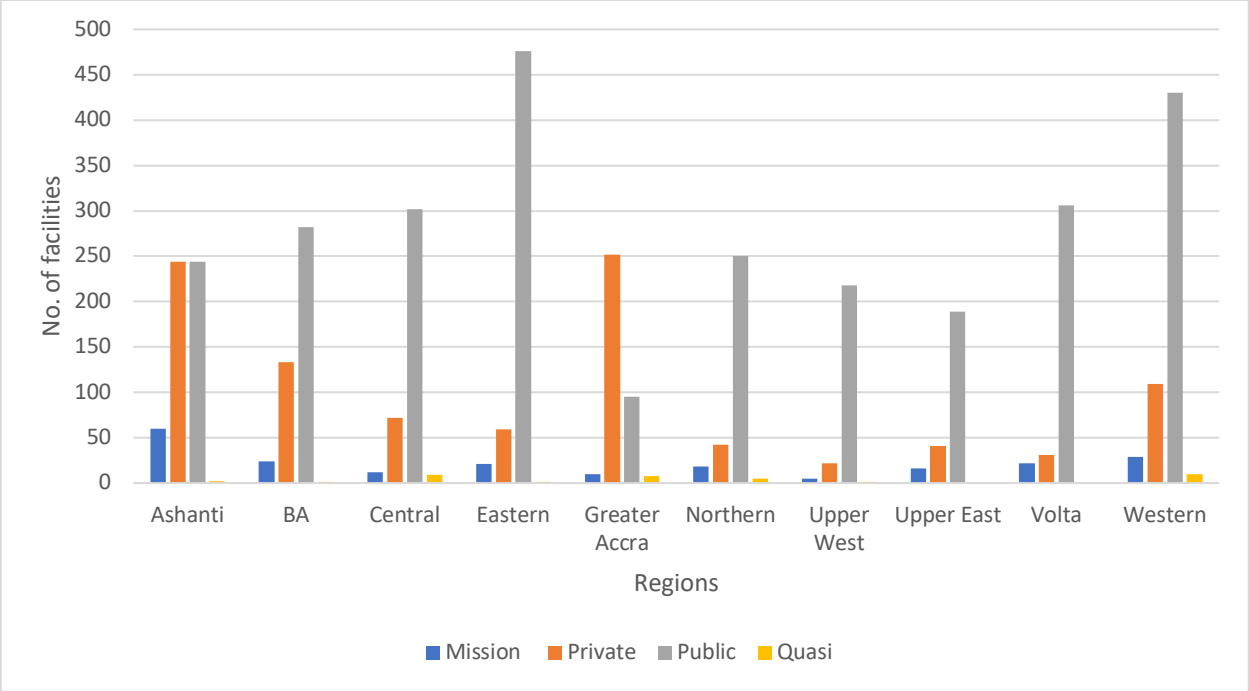


Source: GHS Facts & Figures, 2017

It is however noteworthy that, the facilities (both public and private) are inequitably distributed across the country. Greater Accra and Ashanti regions alone have more than half (55.6%) of the total number of private (self-financing) facilities in Ghana (Figure 1). Similarly, of the total number (289) of private health facilities (self-financing) registered with the SPMDP, 60% are located in Greater Accra while the rest of the country shared the remaining 40% (Figure1) affirming the long-held views that, private provider facilities particularly the self-financing ones are geographically located in wealthier and peri-urban areas in the country. The Ashanti Region has the highest number (1075, 15.2%) of health facilities in Ghana. It has a quarter (64, 25%) of CHAG facilities and 13.7% of the total government facilities. There were a total of 325 CHAG facilities in Ghana (Christian Health Association of Ghana (CHAG), 2019). Also, of the total number (i.e. 4051) of credentialled health facilities by the NHIA by March, 2020, a quarter (25%, 1005) are self-financing while 69% (2792) are public facilities. The FBOs constitute a little over

5% (217, 5.3%). Again, majority of the NHIA credentialled facilities are located in Greater Accra and Ashanti regions respectively (NHIA, 2019) (Figure 2).

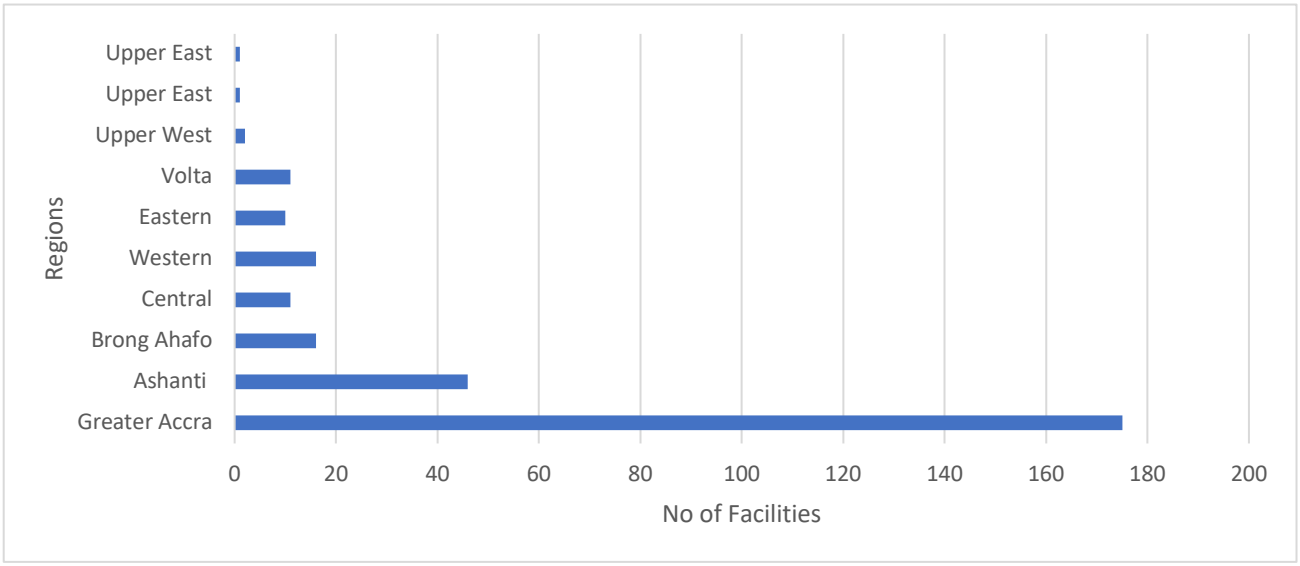
Figure 2: Distribution of NHIA Credentialled Facilities by Regions and Ownership, March 2020



Even though the private health sector in Ghana is highly patronized by the population evidenced in its size, it is insufficiently, less effectively organized and often times underutilized when it comes to accelerating the provision of the desired health outcomes consistent with the priorities of the health sector.

The impact of the private health sector in the delivery of safe and quality care cannot be overemphasized, particularly because of its diversity and size. There is a need to bring more members of the private sector on board and to encourage the sector to grow to its full potential, if Ghana is to attain UHC.

Figure 3: Distribution of SPMD Registered Private Health Facilities in Ghana, 2019



Source: SPMDP Secretariat, 2020

2.5.0 Policies, strategies and plans related to MNH, quality of care and the private sector

Since 2004, Ghana has developed specific policies to strengthen the partnership between the public and private sectors, to improve the investment climate and to develop the private sector generally. The policies have also sought to improve the quality and care outcomes, increase access and utilization of health services. Some of these policies include: the National Health Policy (2007, 2020), the Private Sector Development Strategy I&II (2004; 2009), the National Public-Private-Partnership Policy Framework (2011), the Private Health Sector Development Policy (2003; 2013), the Child Health Policy (2007-2015), the National Newborn Health Strategy and Action Plan (2014-2018) and the Ghana MDG Acceleration Framework (MAF) (2015).

The National Health Policy (2007; 2020) is one of the health sector specific policies that strongly articulates and advocates for a partnership between the private and public sectors. The document further emphasizes the need to attain the desired health outcomes including those for maternal, newborn and child health (MNCH). One of the key features of the policy is to "build a pluralistic health service that recognizes allopathic, traditional and alternative providers, both private and

public," (MoH, 2013, pg. 7). In January, 2020, a new National Health Policy was developed drawing on Article 34 of the 1992 constitution which requires the state to "ensure the realization of the right to good healthcare for people living in Ghana irrespective of their color, race, geographical location, religion, and political affiliation" (Ministry of Health (MoH), 2020; pg.16). As a goal, the policy seeks to facilitate the promotion, restoration and maintenance of "good health for all people living in Ghana" (Ministry of Health (MoH), 2020; pg.16). The policy is guided by 5 main policy objectives with one of the key strategies being to facilitate the establishment of a mutually beneficial public-private relationship. This is very necessary because of the pluralistic nature of the healthcare system of Ghana and the need to foster the necessary synergy to accelerate improvement in care outcomes. In view of this, the policy indicates that: "*the healthcare delivery system, at all levels, will work in formal strategic partnerships with the local government systems as well as* ***private sector stakeholders*** *(CSOs, health and non-health industry players). Pluralism in service delivery will be encouraged and supported*" (Ministry of Health (MoH), 2020; pg.23 italics & bold added). Strategic partnerships with "non-state actor (CSOs, industry, development partners, FBOs, etc)" in all its forms" is identified as one of the five guiding principles and recognized as key to ensure the delivery of the necessary health and wellness interventions for the people (Ministry of Health (MoH), 2020; pg.17).

As a way of strengthening healthcare delivery and ensuring resilience, the Ghana National Health Policy seeks to ensure that: "services will be delivered, through an enhanced coordinated network of facilities (CHPS compounds, health centers and hospitals etc), both public and private, that collectively provides the appropriate package of healthcare services (preventive, promotive, curative, rehabilitative and palliative using a life-course approach) to the population". Furthermore, it seeks to ensure that, "a robust and sustainable [culture of quality] is institutionalized in the healthcare delivery system with clear measurable standards in terms of safety, timeliness, efficiency, effectiveness, equity and patient-centeredness" (Ministry of Health (MoH), 2020; pg.17-18).

The National Newborn Health Strategy and Action Plan (2014-2018) is one of the first and few sector specific policies and strategies that focuses on improving newborn outcomes in Ghana. The strategy has the goal of "reducing neonatal mortality from 32 per 1000 live births in 2011 to 21

per 1000 live births in 2018 and to also reduce institutional neonatal mortality by at least 35% by 2018" (Ghana National Newborn Health Strategy & Action Plan, 2014-2018; pg. 38). Unfortunately, this goal is yet to be achieved (Figure 5). The neonatal mortality rate in 2017 was estimated as 25 per 1000 live births (Ghana Statistical Service, Ministry of Health, 2017). The priority areas of this strategy include ensuring that every newborn receives basic preventive care and are also prevented from dying from any of the 3 major causes of newborn deaths which include complications of prematurity and low birth weight, adverse intrapartum events such as birth asphyxia and infections. The policy, as part of the process of ensuring successful attainment of the goals envisions the constitution of a national sub-committee for newborn care (SCNC). The membership of this committee did not however include representation from the self-financing private sector though it acknowledges the need for an expansion. There is however an acknowledgement of the need to bring the private sector fully on board and provide them with the needed support to facilitate the attainment of the newborn outcomes. This is evidenced in one of the key strategies in the plan as "strengthening public-private partnerships" (Ghana National Newborn Health Strategy & Action Plan, 2014-2018; pg. 50). Incidentally, a new National Newborn Health Strategy and Action Plan (2019-2023) have been developed to consolidate the gains made in the past. This new strategy seeks to further reduce the NMR from "25 per 1000 live births in 2017 to 18 per 1000 live births in 2023 (5%/year)" (Ministry of Health (MoH), 2020a; pg.30). It is noteworthy that, this strategy identifies the inadequate involvement of private health sector facilities and other key stakeholders such as obstetricians; inadequate data capture from the private sector, some teaching hospitals and FBOs; as well as "inadequate investment by the private sector due to weak resource mobilization"(Ministry of Health (MoH), 2020a; pg.15) as some of the key bottlenecks that made it impossible to attain the main in the first strategy (2014-2018). In view of this, one of the main guiding principles of the strategy is to foster strong partnerships "including public-private ones" at all levels and with all stakeholders (Ministry of Health (MoH), 2020a; pg.34). One of the strategies is also to "strengthen inclusive partnership, including public-private partnerships" (Ministry of Health (MoH), 2020a; pg.35). The new strategy has further made improvement in the "quality of newborn care" at the facility level and "to promote more holistic care for newborns" as its focus (pg.19). One of the desirables is to see to it that, "at least 75% of all healthcare facilities provide the required compassionate, quality package of healthcare services…" (pg.30).

The Private Health Sector Development Policy which was developed in 2003 and 2013 specifically looks at the role the private sector can play in the delivery of quality healthcare and how it can better influence the private sector's development to ensure that Ghana's health sector goals and objectives are met. It is guided by national and health sector procedure, policies and legislation (MoH, 2013). Unfortunately, much of the agenda of this policy is yet to be fully implemented seven years after its adoption.

Maternal mortality is an important indicator for measuring the socio-economic conditions of women and girls, and the strength of the health system with respect to access (cost and geography) and the availability of health infrastructure for the prevention of maternal mortality (Beyai et al., 2013). In 2010, the MoH and its agencies in collaboration with its development partners developed the MAF strategy and operational plan as a national response to towards the MDG 5 by 2015. The aim of the strategy was to "augment implementation of the maternal and child health program with the objective of attaining the MDG indicators and targets" (Ghana Ministry of Health, 2014; pg.6). it focused on improving maternal health at the community and institutional levels "using evidence-based, feasible and cost-effective interventions in order to achieve accelerated reduction in maternal and newborn deaths. [The strategy focused on 3 key priority interventions which included] improving family planning, skilled delivery and emergency obstetric and newborn care" (Ghana Ministry of Health, 2014; pg.6) and assumed that "EmONC and child spacing will have a string impact on neonatal and infant mortality Unfortunately, and inspite of the huge investments, Ghana could not achieve the MDG 5 targets of halving its maternal mortality from 380 per 100,000 live births (in 2013) to 190 per 100,000 live births (by 2015) (Beyai et al., 2013; Ghana Statistical Service, Ministry of Health, 2017; HeFRA, 2019). It is noteworthy that, other than CHAG, the self-financing private sector was completely missing in the MAF implementation efforts in the country. There was no mention of them in the 2015 National Strategy and Operational Plan (HeFRA, 2019).

Five domains are identified by the International Finance Corporation (IFC) as the main areas of engagement between the public and the private sectors and these include: "policy and dialogue and the degree to which the private sector is [involved] in discussions [with respect to] policies

and practices of the health sector; information and data exchange; regulation; financing—which includes funding and purchasing; and public provision of services (Thomas et al., 2016).

2.5.1 Regulatory & Legal Framework related to MNH, QoC and the private sector

Regulatory activities in Ghana's health sector focuses on protecting the client/consumer by ensuring that the required and appropriate human resource are available in adequate numbers to provide care at the point of service in a conducive environment. Regulation also ensures that agencies that deliver healthcare services meet the minimum prescribed standards (Makinen et al., 2011; MoH, 2013). The regulatory agencies in Ghana include the Health Institutions and Facilities Regulatory Authority (HeFRA) whose object is to "license and monitor facilities for the provision of public and private health care services" (Health Institutions Act 829 Facilities Act , 2011 Act 829 Health Institutions and Facilities, 2011); and the Traditional Medicine Practice Council that is tasked to ensure that the marketing, use of products and the practice of traditional medicine in Ghana are regulated and controlled (Ministry of Health Ghana, 2018). Other regulatory agencies include the Centre for Research into Plant Medicine that seeks "to make herbal medicine a natural choice for all." Its mandate includes conducting and promoting scientific research into herbal medicine and providing quality control and technical support to institutions and individual herbalists (Centre for Plant Medicine Research, n.d.). The Food and Drugs Authority (FDA) is tasked with responsibility "for the regulation of food, drugs, food supplements, herbal and homeopathic medicines, veterinary medicines, cosmetics, medical devices, household chemical substances, tobacco and tobacco products and the conduct of clinical trials" (Food and Drugs Authority, n.d.). The Pharmacy Council is mandated "to secure in the public interest the highest standards in the practice of pharmacy in Ghana," (Pharmacy Council, 2017). The Nursing and Midwifery Council (N&MC) seeks to "secure in the public interest the highest standards of training and practice of nursing and midwifery" (Nursing and Midwifery Council, 2020). The Medical and Dental Council (MDC) is the statutory body tasked by law "to secure in the public interest the highest standards in the training and practice of medicine and dentistry" (Medical and Dental Council, n.d.). The Allied Health Professions Council (AHPC) is tasked to "regulate the training and practice of Allied Health Professions in Ghana and to grant professional accreditation for all Allied Health Programs" (Allied Health Professions Council, 2018).

Professional associations like the Community Practice Pharmacist Association (CPPA), Ghana Medical Association (GMA), Ghana Registered Nurses Association (GRNA), Ghana Association of Medical Laboratory Scientist (GAMLS) and civil society organizations are all involved in one form of regulation or the other of both the public and private health sectors. In Ghana, the same laws govern public and private health sector regulation and notable among these laws is the Health Institutions and Facilities Act, 2011 Act 829 which establishes the Health Facilities Regulatory Agency (HeFRA). The object of HeFRA as curled from Act 829 *"is to license and monitor facilities for the provision of* ***public and private healthcare services****"* (Pg. 5). Until the promulgation and coming into effect of the HeFRA law, it was only the private health sector (i.e. private hospitals and maternity homes) that was regulated by the Private Hospitals and Maternity Homes Act, Act 9 which was enacted in 1958. Regulation of the health sector in Ghana include facility licensing before they are opened by the HeFRA and credentialing and/or provider certification or accreditation by the various professional regulatory councils and the National Health Insurance Authority (NHIA) for health facilities that would like to provide healthcare to health insurance (for both public and private) card holders. This NHIA role was changed by Act 852, the National Health Insurance Act, 2012 to "grant credentials to healthcare providers and facilities that provide healthcare services to members of the National Health Insurance Scheme" (National Health Insurance Act, 2012, Act 852; pg. 7). The standards from HeFRA are the minimum national standards any health facility (public or private) has to meet before the commencement of the provision of healthcare service.

The question that is often asked however is, what is the right regulatory oversight for countries like Ghana with weak regulatory mechanisms to protect populations and to ensure that quality of care and safety standards are met or strictly adhered to while at the same time encouraging innovation and involvement from the private sector? The paucity of regulations and inconsistency among the existing regulations presents significant barriers and risks to quality of care and patient safety. Strong leadership and management are required when using regulatory mechanisms and systems to establish accountability and to improve quality of care (Kruk et al., 2018). Unfortunately, the regulatory institutions in Ghana are weak in their ability to enforce their required mandate. This is even deepened by the various independent Acts that establishes or creates them, the absence of a visible cross-collaboration and synergies that should have existed

coupled with very little influence from the MoH. The regulatory agencies are therefore operating more in silos making it difficult for the health sector to derive the required maximum benefit from its regulatory efforts. Similarly, there have been weaknesses in the MoH's own capacity to facilitate the development of effective and appropriate legislation to ensure the regulation of professionals and their practice (NHP, 2020). In Ghana however, there are capacity and resource-related limitations of regulatory bodies to accredit, license, renew, monitor, supervise, enforce and provide technical support. HeFRA, the institution legally clothed with this mandate was able to license only 724 facilities and also registered 614 facilities in 2018 out of the over 4000 health facilities scattered all over the country. They (i.e. HeFRA) indicated that, this was mainly due mainly to their inability to locate some of the facilities and inadequate capacity in the areas of staffing and equipment (HeFRA, 2019). This raises further concerns about the extent of collaboration between the agencies particularly between HeFRA and the regional/district health directorates of the GHS who have primary jurisdiction!

Further, partnerships between and among some of the regulatory agencies (such as NHIA and HeFRA) and private providers are weak, although there have been great strides at addressing many gaps that exist to provide quality and safe care in both public and private healthcare facilities.

A mechanism is needed to unite all the regulatory domains, such as human resources, facilities, service delivery, supplies and products, so that this mechanism covers different institutions (Akhtar, 2011; Makinen et al., 2011; Ministry of Health, 2014). This mechanism should also have the ability to monitor how healthcare providers shuttle between public and private practices. Professional associations should be able to institute mechanisms to sanction their errant members whenever they fail to meet minimum standards (Kruk et al., 2018). This approach will be one of the many ways of ensuring improved performance of their members (Akhtar, 2011; Rochefort et al., 2017). In Ghana, like many LMIC, self-regulation is often underutilized. Professional organizations in high-income countries often advocate for their members, and their self-regulation promotes a "sense of accountability among professionals to people, and reduces transaction costs for governments," (Kruk et al., 2018, pg. e1233). A typical example from Canada shows that "physicians successfully self-govern all aspects of the profession, from setting nationally uniform

entrance exams to monitoring and remediating substandard clinical practice among practising physicians," (Kruk et al., 2018, pg. e1233)

The role of regulation in the provision of quality and safe care in any healthcare delivery system cannot be overemphasized. Regulatory oversight is crucial and could include the use of incentives and/or penalties to ensure compliance with the defined standards governing the quality and safety of healthcare services. These roles could be in areas such as competence, professionalism, and numbers of the health workforce required for particular types of facilities; education and training of health workers; medicines, technology and health infrastructure (National Academies of Sciences, Engineering, 2018). Relevant "safeguards and transparent oversight can enable self-regulation of prices, quality, and numbers" (National Academies of Sciences, Engineering, 2018, p. 214). Regulatory bodies should also start addressing how multiple approaches can be used to contain costs and ensure improvement in quality of care outcomes.

2.5.2 Leadership & Governance

Leadership, governance and management is a key health system priority area in Ghana. The Ministry of Health provides the overall leadership, direction and high-level planning for the health sector in Ghana. It is also responsible for developing national policies, strategies and priorities across the entire health sector (i.e. public, private, development partners, FBOs/NGOs and health-related agencies). One of the key strategic objectives of the NHQS (2016) is to *"create a sustainable leadership and governance for quality planning, quality control and quality improvement at all levels of the healthcare system"* (Ministry of Health (MoH) Ghana, 2016 pg.20). Leadership in the areas of quality improvement and quality assurance are led by the service delivery agencies notably the Ghana Health Service, Teaching Hospitals, FBOs and the self-financing private sector. Leadership of the health sector is seen across the various levels of the healthcare delivery system i.e. national, regional and district respectively. Regional and District Health Directorates are responsible for the provision of quality and safe care at those respective levels.

The self-financing private health sector is highly fragmented, with most of the facilities being sole proprietors and often made up of private medical practitioners. The MoH established the Private

Health Sector Alliance of Ghana (PHSAG) as a coordination platform to bring all the self-financing private sector actor to the table. Unfortunately, this did not see the light of day because of suspicion and the lack of or inadequate consultation among the stakeholders in the private sector space (Thomas et al., 2016). The self-financing private health sector is often characterized by poor management capacity, inadequate quality assurance/improvement, and inadequate access to finance which often leads to unsustainable business performance and poor patient outcomes similar to the situation in Nigeria (Makinen et al., 2011; National Academies of Sciences, Engineering, 2018). There are currently different private health provider associations in Ghana which include the Society for Private Medical and Dental Practice (SPMDP) whose membership is made up of medical practitioners; the Responsive Healthcare Service Providers Association of Ghana (ROPHESPAG) consisting of pharmaceutical companies and outlets, hospitals, clinics, maternity homes, and investigations and images companies in Ghana; the Private Health Providers Association of Ghana (PHFAG) (Nyabor, 2019) and the Health Insurance Service Providers Association (GhanaWeb, 2020a). Of these, the Ministry of Health recognizes and works with the SPMDP. Unlike the Christian Health Association of Ghana (CHAG) which is a network of 325 health facilities owned by 33 Christian denominations in Ghana. For CHAG, this is recognized as one of its key strengths- diversity of its membership! CHAG is recognized as an agency and an implementing partner of the ministry of health but is an advocate and takes independent position on issues in the health sector (Christian Health Association of Ghana (CHAG), 2019). CHAG has an Executive Secretariat tasked to represent the interest of its network and support its members to achieve the stated goals and objectives.

Unfortunately, these splinters and varied associations representing the private health sector in Ghana often times makes it difficult for the sector to harness its full potential and contribute meaningfully to the development and influence the implementation of the appropriate policies and strategies that would inure to the health sector of the country.

Quality of care outcomes such as mortality, average length of stay, high organizational culture and patient satisfaction can greatly be improved with effective leadership (Sfantou et al., 2017). Leadership failings have been cited in the occurrence of many poor outcomes of care that occur in healthcare environments/settings (Lee & Scott, 2016; Neale et al., 2001; Otchi et al., 2019).

Similarly, Brown (2019) noted that, the failings of healthcare governing boards and senior management to provide the requisite oversight, guidance and to respond promptly to quality and patient safety issues are a major factor that contributes to the occurrence of preventable adverse events (Brown, 2019).

Governance process that influences how well the governing boards of healthcare organizations are able to make quality and patient safety governance tasks include: “board and committee orientation and skill development, agenda setting, reviewing data reporting and reviewing governance effectiveness and reporting framework” (Brown, 2019; pg.8).

There is the need for hospital boards to develop incremental targets that are short-term for the monitoring of their efforts and progress. Hospital boards should gravitate towards the use of "zero harm targets"(Brown, 2019, pg. 10) for their aspirational goals other than the "use of aspirational no-harm targets for some quality indicators" (Brown, 2019, pg. 10) which gets some board members fixated because of its "frequent trigger of red flags" (Brown, 2019, pg. 10).

2.5.3 Market competitiveness

Ghana, like many other countries, has introduced various policies and reforms aimed at advancing competition among healthcare providers and increasing the choices of the patient. Some of these policies have been directed at creating a conducive environment and incentives to attract private sector players into a sector that has traditionally been government owned and directed. Historically, healthcare provision in Ghana has been centralized and non-market oriented. Through the establishment of the NHIS for instance, the choice of the patient has significantly improved, and patients are in a unique position to drive quality of care among health facilities in the country. Until the NHIS, patients had very little choice over where they could go and receive healthcare. The NHIS began credentialing private health facilities as part of the process of creating an environment that would foster competitiveness.

A competitive healthcare market will be defined as one in which providers (i.e. sellers) and patients (i.e. buyers) engage in a relationship where there is some kind of an exchange between the actors such as providers and patients, among providers, or providers and insurers (Goddard, 2015; Lábaj

et al., 2018). Market competitiveness could be based on price and quality (or non-price competitiveness such as quality of service, quality of care, convenience, timeliness, etc.). Results of studies that demonstrate an association between market competitiveness and quality of care outcomes are mixed. Gaynor (2004), cited in Cooper 2011, showed that where prices of health services are fixed it results in improvement in the performance of hospitals (Cooper et al., 2011) while Gowrisankaran and Town (2003), cited in Cooper 2011, also revealed that an increase in competition in any fixed price market will lead to an increase in mortality for acute myocardial infarction (AMI) patients.

Similarly, the type of ownership (private versus public) could also be a basis to instigate competition (Goddard, 2015). Type of ownership could be driven by numerous factors such as: economies of scale, scope and level of spare capacity that can be tolerated; the amount of quality and unbiased information that is available and its ease of access and the willingness of patients to travel to access services (Goddard, 2015). Health sector markets are complex, large-sized and "complicated by the presence of public-private mixed services," (National Academies of Sciences, Engineering, 2018 pg. 209). The health sector, like many others, is prone to corruption and decreased quality of governance (National Academies of Sciences, Engineering, 2018). Even though there have not been significant studies on the impact of market competitiveness in healthcare, the benefits of market competitiveness cannot be overemphasized. Studies by Cooper (2011) and Gaynor, Moreno-Serra, & Propper (2013) have shown instances where market competitiveness has resulted in reduced mortality among myocardial infarction patients in the National Health Service in the United Kingdom.

Competition also helps improve efficiency and timeliness in the provision of care (Bevan & Skellern, 2011). Patients are in a position to drive quality of care in market competitive environments because of their purchasing power and choice of providers. However, in healthcare markets where providers are better informed than patients, it is likely that health providers may underprovide quality. Partnerships between public and private providers and adequate investments are often needed to accelerate improvement in the quality of care in market-competitive environments such as in Ghana (National Academies of Sciences, Engineering, 2018).

In systems where healthcare is mixed and funded both publicly and privately, these "systems tend to suffer from poor performance, such as a failure to achieve fairness in financing and equity in outcomes. This has been hypothesized to result from an interplay among three determinants: insufficient state funding for health, insufficient regulatory oversight, and a lack of transparency in governance," (National Academies of Sciences, Engineering, 2018, p. 213). It is necessary therefore to develop effective stewardship mechanisms to ensure that the services of both the public and private sectors are used for the general good of the populace (National Academies of Sciences, Engineering, 2018). There is a need to urgently increase funding for healthcare or risk commercialization of both healthcare and hospitals. One cannot assume that market forces alone can and are able to drive the desired quality and safety in healthcare, especially in the private sector.

2.6 Improved Readiness of the Private Service Providers for the Provision of Quality MNH Services

The self-financing private sector provides a parallel but an expensive alternative to the public sector. They are however saddled with numerous challenges in rural areas, mostly as a result of the high poverty rate in rural populations. Unfortunately, unlike the private not-for-profit like CHAG providers who receive some levels of support from government, there is little or no support and/or any partnership arrangement existing between the government and the self-financing private sector. The operational cost of the private sector is mainly financed by out-of-pocket payments (OOP) and claims reimbursement from the National Health Insurance Scheme (NHIS). There is, however, the need to discourage OOP as Ghana strives to attain UHC.

Other challenges confronting the private sector include: inadequate infrastructure including infrastructure of poor quality; inefficient water and electricity supply; and poor road networks and transportation services that greatly influence the location and type of services to be offered. Other financing limitations include the high cost of credit, including prohibitive interest rates from the banks; the time frame in which one is expected to pay back principals and interest on bank loans; unavailability of start-up and investment capital; and high transaction costs. Often times, the banks and financial institutions do not understand the needs of the private health sector and how they can design appropriate products to help (Makinen et al., 2011; Ministry of Health, 2014; MoH, 2013).

The private sector may need to be encouraged to invest its own resources to improve quality of care outcomes for clients. Some financing options that can be considered by the private sector include strategic purchasing that involves deciding on what service to purchase, from who to purchase and at how much as against passive purchasing; and input and output incentive contracting that was found to reduce post-partum hemorrhage by 20% in India (National Academies of Sciences, Engineering, 2018, pg. 237).

CHAG is one of few—and probably the only—private sector players that are supported financially by the government. The organization also receives donations and support in other forms from other development partners and donors. This support from the government comes in the form of paying the salary for staff and other associated costs, training, equipment supplies and subventions(CHAG, 2019). The Government of Ghana through the MoH has also developed and signed a performance contract with CHAG and by extension other agencies of the ministry (Makinen et al., 2011; MoH, 2013).

The NHIS is a social intervention program that seeks to ensure financial access to quality and safe care including MNH. It is a contributory scheme that has currently enrolled a significant number of the population than private health insurance scheme that are mostly commercial and have enrolled a very small group(NHIA, 2019). Unlike the not-for profit private sector like the CHAG, 88% and 83% of their outpatients and inpatients are all insured clients (Christian Health Association of Ghana (CHAG), 2019). NHIS reimbursements accounts for a greater percentage of the source of funding for health facilities both public and private. Reimbursements from the NHIA accounted for 51%, 71% and 49% of all funds in private and maternity clinics, and public facilities in 2011(Institute for Health Metrics and Evaluation (IHME), 2015). Incidentally, this was the same time around which Ghana introduced its Free Maternal Healthcare Policy. Generally, claims payment by the NHIS had seen a considerable decline from GHS890.44 million in 2014 to GHS855.03 million in 2016; and a 0.3% decline from GHS1143.47 million in 2017 to GHS1140.00 million in 2018. There was however an increase in 2017 (1143.47 million) because of the payment of arears to providers in order to ensure the restoration of confidence in the scheme(NHIA, 2019).

Increasing numbers of consumers continue to pay nothing at public and private health facilities in order to access healthcare services. Unfortunately, however, this trend has yet to affect OOP when such payments are required in facilities. The irony is that private health service providers are mostly in favor of the NHIS because it allows people to access private healthcare services for the first time. The tariffs for private self-financing facilities are slightly higher than the government and FBOs. However, private providers continue to express frustrations with the NHIS because of delayed reimbursements, incomplete credentialing (Makinen et al., 2011), unrealistic tariffs and political interference. The NHIA owes providers between 9 to 14 months contrary to the statutory 90 days within which they (NHIA) are supposed to have made claim payments or reimbursements. The Private Health Providers Association and the Health Insurance Service Providers Association of Ghana whose members are owed threatened the commencement of the dreaded "cash & carry" system in their facilities because of the increasing debts and their inability to purchase medicines and commodities to provide quality healthcare to their clients (GhanaWeb, 2020a).

Insurance "fraud can be committed by multiple actors within the health care system, including health care providers, government inspectors or regulators, payers (whether public or private), and even suppliers of equipment and medicines," (National Academies of Sciences, Engineering, 2018, p. 209). There have been instances of insurance fraud when health facilities submit false claims for reimbursement to insurance companies. In 2018, one medical superintendent of a district public hospital was convicted and sentenced to 10 years in prison for defrauding the NHIS to the tune of GHS 415,000 (Nyabor, 2018). An audit by the NHIS revealed how he had submitted same names of users for his private clinic and the government facility where he was the medical superintendent. Interestingly, none of the names he submitted had ever attended his private clinic (Nyabor, 2018). There have also been instances where patients have had to make informal payments to access care that have in many instances resulted in bad outcomes (National Academies of Sciences, Engineering, 2018).

Innovation and digital health technology are changing healthcare quality and safety, but the public health sector seems to lag behind the private sector in these innovations. The private health sector is making significant investments in this area. Public sector efforts are ongoing in Ghana with the government's digitization agenda working to digitize public hospitals' current paper-based

systems. Presently, two (2) teaching hospitals have gone completely paperless while the largest teaching hospital in Ghana is also in the process of complying with digitization. Its Family Medicine Department has however gone completely paperless (Korle Bu Teaching Hospital, 2019). Most of the secondary and primary healthcare facilities are yet to fully comply with the digitization requirements even though they all have systems available for reporting their healthcare data through the DHIMS.

Accountability in the health sector is weak and limited by the reporting of health service indicators, such as quality of care and user profiles in both public and private sectors. The private sector, however, offers little information about quality and quantity of care delivered. There is an urgent need to integrate and incentivize the private sector in reporting, planning and monitoring; and to also ensure the private sector's timely and reliable reporting of data (Saleh, 2013). In order to ensure that accountability and action is present in healthcare, the quality of the data must be ensured at all times. Evidence suggest for instance that, hospital boards and management that spend majority of their time to review their data and "quality performance measures [or indicators] using dashboards or balanced scorecards" and also spend a lot of time to discuss quality and patient safety related issues during their board meetings often record improved care outcomes than those who do not (Brown, 2019; pg.2). Ghana, like many countries in the WHO QoC Network, has adopted a national electronic health records system (DHIMS2) that seeks to facilitate "aggregate reporting from paper-based" registers in health facilities (Kruk et al., 2018). Even though the private health facilities are also expected to submit reports and feedback of their data to the MoH, this rarely happens. The reason for this failure is sometimes due to the MoH's inadequate enforcement of its own rules. Private providers have also suggested that, often times, the requirements for reporting are not clear. Their participation and data completion in national health management information system is often very low. However, a true "national view of health system quality requires measurement from the private sector. The exclusion of private providers restricts health system assessments" (Kruk et al., 2018, pg. e1228) and goes a long way to increase the degree of variation in data reporting and presentation making it imperative to institute clinical and internal audits to determine the issues. Occasionally however, there is reluctance on the part of the private sector to share its data with the government; however, there is also a willingness to

share data once strong mechanisms and incentives exist to do so (Bhattacharyya S, Berhanu D, Taddesse N, 2016; Kruk et al., 2018).

2.7 Improved access to and availability of quality MNH, & Coverage

Prior to the Alma Atta declaration in 1978, a strategy of health service delivery that used the services of Community Health Workers also referred to as Traditional Birth Attendants and Community Clinic Attendants worked to ensure improved service delivery outcomes at the community level in 1977 (Ministry of Health (MoH), 2016). Ghana is using the CHPS concept as a vehicle to accelerate its efforts at attaining quality UHC. The CHPS concept is a national mechanism for delivering "essential community-based health services involving planning and service delivery with the communities" (Ministry of Health (MoH), 2016; pg.13). Its primary aim is to accelerate the attainment of "reaching every community with a basic package of essential health services [including MNH] towards attaining UHC and bridging the access inequity gap by 2020" (Ministry of Health (MoH), 2016; pg.13). The program has been touted as one of the key mechanisms in ensuring that the community become involved in and own all the primary healthcare interventions to ensure the attainment of UHC. It has been found that, maternal and newborn outcomes could be greatly improved if access to quality primary healthcare services that is clinically effective and affordable is pursued(Sheff et al., 2020).

The CHPS concept was to help improve geographical access and "make basic services available "close to the client"" (Ministry of Health (MoH), 2016;pg.16) while the NHIS was to improve financial access. Ghana is the first country in sub-Sahara Africa to have established such a large health insurance scheme with the requisite financial protection safeguards as a mechanism to attain UHC (Bonfrer et al., 2016). The NHIS was "to provide access to care irrespective of one's ability to pay for certain services" (MOH Ghana, 2018). The goal of the scheme is "to attain universal health insurance coverage for all persons resident in and or visiting Ghana in an equitable manner; and to provide them with access to quality healthcare services" (NHIA, 2019;pg.12). Ghana's national health insurance scheme has evolved from a district mutual health insurance in 2011 to a national health insurance scheme through the passage of Act 654. Subscribers renew their membership annually via the payment of a processing or renewal fee (except exempt categories such as pregnant women and elderly people above 70 years) that enables them to access both public

and private healthcare facilities credentialed by the NHIA. However, there could be instances in Ghana where even though someone has registered or subscribed for health insurance, the person will still not be covered or be able to access care in any of the credentialed facilities. This issue is likely to happen in the following instances: 1) the individual has a card that is expired and has not yet renewed it; 2) the individual is waiting to complete the paperwork of her/his registration so that he/she can receive his/her card. The NHIS is also fraught with delayed "reimbursement, leading to cash flow constraints and loan defaults, particularly on the pharmaceutical supply chain," (Makinen et al., 2011, pg. 7).

It is noteworthy that in spite of the decline in private and OOP expenditures since the introduction of the NHIS in 2004 and the Free Maternal Healthcare Policy in 2008, financial risk protection remains inadequate. There have been instances where pregnant and lactating mothers and their newborns have had to pay various sums of money at antenatal care clinics, for caesarean sections, and for delivery at the point of service (Adua et al., 2017; Wang et al., 2017). The Free Maternal Healthcare aimed at increasing access of pregnant women to skilled birth attendants and facility deliveries. Prior to the implementation of this policy in 2008, Ghana's maternal mortality rate was greater than 400 deaths per 100,000 live births (WHO, UNICEF, UNFPA, 2019). This policy took away all related costs with intrapartum care in public and private facilities. This initiative has since been rolled unto the NHIA as one of its benefit packages(Institute for Health Metrics and Evaluation (IHME), 2015; MOH, 2014). Some self-financing private sector players end up charging insured clients additional fees (Makinen et al., 2011, pg. 59; Ministry of Finance (MoFEP), 2011; MoH, 2013).

Informal payments are a common phenomenon, ranging from 3% in Peru to 96% in Pakistan with variations across other regions of the world (National Academies of Sciences, Engineering, 2018, pg. 208). These payments have negative impacts on quality, efficiency and equity of healthcare provision. The practice is more prevalent in public facilities than in private not-for-profit facilities, but it is highest in private for-profit facilities in Cameroon (Kruk et al., 2018). A global need exists for a sector-wide and sector-specific approach to solving it (Kruk et al., 2018). In Ghana for instance, the private sector health services are still characterized by out-of-pocket payment at the point of service(University of Ghana, 2018).

The NHIA has a very generous exemption regime that includes SSNIT pensioners, children below the age of 18-year, pregnant women, indigents and SSNIT contributors. Pregnant women (7.1%), children below 18 (47.0%) and indigents (3.7%) altogether constitute more than half (57.8%) of the exemption's category of the scheme (MOH Ghana, 2018; NHIA, 2019). Since the introduction of the duo, there have been significant gains and impacts made even though a lot more still needs to be done. CHPS contributed about 5% of the total OPD attendance nationwide while that of insured clients also increased from 55.8% in 2010 to 82.1% in 2011 (Ministry of Health (MoH), 2016). In 2018, 27.55million and 1.65million outpatient and inpatient visits were with national health insurance (NHIA, 2019). There has been modest improvement in ANC coverage by skilled providers from 96% in 2007 to 98% in 2017 (GHS, 2017) while the rate of skilled delivery has also improved by 44% from 55% in 2007 to 79% in 2017 (Ministry of Health (MoH), 2020b). However, the regional data in some parts of the country like the Volta region leaves much to be desired. A health facility assessment conducted in July, 2018 by Sheff et al. (2020) showed that, less than 20% (i.e. 16.9%) of women with children aged 12-23months had a valid NHIS even though 86% of them had indicated in the survey that they had ever registered as members of the scheme. The total sample size used in the assessment were 11,201 women (Sheff et al., 2020). Findings from the Demographic and Health Survey show that four-fifths of women aged 15-49 years are registered with any insurance, but less than half (i.e. 46.2%) are able to access the benefits of health insurance (Ghana Statistcal Service, Ministry of Health, 2017, pg. 15). When it comes to privately purchased commercial insurance, even fewer individuals are registered (0.2%) (Ghana Statistcal Service, Ministry of Health, 2017, pg. 7). The Maternal Health Survey (2017) further revealed that men aged 25-29 years were less likely to be covered by NHIS. The national health insurance uptake in Ghana is further influenced by socioeconomic and educational status. For instance, men and women who are in the wealthiest quintile and/or with secondary or higher education are more likely to be covered by the NHIS compared to other subgroups (Ghana Statistical Service, Ministry of Health, 2017).

About 80% of pregnant women who delivered in Ghana did so in health facilities, and about 11.2% of these facility-based deliveries occurred in private sector facilities (Ghana Statistical Service, Ministry of Health, 2017, pg. 115). According to the Maternal Health Survey (2017), deliveries in private facilities saw a 3.1% increase in 2017 over that of 2014 (from 8.1% to 11.2%) (Ghana

Statistcal Service, Ministry of Health, 2014, pg.115; Survey & Indicators, 2017), and institutional deliveries increased from 54% in 2007 to 79% in 2017 (Ghana Statistcal Service, Ministry of Health, 2017, pg. 57). About 67.5% of women who delivered during the Maternal Health Survey in 2017 did so in public sector facilities, while home deliveries accounted for 20.1% of births (Ghana Statistcal Service, Ministry of Health, 2017, pg. 72). It is interesting to note however that, the percentage of women who delivered at home (20.1%) was higher than those who delivered in any private healthcare facility (11.2%). Comparatively, more doctors provide assistance during deliveries in private health facilities than in public facilities. For instance, according to the 2017 Ghana MHS, doctors assisted with 23.6% of deliveries in private facilities, while nurses/midwives assisted with 74.8% of deliveries in private facilities, according to the Ghana Maternal Health Survey (2017). Similarly, deliveries in public sector facilities were conducted by 19.4% of doctors and 78.5% of nurses/midwives (Ghana Statistcal Service, Ministry of Health, 2017, pg. 75). It noteworthy that, more nurses/midwives conduct deliveries in public health facilities than in private health facilities unlike in the case of doctors. In private facilities, cesarean section (C/S) is the main mode of delivery (17.2%, 1230 births) unlike in the public facilities (15.8%, 7384 births) (Ghana Statistcal Service, Ministry of Health, 2017, pg. 76). For instance in the CHAG Network, the C/S rate was 23.2% out of a total of 143,242 supervised deliveries in 2018, and this is higher than the national target of 6.5% and the WHO rate of 10%-15%(Christian Health Association of Ghana (CHAG), 2019). Furthermore, 99.6% and 99.1% of deliveries in the public and private facilities were assisted by a skilled provider (Ghana Statistical Service, Ministry of Health, 2017, pg. 75).

The private sector provides significant support to the malaria prevention and control efforts in Ghana. Some of these efforts include: an indoor residual program whose implementation is supported by the USAID-President's Malaria Initiative and AngloGold Ashanti, a private mining company in Ghana; intermittent preventive treatment of malaria and free administration of sulphadoxine-pyrimethamine to pregnant women as a directly observed therapy; and malaria diagnosis via microscopy (Ministry of Health (MoH) Ghana, 2014; Ministry of Health, 2014). All of these initiatives and efforts occur in both public and private health facilities across the country.

More children with fever resulting from malaria visit public health facilities (60%) than private health facilities (38%) for advice and treatment (Ghana Statistcal Service, Ministry of Health,

2014). The main public sector sources for malaria-related care include health centers (30%) and government hospitals (24%), while individuals seeking care from the private sector most frequently attend pharmacy/chemical/drug stores (27%) (Ghana Statistical Service, Ministry of Health, 2014, 2017).

Findings from the Ghana Demographic and Health Survey (2014) show that a third of contraceptive users obtained their methods from private providers, particularly from drugs or chemical shops (22%) and pharmacies (7%) (Ghana Statistical Service, Ministry of Health, 2017). Most modern contraception is delivered by the public sector (64% of current users). The findings further indicate that the private sector is a major supplier for users of pills (82%) and male condoms (89%). Public providers (77%) are likelier than private providers (33%) to share information on the side effects and what is to be done when one experiences them (Ghana Statistcal Service, Ministry of Health, 2014). It is evident that if the private providers are given the requisite support, they can complement the efforts of the government to increase accessibility to family planning commodities and products, even in rural and underserved areas (Ghana Statistical Service, Ministry of Health, 2014).

2.8 Improved Utilization

As a budding economy and an emerging middle-income country, the demand for quality services including healthcare keeps soaring. There has been a significant increase in health service utilization particularly since the abrogation of the dreaded "cash and carry" system and the subsequent introduction of the National Health Insurance Scheme (NHIS). The "cash and carry" system introduced the concept of user fees in Ghana's healthcare system which ensured that service users had to make payment at the point of service. Access to and utilization of health service became expensive to the poor and vulnerable in the society (Aikins & A, 2017). Accessibility is being defined here as "the opportunity or ease with which consumers or communities are able to use appropriate services in proportion to their needs" (Levesque et al., 2013; pg.1) and looked at from two main perspectives i.e. financial (i.e. an individuals ability to pay the monetary costs associated with medical care) and physical (i.e. the "transportation, time and search costs incurred in obtaining care" (Salkever, 1976; pg.469) access. Access is therefore ones ability "identify healthcare needs, seek healthcare services, reach the healthcare resources, to obtain or use healthcare services, and to actually be offered services appropriate to the needs for care" (Levesque

et al., 2013; pg.4). Impliedly, the more accessible a system is, the greater its utilization by individuals and the community to improve their health need (Eun Woo Nam & Ha Yun Kim, 2015). Therefore, the inadequate utilization of a service could be as a result of a lack of access or one's inability to circumvent the access barriers. This is so because access makes it possible for an individual or community to obtain and use the service. Before any health service is utilized, it has to go through the pathway of access i.e. perceive the need, seek the care or service, reach the care or service and then obtain or utilize the service (Levesque et al., 2013).

The concept of user fees, like many other access barriers such as attitude of staff, long waiting time, price of the service, transportation time, physical unavailability of resources among others limits or reduces accessibility in all forms and service utilization particularly for pregnant women, the poor and the vulnerable in our communities (Aikins & A, 2017; Dennis et al., 2020; Levesque et al., 2013; Pearson et al., 2011; Salkever, 1976). A study in the Volta region of Ghana to assess the strengths and weaknesses of maternal health service …to strengthen maternal health and reduce maternal mortality ratio identified the following as barriers to healthcare utilization: "inadequate service, inadequate service providers, insufficient equipment and medicine, poor geographic access to health facilities, insufficient staff and insufficient knowledge in service provider" (Eun Woo Nam & Ha Yun Kim, 2015). The authors found the health facilities assessed lacking in basic equipment such as infant weighing scales, equipment for infant resuscitation and lack of privacy for pregnant women during childbirth. In view of these limitations and barriers, one could have an opportunity to utilize poor quality healthcare services or good quality healthcare services depending on his/her abilities (i.e. to perceive, seek, reach, pay and engage) (Levesque et al., 2013) to circumvent the various access barriers or obstacles. Quality healthcare service will therefore have to be approachable, acceptable, available and accommodating, affordable and appropriate (Eun Woo Nam & Ha Yun Kim, 2015; Levesque et al., 2013) for it to be utilized to ensure the attainment of desired outcomes. The service and individual characteristics also goes a long way to influence utilization. Therefore, even though individuals and the community might have a right to healthcare services, constraints such as language, finance, culture, location of the health facility and organization of care (such as delay in receiving care or appointments) might inhibit their use (Levesque et al., 2013). For instance, during the era of user-fees health services in Ghana in the 1990s, one of the most catastrophic health expenditures for individuals and households was the

cost of medicines in both public and private health facilities. At a minimum, there should be unfettered access to medicines that are quality assured, affordable, available at all time, in adequate quantities, right dosage in public and private healthcare facilities situated within an hours' walk of need (Aikins & A, 2017). Unfortunately, this ideal is yet to be met in Ghana and other LMICs.

Often times, the arguments for the introduction of user fees which include the generation of revenue to accelerate improvement in the provision of supplies and consumables, maintain infrastructure, support the poor and vulnerable, and boost efficiency are not attained (Dennis et al., 2020). However, evidence abound to suggest the inefficient management and use of these user fees to provide the desired quality of healthcare services (Aikins & A, 2017; Dennis et al., 2020; Pearson et al., 2011). In some healthcare systems, these user fees end up being embezzled by healthcare providers and their managers. The system also ends up more in favor of the rich than the poor and vulnerable because of the regressive nature of such fees (National Academies of Sciences, Engineering, 2018). A study by Dennis et al. (2020) showed how rich pregnant women benefited from the 10/20 healthcare policy other than the poor and less privileged ones for whom the policy was actually meant for. The authors for instance found that, *"20.4% of better-off ANC users started ANC within the first 3-months of pregnancy, while coverage of early ANC initiation was [only] 4.5% among worse-off ANC users"* (Dennis et al., 2020; pg.6). Often times, service users have had to make a shift from public facilities to sometimes relatively expensive private healthcare facilities to seek care sometimes as a result of mistrust and the inability of public facilities to ensure strict compliance with the recommended fees (Dennis et al., 2020). This is especially so because the private sector provides an alternative parallel system which is expensive though!

Ghana introduced the National Health Insurance Scheme (NHIS) and the Free Maternal Health policy as a way of removing all forms user fees in its healthcare delivery system and to improve upon utilization of healthcare services. Unfortunately, this noble initiative is fraught with challenges particularly informal and out-of-pocket payments at the point of service. A study by Dalinjong et al. (2018) in rural northern Ghana found persistent out-of-pocket payment by pregnant women at every stage of their healthcare delivery process. The authors found that, service utilization was very expensive for these poor women who visit public facilities because they had

to pay for virtually everything including labs, drugs, supplies, ultrasound and transport and this was no different from situations in Ethiopia and Kenya as well (Dalinjong et al., 2018; Dennis et al., 2020; Pearson et al., 2011).

Active membership of the NHIS has seen a significant increase from 597,853 (Kodom et al., 2019) in 2005 to 10.8 million subscribers in 2018 which constitutes 36% of the total population (NHIA, 2019). The active membership of 2018 (10.8 million) however was a decline from the 2015 figure of 11.34 million subscribers. However, the per capita utilization has seen a general decline from 2014 (2.88 visits per card bearing member) to 2018 (2.25 visits per card bearing member). For instance, between 2017 and 2018, the outpatient utilization has decreased by 0.12 visits by card bearing member from 2.37 in 2017 to 2.25 visits per card bearing member in 2018. Similarly, the outpatient utilization of healthcare services has also declined from 30.37 million visits in 2014 to 27.55 million in 2018. There was however a slight increase from 25.25 million in 2017 to 27.55 million in 2018 (NHIA, 2019). The NHIA attributes this decline to either improved health seeking behavior or effective measures instituted to curb provider shopping. There was also a marginal increase from 0.14 to 0.15 visits over the same period for inpatient services. These declines are explained by the NHIA to be due either to "improved health status of members or effective measures put in place by the NHIA to control provider shopping by members" (NHIA, 2019; pg.18). A third reason could also be the perception of poor quality of healthcare that is received by card-bearing members of the NHIA. This is plausible because among the insured and uninsured (or those who make out-of-pocket payments), the perceived quality is not the same (Duku et al., 2018). A study of 1903 respondents in Greater Accra and Western regions revealed that, the perception of healthcare quality by those who make out-of-pocket payment was higher than those who were insured. The authors for instance indicated that "the average perception of the currently uninsured was significantly higher than that of the currently insured on: services provided, process of lodging complaints, information provision, waiting time, availability of prescribed drugs, equal treatment of insured and uninsured patients, fair queuing system, and overall average perception index" (Duku et al., 2018; pg.9). These nuances notwithstanding, health insurance membership increases the demand for and utilization of health service evidenced in the service utilization data provided in the above. A study in the Greater Accra and Western region of 1,903 respondents showed that, of the 78% of those who were "currently insured" and 87.2% of those who were

"previously insured" were more likely to report being sick and visit the hospital than those who have never been insured (Duku et al., 2018).

Inspite of these modest gains by the NHIA in improving health service utilization, the necessary decline that have to be seen in maternal and newborn mortalities is still yet to be seen. Service delivery is still inundated with poor quality care, unavailability or inadequate drugs, labs, equipment, infrastructure, water, electricity and emergency transport (Dalinjong et al., 2018; Vesel et al., 2013). Studies have showed that, quality of care, efficiency and equity are compromised where there are user fees and informal payments in healthcare systems (Aikins & A, 2017; Dalinjong et al., 2018; Dennis et al., 2020; National Academies of Sciences, Engineering, 2018; Pearson et al., 2011). Similarly, insured clients have indicated receiving lower quality healthcare than those who make out-of-pocket payment, expressed dissatisfaction with the service received and lack of trust in healthcare providers (Dalinjong et al., 2018; Duku et al., 2018; Nsiah-boateng et al., 2018). The quality of healthcare received is often directly proportional to the rate of utilization and individuals and communities will demand and utilize more healthcare when they realize that the perceived quality is high.

2.9 Adherence to Standards

Adherence to clinical standards and guidelines by health facilities ensures that variabilities are reduced to the barest minimum if not entirely eliminated (National Academies of Sciences, Engineering, 2018). According to the Council for Health Service Accreditation for Southern Africa (COHSASA), *"healthcare facilities standards are statements that define the key functions, activities, processes and structures and systems required for organisations to be in a position to provide quality services and as they are determined by professional and regulatory bodies, healthcare professionals, staff, patients and citizens"* (COHSASA, 2020). This implies that every aspect of care needs to meet the highest standards if we are to attain the desired care outcomes. Care outcomes including higher patient and provider satisfaction are higher in facilities that adhere to standards than those that don't. However, healthcare workers fail to adhere to the clinical standards and guidelines even though their training and practice requires them to do so. Unfortunately, this is so partly because of weaknesses in regulatory and other institutions clothed with the mandate to ensure this (National Academies of Sciences, Engineering, 2018).

In Ghana, the HeFRA is the agency clothed with the mandate under Act 829 to *"maintain professional standards in practice" (pg.6)* and also *"make regulations to provide for the prescription of safety standards for premises and sanitary arrangement of a practice" (pg.13).* Ghana has recently developed standards for newborn health services. Some of the key areas included in the standard are basic essential newborn care, management of adverse intrapartum events (including birth asphyxia), care of the preterm/low birth weight/growth-restricted baby and management of neonatal infections/sick newborn. There are 20 quality statements addressing health service delivery and experience of care received by patients and their relatives (MoH/GHS, 2020).

Currently in Ghana, some private facilities have adopted quality standards from COHSASA and SafeCare. There is still an ongoing debate on which facilities (i.e. public or private) are most adherent to clinical guidelines and standards in the provision of care. Evidence suggests that private health facilities in Democratic Republic of Congo, Kenya, Rwanda and Uganda adhered more closely to the World Health Organization (WHO) guidelines for sick children than public facilities (Kruk et al., 2018). Similarly in India, private facilities adhered more closely to the use of checklists than public facilities in a standardized patient study (Das et al., 2012). However, private facilities have been cited as strong violators of medical standards and have also ranked lower in efficiency than public facilities (National Academies of Sciences, Engineering, 2018). A systematic review in LMIC also revealed that public providers had better outcomes, were likelier to follow and adhere to the standards of medical practice, had less incentives for needless testing and treatments, and were more efficient than private providers including unlicensed and uncertified providers (Basu S, Andrews J, Kishore S, Panjabi R, 2012).

There is the need to also ensure that healthcare providers are adhering to the required ethical standards that guides their practice as a way of improving service integrity in the care that is provided. PPPs offer an important opportunity for quality improvement in healthcare generally and for MNCH in particular.

3.0 Outcomes of Care

Effectiveness is the extent to which health services are provided "based on scientific knowledge to all who could benefit, and refrain from providing services to those [who are] not likely to benefit

(that is avoiding both overuse of inappropriate care and underuse of effective care (National Academies of Sciences, Engineering, 2018; pg.43). All over the world health systems that provide maternal and newborn care are struggling to improve care outcomes and improve efficiency of care. Improving quality of care outcomes requires an integrated system of care and productive interactions between the public and private sectors. Private health facilities contribute significantly to the provision of health services even though often times their contributions are deliberately or inadvertently ignored.

3.1 Quality

Improving service quality have become a strong desire over the recent decade because of the intense competition between public and private healthcare service providers (Anabila et al., 2019). There is a vast difference between the quality of service provided by the public and private sectors in Ghana. One would have expected a convergence in the quality of healthcare services between private and public health facilities because of the reliance on the same healthcare providers for service provision but this is not so. Studies in high-income countries have revealed that the quality of care in private facilities is better and of higher quality than in public facilities (National Academies of Sciences, Engineering, 2018). However, this finding seems to be different in LMIC such as Ghana.

The issues of quality in healthcare is probably more important than in other sectors mostly because of the harm and other adverse events that are caused. There is a general consensus that the provision of quality healthcare has the potential of improving the safety, clinical effectiveness and health outcomes (World Health Organization (WHO), 2016). Unfortunately, however, investments and interventions aimed at improving quality of care outcomes over the years have been directed towards disease-specific other than facilitating institutionalization and sustainability of strengthened health systems. QoC is perceived more as a resource (equipment, supplies, numbers and competency of staffs) that is either available or no other than a health system issue (Kruk et al., 2018; Mwaniki et al., 2016). Healthcare quality is the "degree to which healthcare services for individuals and the population increases the likelihood of desired health outcomes and is consistent with current professional knowledge"(IOM, 2001;pg.44). Six dimensions of healthcare defines its quality—safety *(ensuring that patients are not harmed "from the care that is intended to help*

them"); timeliness, accessibility and affordability *("reducing unwanted waits and harmful delays for both those who receive and those who give care; reducing access barriers and financial risk for patients, families, and communities; and promoting care that is affordable for the system")*; equity *(ensuring that the care that is being provided does not discriminate or vary on the basis of "gender, ethnicity, race, socioeconomic status and geographic location")*; efficiency *("avoiding waste, including waste of equipment, supplies, ideas, and energy, and including waste resulting from poor management, fraud, corruption, and abusive practices. Existing resources should be leveraged to the greatest degree possible to finance services")*; effectiveness *("providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit (that is, avoiding both overuse of inappropriate care and underuse of effective care)")* and person-centeredness *("providing care that is respectful of and responsive to individual preferences, needs, and values and ensuring that people's values guide all clinical decisions. Care transitions and coordination should not be centered on health care providers, but on recipients")* (National Academies of Sciences, Engineering, 2018; pg.43). Parasuraman et al. (1988) also identified reliability, assurance, tangibles, empathy and reliability as service quality indicators which have been used extensively in other organizations including healthcare. In 2017 Ghana made a firm statement to improve its quality of care outcomes through the development and subsequent implementation of its National Healthcare Quality Strategy (NHQS) in 2016 with the goal *"to continuously improve the health and well-being of Ghanaians through the development of a better coordinated health system that places and communities at the center of quality care"* (Ministry of Health (MoH) Ghana, 2016; pg.19).

Healthcare quality is defined in Ghana as "the degree to which healthcare interventions are in accordance with standards and are safe, efficient, effective, timely, equitable, accessible, client-centred, apply appropriate technology and result in positive health outcomes, provided by an empowered workforce in an enabling environment" (Ministry of Health (MoH) Ghana, 2016; pg.4).

Quality of care is fragmented and inequitably distributed between the public and private facilities. Across the six dimensions of healthcare quality (i.e. safety, timeliness, equity, efficiency, effectiveness and person centeredness), poor quality has been identified in both public and private

health facilities (Basu S, Andrews J, Kishore S, Panjabi R, 2012). Public and private facilities performed similarly in the provision of quality antenatal care according to a household survey in 46 countries (Powell-Jackson T, Macleod D, Benova L, Lynch C, 2015).

Prior to this national coordinated quality effort, there had been efforts by individual institutions public and private alike to improve their quality of care outcomes. The GHS which is the largest provider of public health services had developed a Quality Assurance Strategic Plan (2007-2011) to guide its quality efforts. It had also established a quality assurance unit within its institutional care division (ICD) to provide the necessary coordination and oversight of its quality management program such as the development of standards, protocols and guidelines; development of the Patient's Charter; and training and capacity building of its personnel in the concepts of quality and patient safety (Ministry of Health (MoH) Ghana, 2016). Currently, they have signed an MoU with the Africa Institute of Healthcare Quality Safety and Accreditation (AfIHQSA) to support their quality efforts in the next 5-years. Similarly, the Faith-based organizations had also made efforts at improving their quality of care outcomes. The faith-based organizations particularly the Christian Health Association of Ghana (CHAG) had in the recent past received direct support from the Institute of Healthcare Improvement (IHI) through its Project Five's Alive. It has recently, further signed an MoU with Pharmaccess Foundation to adopt its SafeCare program as a way of improving the quality of care within the CHAG network. Efforts by the self-financing private sector have mostly been at the individual facility levels even though efforts by their umbrella organizations such as the Society of Private Medical and Dental Practitioners (SPMDP) and the Community Practice Pharmacists Association (CPPA) through the Medicines Transparency Alliance (MeTA) project started in 2009 saw some modest gains and improvement in the areas of capacity building for medicines and therapeutic committees, formulation of effective medicines pricing policy, governance and transparency across the supply chain of medicines among others (World Health Organization (WHO), 2016). A study of 240 facilities across the country in 2015 by the GHS the private sector is the main source of procurement of medicines for both public and private healthcare facilities (Aikins & A, 2017).

The quality of healthcare service received by patients have also been brought to the fore by some authors. Service users have expressed disgust both in public and private facilities alike but have

been more abhorrent about the service quality received in public than private facilities. Kodom et al (2019) noted that patients with health insurance cards often make additional payment especially for their medication, diagnostics and imaging services before they could be accessed. They add that, “the NHIS did not cover medications for those who attended a private hospital” (Kodom et al., 2019; pg.576).

Unfortunately, it does not look like the quality of care particularly maternal and newborn is also as desired by the populace. For instance, the percentage of mothers who initiate breastfeeding within 1 hour of birth have seen a decline from 97.4% in 2014 to 92.9% in 2018 while exclusive breastfeeding has also declined from 80% in 2016 to 60% in 2018 (Ministry of Health (MoH), 2020b). There have been growing concerns and public outcry over some bad care outcomes some of which have resulted in legal suits that have been reported in the media. These concerns affect both the public and the private health sectors alike. A study that estimated the prevalence of adverse events among obstetric clients in a large secondary referral facility found that 12% of obstetric clients were harmed while seeking care (Otchi et al., 2019) similar to findings in the Iberoamerican study where 10.5% prevalence was estimated in 58 hospitals across 5 countries in Latin America (Aranaz-Andrés et al., 2011), 11.8% among 64,917 Swedish patients from 2013 to 2016 (Nilsson et al., 2018) and 12.8% among 4 general hospitals in Brazil (Mendes et al., 2018). Comparatively, adverse events in LMICs is higher than those in HICs even though their (HICs) quality of care equally leaves much to be desired (National Academies of Sciences, Engineering, 2018). A public hospital was sued by a husband who alleged that the pregnant wife died after the administration of a wrong medication. According to his account, he also observed nurses “laughing heartily” in the midst of his predicament even as one of the doctors was heard scolding his colleague “I can’t believe you have done this again. This is the second time. This woman’s case is similar to the other one but you have done it again” (Myjoyonline, 2020). In another related story, the same facility is accused of leaving a “huge towel in [the] tummy [of a pregnant woman] for nine months” after delivering the victim (a woman) of her baby via a caesarean section in 2015. According to the account of the victim, her situation was only noted after an X-ray and the item was subsequently removed via another surgical procedure (GhanaWeb, 2020b). In a similar incident in another public facility, a surgical towel was left in the abdomen of a young woman after a cesarean section for more than a year resulting in complications of bareness (Boateng,

2016). In 2018, it was also reported that, a 30-year old pregnant woman had died together with his unborn baby in a public health facility because he could not raise five hundred Ghana Cedis (GHS500) "motivation fee" demanded by a doctor before a cesarean section was performed in 2018. According to the spouse, the wife's delivery time had elapsed for seven days and had to wait for more than hours in a wheelchair till her condition deteriorated (GhanaWeb, 2018). Similarly, a doctor in a private facility was alleged to have "pulled the plug from [an] oxygen machine because of the inability of their parent to pay GHS533 or about $122 to keep their [9-week old baby alive] (Annor, 2018). In 2015, a 34-year woman also died in a private hospital after a fertility surgery (i.e. laparoscopic endometrioma surgery) aimed at helping the victim to become pregnant and give birth ended sadly (Daily Graphic, 2015). These and many other stories seem to affirm suggested inadequacies in the provision of quality and safe maternal and newborn care in Ghana and other developing countries.

An assessment of the structural capacity of 64 health facilities (51 public and 13 private) that performed deliveries in the Brong Ahafo region of Ghana in 2012 to provide quality immediate and essential newborn care (ENC) services revealed that, private health facilities scored higher marks in the two main categories assessed i.e. structure (the characteristics of the setting in which care is provided) and the processes (i.e. the essential procedures that guides the delivery of care). Specifically, private facilities scored higher in their newborn resuscitation, care for low birth weight (LBW) babies immediate care after resuscitation and moderately in thermal care unlike public facilities that had varied scores. Again, the private hospitals assessed lacked only one (i.e. dexamethasone) of the four lifesaving drugs similar to other public facilities. Private facilities outperformed public facilities in the area of availability of reliable electricity supply but one of them lacked a bag and mask for newborn care. The authors concluded that "unless major gaps in ENC equipment, drugs, staff, practices and skills are addressed, strategies to increase facility utilization will not achieve their potential to save newborn lives" (Vesel et al., 2013; pg.1). Similarly, a qualitative study by Kodom et al. (2019) of 56 NHIS card holders in the Greater Accra region showed that patients who used private facilities were generally satisfied with the quality of care they received than those who used public facilities. Patients who visited private facilities were generally satisfied with the structure quality indicators such as cleanliness of washrooms and housekeeping than in public health facilities similar to (Vesel et al., 2013). The study further found

the private health sector to be more receptive, responsive and had shorter waiting times (2 hours at the OPD) than the public sector which are less receptive, responsive and had longer waiting times (> 5 hours). Private facilities are more consistent with ensuring availability of necessary supplies than in public facilities and have ensured improvement over the years. For instance, the availability of some selected generic medicines improved in private facilities from 18% (2001-2008) to 44% (2001-2009) while the public sector recorded declines from 45% (2001-2008) to 17.9% (2001-2009) (University of Ghana, 2018). The NHIA did a facility mapping in clinical and non-clinical health facilities in five regions (i.e. Ashanti, Central, Upper East, Upper West and Volta regions) and noticed the lack of essential equipment and inadequate human resource capacity for the provision of primary healthcare. In the Central region for instance, the assessment revealed that out of 415 clinical facilities assessed, less than 20% (18%, 75) had the full set of equipment needed for the provision of primary healthcare (NHIA, 2019). The report however does not indicate the ownership type.

A similar study in the Kassena-Nankana municipality in rural Ghana found inadequate availability of essential inputs such as equipment, infrastructure, drugs, supplies, water, electricity, emergency transport, laboratory and other diagnostic services in a public facility. The authors further noted that, the women did not have any privacy during the labor and delivery process defying a critical quality dimension of person-centeredness. The women were also subjected to out-of-pocket payment for drugs, laboratory services and the purchase of items for childbirth even though they were supposed to be covered by the free maternal health policy (Dalinjong et al., 2018). It is interesting to note however that, this situation is not any different in Senegal (Witter et al., 2009) and Ethiopia (Pearson et al., 2011). In Senegal, the authors found that the care for the pregnant women was characterized by out-of-pockets payments for gloves, transport, bed, bleach and water inspite of the implementation of a maternal fee exemption policy similar to Ghana. And peculiar to Senegal is that "complications have to be paid for on top of these basic costs" (Witter et al., 2009). The situation was no different in Ethiopia where more than half of both public and private facilities (i.e. 68%) "charged a fee for normal delivery or required women to buy supplies for normal delivery" (Pearson et al., 2011; pg311). The authors added that, "private for-profit and nonprofit facilities were more likely to charge user-fees than government facilities"(Pearson et al., 2011; pg.312). It was interesting to note that facilities that charged user fees in Ethiopia

irrespective of ownership had the requisite inputs and supplies available than those that did not (Pearson et al., 2011). Patients in Ghana (Dalinjong et al., 2018) were satisfied with the quality of service while their colleagues in Senegal (Witter et al., 2009) had mixed levels of satisfaction. However, providers in both Ghana and Senegal were dissatisfied with the quality of care being provided (Dalinjong et al., 2018; Witter et al., 2009).

A study by Duku et al. (2018) of 1903 respondents in Greater Accra and Western regions showed that respondents perceived the quality of healthcare received by health insurance clients as sub-optimal. The verdict of the uninsured and the previously insured was very unanimous on the perception of the quality of healthcare on all seven quality indicators that were assessed i.e. services provided, complaints process, provision of information, waiting time, prescribed drugs availability, treating the insured and uninsured equally, a queuing system that is fair and the overall average perception index. This is similar to the findings by Fenenga et al. (2014) who also found that individuals who were insured in Ghana were not satisfied with the same indicators Duku et al. (2018) identified (Duku et al., 2018; Fenenga et al., 2013). This means that, individuals who are insured perceive the quality of care to be poor while those who make out-of-pocket payment perceive the quality of care to be high. This is likely so because of the documentation and claims processing that is associated with the NHIS unlike the uninsured who only have to pay and receive care. So, there is no issue of increased waiting time for the individual doing out-of-pocket payment unlike the insured. Similarly, NHIS credentialed providers are reimbursed for generic other than branded drugs hence there is no incentive to procure and stock the latter leading often to "artificial shortages" which further fuels the levels of dissatisfaction among the insured. The respondents were drawn from both public and private facilities but the authors did not make any specification in their findings (Duku et al., 2018).

It is suggested that, if quality improvement initiatives and efforts is not taken seriously by the public health sector, they will be overtaken by the rapid development of the private health sector (National Academies of Sciences, Engineering, 2018).

3.1.2 Service Responsiveness

This is the extent to which healthcare is provided to clients without delay. Timeliness is one of the 6 dimensions of quality which is synonymous to "responsiveness" as posited by Parasuraman in his service quality dimensions. It refers to the provision of prompt service to the clients (Ramya et al., 2019). A number of delays such as decision to seek care, reaching the point of care once a decision is even made and provision of quality service at the point of service once the patient finally arrives (Mwaniki et al., 2016) have been identified as factors that impact quality of care outcomes. Effective transportation system has been identified as one of the critical links between healthcare institutions and the homes of patients. Similarly, referrals serve as a major component of emergency care between the different levels of the healthcare system particularly from the lowest to the highest. However, there is little referral between private and public facilities even when the relevant specialty is available in the former. Similarly, with the exception of medical diagnostics, referral between private facilities is infrequent (Ghana Statistical Service, Ministry of Health, 2014, 2017). A study in the Upper West region of Ghana in 2015 found that, most pregnant women do not honor referrals to the next level of care inspite of its importance because of financial implications associated with transport and other related issues. The authors further found that healthcare providers are unable to enforce referrals especially in instances when the patient or relatives do not have enough money to honor it. According to the authors, the lack of regular transportation services, the bad road networks and its attendant high cost are some of the reasons why about 70% of referrals are not honored. The situation worsens even during the rainy season (Atuoye et al., 2015). Timely access to care has sometimes been a challenge because of the nature of bad road networks in the country and the availability of an appropriate means of transportation (Atuoye et al., 2015). Findings from the 2017 Ghana Maternal Health Survey showed that a fifth (20%) of rural women cited transportation as a reason for not seeking ANC; similarly, 24% of women (28% rural and 11% urban women) who delivered at home other than a health facility cited transportation as one of the major problems.

The median travel time for women in the rural areas to access a health service is estimated at 44.5 minutes while those in the urban areas are estimated to do a little more than half (29.7 minutes) the time of rural women. For women who died en route to seek care, 95% of them used motorable transport Bicycles are common means of transportation (26.8%) to rural women (2017 Ghana MHS, 2018). Ghana established a National Ambulance Service (NAS) since 2004 with its core mandate "is to provide efficient and timely pre-hospital emergency medical care to the sick and the injured and transport them safely to nearby health facilities" (MOH Ghana, 2018;pg.12). The fleet of ambulances were significantly augmented from 133 (as at December 2017) to 375 (as at January, 2020) new ones. The number of ambulance stations have also since increased from 145 to 275 (Pamela, 2020). The NAS responded to 9,180 medical emergencies in 2017 out of which 19% (1,744) where obstetrics related which is a decline from the 2015 figure of 20,236. The ambulance response time also increased to 30.44 minutes in 2017 from 17.4 minutes in 2015 (MOH Ghana, 2018).

However, private facilities continue to be known for their hospitality and timeliness in service delivery more than their public counterparts (National Academies of Sciences, Engineering, 2018).

3.1.3 Efficiency

Efficiency in health facilities in Ghana is influenced by the number of patients and the facility-based capital. There are varied efficiency levels among health facilities in Ghana. "Efficiency scores reflects the relationship between facility-based resources and the facility's total patient volume each year" (Institute for Health Metrics and Evaluation (IHME), 2015;pg.46). A national assessment of health service provision in Ghana by the Institute of Health Metrics (IHME) in 2013 and published in 2015 showed that there were more outpatient visits per medical staff per day in private facilities than in public facilities. For instance, private facilities recorded an average of 5.5 visits per medical staff per day than public facilities that recorded three (3) (Institute for Health Metrics and Evaluation (IHME), 2015). Similarly, they also found that private maternity clinics recorded the highest visits per medical staff per day of 6.8 (Institute for Health Metrics and Evaluation (IHME), 2015). However, public facilities had the highest inpatient bed-days of 2.4 per medical staff per day. The authors found that, generally each day in 2011, a medical staff was seeing an average of 4 inpatients while daily outpatient visits account for the highest number of

patients seen daily by medical staff. The greatest proportion of daily visits per medical staff are outpatients other than inpatients. All health facilities generally scored low on efficiency levels. 82% of health facilities for instance scored 50% and lower on efficiency scores (Institute for Health Metrics and Evaluation (IHME), 2015). Even among public facilities there were marked differences in their levels of efficiency. For instance, it is estimated by Adams et al. (2014) that, between regional hospitals in Ghana the average cost per patient day was equivalent to GHS155,000. This however could vary between GHS58,708 in the Upper East Regional Hospital (in the Upper East region) to GHS252,719 in the Greater Accra Regional Hospital (in the Greater Accra region-the capital of Ghana) even though the amount of services provided were very similar. Further, the average cost-per patient-day equivalent[1] is higher in regional hospitals (GHS155,000) than in public district hospitals (109,953). The other area of variation is in their staffing ratios. For instance, the staffing ratios particularly for doctors in regional hospitals such as the Greater Accra Regional Hospital located in urban areas was higher (0.20) than some of the public district hospitals (0.1) and FBOs. Again, members of staff in public facilities located in southern part of Ghana were less productive than those located in middle and northern (Adams et al, 2014). Efficiency scores were higher in urban public facilities than rural. Similarly, urban private facilities had higher efficiency scores than rural. Private facilities whose efficiency scores were highest had more bed space than those whose efficiency scores were least. It is noteworthy that the bed occupancy rate (58.3) and average length of stay (3.5) in public facilities were similar to those in private facilities (57.9 and 3.4 respectively) (Christian Health Association of Ghana (CHAG), 2019). The bed capacity of mission (FBOs) hospitals are used more efficiently with a 63.6% occupancy rate unlike public district hospitals whose occupancy rate was 49.5% (Adams et al., 2014). A publication in the Bulletin of Health Information by Adams et al. (2014) indicated that, "staff productivity expressed as inpatient days per staff member [was] higher in mission hospital [than in public hospitals] since they had fewer staff and higher workload" (pg.24). The average cost of care in public facilities were similar to that in private facilities. It is important to note that, the high-cost per patient-days could be an indication of poor efficiency and high quality hence may require some further interrogation.

[1] Average Cost-per Patient-Day Equivalent (PDE) is the average cost of producing a day-equivalent of institutional care

3.1.4 Equity

The situation with the number of skilled healthcare workers in Ghana has seen significant improvement over the years. The doctor-to-population ratio has improved from 1:13,074 in 2008 to 1:7,374 in 2017 (Ghana Health Service, 2018; MOH Ghana, 2018). There has been a 49% increase in the number of doctors from 4016 in 2017 to 5988 by the end of 2019 (Ghana Gazette (List of Medical & Dental Practitioners Registered in Ghana for 2020), 2020). Between 2013 to 2017, there have been more than 100% increase in the equity ratio of doctors from 16.7 to 8.1 which has gone a long way to address the inequitable distribution of doctors in the country (MOH Ghana, 2018). A lot more still needs to be done with respect to ensuring equitable distribution because the Greater Accra region alone has more than 40% of the total number of doctors in Ghana (MOH Ghana, 2018). The total number of nurses has seen a significant increase from 68,492 (nurses and midwives) in 2017 to 125,024 (for professionals and certificate nurses/midwives) in 2018 (Pers. Comm. Dr. Barnabas Yeboah, MoH, 2020). The nurse to population ratio has seen significant improvement from 1:715 in 2013 to 1:500 in 2017. Similarly, the midwives to WIFA population ratio continue to see improvement from 1:1374 in 2014 to 1: 720 in 2017 (MOH Ghana, 2018). CHAG on the other hand has a total number 27,581 members of staff across its 322 network and 73% 20,344) are on the government of Ghana payroll as at 31st December, 2020 (CHAG, 2019). It is estimated that, of the total number of doctors (5,347) and nurses/midwives (69,121) registered in Ghana in 2015, 30% of doctors and 21% of nurses worked in the private sector "though not fully employed" (Agongo et al., 2017; pg.10). It is suggested by Agongo et al (2017) that the private and public sectors do not have enough fiscal capacity to absorb the increasing numbers of health professionals that are produced every year.

Ghana has already exported about 95 nurses to Barbados to augment the acute shortage of qualified nurses confronting that health sector. This action has received some criticisms however from a section of the Ghanaian populace (GhanaWeb, 2019). Though data for the self-financing private sector is not readily available, it is estimated that about 10% of the country's healthcare workforce are in that sector (University of Ghana, 2018). The health system in Ghana encourages dual practice so it's the same healthcare providers that are found both in the public and the private health sectors respectively. Inspite of these modest improvement in the numbers of human resource, there is still a challenge in ensuring their equitable distribution across the places where

they are needed the most and this was partly influenced by the HR policy which indicated that, regions were at liberty to keep all the nurses they trained (MOH Ghana, 2018) which has since been revised with a new e-recruitment system into public health facilities which allows prospective applicants to select their regions of choice based on a regional quota allocation system allocated.

3.2 Reduced Maternal & Newborn Mortality

CHAG has consistently from 2012 till 2018 outperformed the biggest public health provider in Ghana, i.e. GHS, on its maternal mortality scores shown in Table 1. Maternal mortality in the FBOs such as CHAG is lower than in public health institutions. For instance, the maternal mortality rate in CHAG was 124/100,000 live births while that in the public health institutions nationally was 127.3/100,000 live births (Christian Health Association of Ghana (CHAG), 2019). Data also from the largest teaching hospital, the Korle Bu Teaching Hospital (KBTH) also revealed that, more than two-thirds (75.7%, 156) of maternal deaths in that facility were from public health institutions. Private health institutions contributed less than 30% (50, 24.3%) of the total maternal deaths ion that facility from 2015 to 2018 (KBTH Obst & Gynae Department, 2020).

Ghana's Maternal Health Survey (2017) shows that 84% and 16% of deceased women sought care in public and private health facilities respectively (Ghana Statistcal Service, Ministry of Health, 2017, pg. 142). More women in urban areas (21%) sought care in private healthcare facilities than women who resided in rural areas (13%), largely because more the half of private providers are located in urban areas (Ghana Statistcal Service, Ministry of Health, 2017). For instance, data from some of the teaching hospitals particularly the Korle Bu Teaching Hospital (KBTH) reveals for instance that, out of the 46 maternal deaths recorded in 2015, about a third (30.0%, 14) of them were referrals from private facilities (KBTH Obst & Gynae Department, 2020).

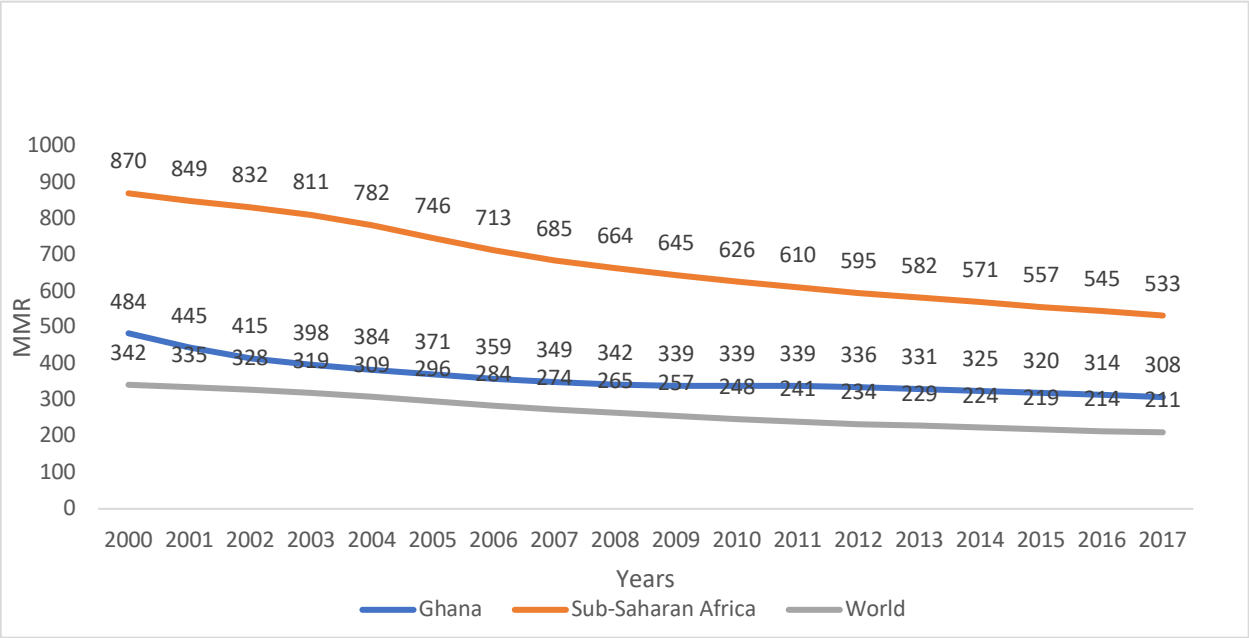
There is higher infant (8.9/1000LB) and under-five (6.5/1000LB) mortality in CHAG facilities than in public health facilities where the rates are 8.5/1000LB (infant) and 4.9/1000LB (under-five) respectively (Table 1).

The proportion of abortion in public (19.9%) and private (19.8%) facilities is similar, according to the 2017 Maternal Health Survey (Ghana Statistcal Service, Ministry of Health, 2017). The

percentage of women who sought help after a miscarriage from private facilities was 21.8%, while 77.2% of women seeking help after a miscarriage went to public facilities (Ghana Statistcal Service, Ministry of Health, 2017). For sexually transmitted infections (STI), most women (61%) and men (58%) sought care from the private sector by attending to a clinic, hospital, doctor or other health professional for advice or treatment of STI or symptoms related to STI (Ghana Statistical Service, Ministry of Health, 2017).

There had been marked improvements in outcomes in maternal and newborn health over the last two decades. Institutional deliveries have seen a 25% increase from 54% in 2007 to 79% in 2017 while home deliveries had also seen a decline from 45% to 20% within the same period. Maternal deaths have also showed a decline from 451 deaths per 100,000 live births to 343 deaths per 100,000 live births from 2007 to 2017. Comparatively, Ghana's maternal mortality point estimates between 2010 to 2017 of 343 deaths per 100,000 live births happens to be the least among its West African neighbors (Ghana Statistical Service, Ministry of Health, 2017). This has since improved according to recent estimates in September, 2019 that puts Ghana's MMR at 308 deaths per 100,000 live births which is still higher than global estimates of 211 deaths per 100,000 live births (in 2019) but lower and better than the Sub-Sahara Africa (SSA) estimate of 533 deaths per 100,000 live births(WHO, UNICEF, UNFPA, 2019). Details of the trend in Ghana's maternal mortality ratio from 2000 to 2017 is presented in Figure 4. Unfortunately, efforts at improving maternal and newborn outcomes have mostly targeted the prevention of deaths of the patient with respect to her initial contact with the facility other than post-hospitalization period. A large burden of death has shifted to the post-discharge period and many mothers continue to die after they have been discharged from the hospital.

Figure 4: Maternal Mortality Rates (Ghana, SSA, World)



Source: WHO, UNICEF, UNFPA, World Bank Group and UNDP (MMEIG), 2019

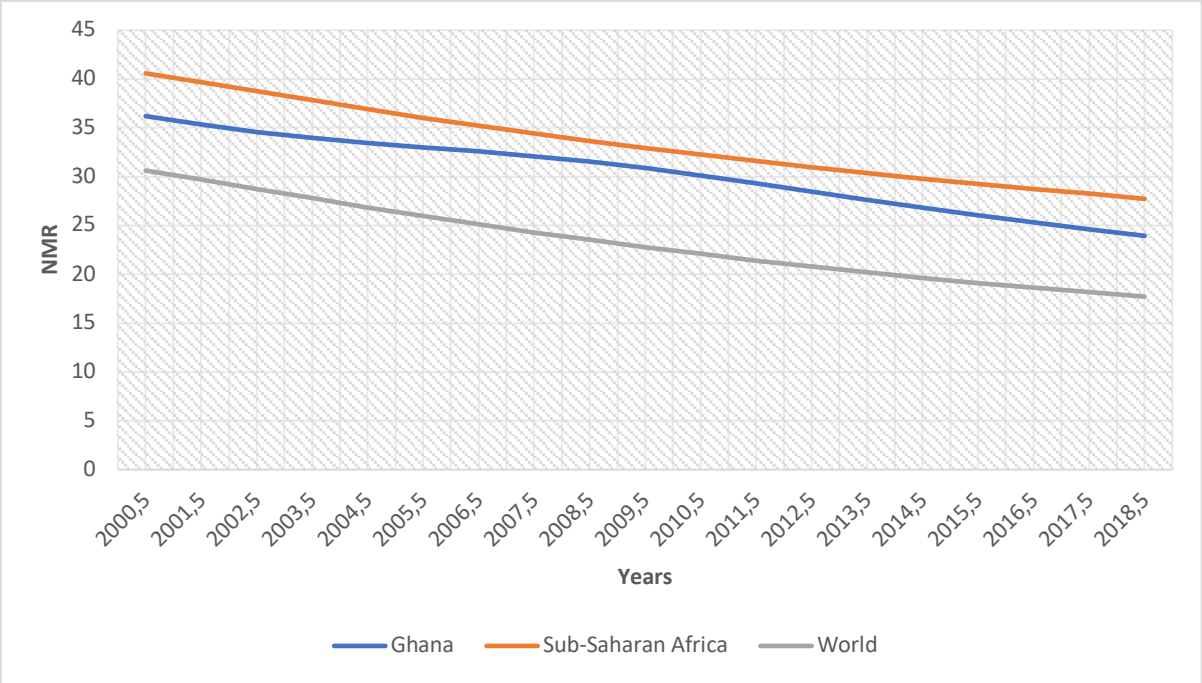
There continue to be a disturbing increasing trend in maternal and newborn outcomes with its attendant overuse of some medical procedures and interventions during childbirth. For instance, maternal health interventions like caesarean section (CS) has increased from 12% to 16% and the use of intravenous fluids during births from 36% to 58% in the same period (i.e. 2007 to 2017) (Ghana Statistical Service, Ministry of Health, 2017). In Ghana, CS rate is however estimated to be higher in private health facilities (27% of deliveries) than public health facilities (20% of deliveries). The FBOs are also doing 19% CS rate among all their deliveries (University of Ghana, 2018). This is similar to India where CS rates in private facilities is thrice (34.6%) as high as the rate in public/government facilities(Renfrew et al., 2014). The deliveries by CS (23.2% of 143,2424 deliveries) was even much higher among the CHAG network in 2018. This rate is higher than the national target of 6.5% and 2% for Sub-Saharan Africa(CHAG, 2019). The Korle Bu Teaching Hospital is also doing a CS rate of 47.5% out of total deliveries of 8275. Also, more than two-thirds (86.5%) of all maternal admissions to that institution are due to external referral (KBTH Obst & Gynae Department, 2020). It is interesting to note that, these high CS rates do not have any direct association with a decrease in maternal and neonatal mortality consistent with a WHO publication in 2015 which suggested that "as caesarean sections increase above 10% [at the

population level] and up to 30% no effect on maternal mortality rates was observed" (World Health Organization (WHO), 2015; pg.3). The authors concluded that, in as much as CS interventions are important, they should only be used for "medically indicated reason" (World Health Organization (WHO), 2015; pg.4). This is corroborated by Powell et al (2018) as they also posit that, most pregnant women do not often require medical interventions during their periods of pregnancy or childbirth but rather what they require are reliable systems and healthcare providers who will provide them with the necessary support to attain their desired potential to deliver safely. The CS rates are indicative of high institutional CS rates which will have to be addressed urgently to improve the safety *(one of the six healthcare quality dimensions)* of pregnant women and their newborns especially because of their tendency to cause life-threatening complications like any other surgery. There are other associated risks such as the development of surgical site infections as well especially in instances where surgical safety principles are compromised.

Our under-5 and infant deaths have equally seen a steady decline from the 1988 figure of 155 deaths per 1000 live births to 52 deaths per 1000 live births in 2017; and 77 to 37 deaths per 1000 live births over the same period (1988 to 2017) (Ghana Statistical Service, Ministry of Health, 2017). We however still have a lot of work to do in Ghana to reduce our newborn deaths which is estimated to be about 40% of all under five deaths in 2017 (Ministry of Health (MoH), 2020b). UNICEF estimates Ghana's newborn death rate at 23.9 deaths per 1000 live births (2018) which is still higher than the global estimates of 17.7 deaths per 1000 live births but lower than the sub-Sahara Africa estimates of 27.7 deaths per 1000 live births (UNICEF, 2019) (Figure 5). Ironically, institutional neonatal deaths continues to rise consistently from 2014 (3.8 per 1000 live births) to 2014 (8.4 per 1000 live births) across all the regions of the country (Ministry of Health (MoH), 2020b). There are variations across the various regions with Volta, Central and Western having the worse neonatal mortality rates while Greater Accra, Brong Ahafo and Upper East regions having the best rates. Unfortunately, it is further estimated that these deaths occur within the first 28 days of birth (GSS, 2015). It is noteworthy that, "the period from labor and delivery, through the first 24 hours to the end of the first week of life accounts for about 75% of neonatal deaths [in Ghana]" (Ministry of Health (MoH), 2014; pg.32) and about two-thirds of infants do not also live to celebrate their first month of birth in Ghana (Ghana Statistical Service, Ministry of Health, 2017). This makes Ghana one of the countries where it is unsafe to give birth. This statement is

corroborated by Ghana's 150th place amongst 178 countries assessed to be the safest places for motherhood and child health globally (Ghana Health Service (GHS), 2017). Unfortunately, there has been little or no attention given to interventions and efforts at reducing newborn deaths to the events that occur during the neonatal and newborn care period. Most of the efforts and interventions have focused on the post-neonatal period.

Figure 5: Neonatal Mortality Rates (Ghana, SSA, World)



Source: UNICEF, 2019

3.3 Improve the experience of care

Delivering person-centered care requires "the provision of care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that these values guides all clinical decisions" (National Academies of Sciences, Engineering, 2018, pg. 143). Poor experience with the health system is believed to significantly impact the healthcare seeking behavior of the patient, loss to follow-up and unnecessary spread of disease.

The attitude of healthcare providers also goes a long way to influence the experience of care of patients at healthcare facilities. The experience and satisfaction of patients is influenced by several

elements. For instance, authors such as Javed & IIyas (2018) who evaluated outpatient satisfaction and service quality in Pakistan are of the view that, empathy and responsiveness that are shown towards patients by healthcare providers goes a long way to influence the satisfaction of patients. The authors for instance found that, the satisfaction of patients who visits public facilities is influenced by responsiveness *(i.e. timeliness)* of the service. Patients would want to be treated promptly and without delay while the satisfaction of those of them who visit private facilities is influenced by the reliability *(ability to accurately and dependably deliver on the promised service)* of the service. The authors generally found responsiveness and empathy having a strong relationship with the satisfaction of patients from the healthcare services that they receive.

Kodom et al. (2019) have also identified how attitudes such as rudeness, disrespectfulness and being less empathetic of some categories of healthcare workers particularly nurses especially in public health facilities affects the quality of treatment and care that patients receive. In their study, the authors recount an experience of one patient in a public hospital as: *"Most of them prefer to spend time on their phones rather than to attend to patients. In my last visit, one of the nurses was browsing or chatting on her phone. I asked her a question and she didn't even mind me. When I asked again, she rudely asked me, 'Why are you shouting on me, am I a child to be shouted at?' I quietly left her to ask another person. The government must ban nurses from using phones at the hospitals"* (Kodom et al., 2019;pg.579). Though this attitude is not peculiar to only the public health facilities; patients acknowledge some levels of efforts by the private healthcare facilities to avert some of these occurrences as indicated in this quote: *"In the private hospital, there is an inscription that if you are not treated well by a staff, call this number [a number that has been provided]. So, most of them are quite cautious about how they behave towards patients. But in the midst of the inscription, some, especially the young nurses, are very rude as compared to the older nurses"* (Kodom et al., 2019;pg.579). Fortunately, it is not all doom and gloom, studies by Mensah et al. (2014) that documented birthing experiences of Ghanaian women in the 37 Military Hospital however showed nurses/midwives demonstrating a lot of empathy, concern and care towards pregnant women. One of the pregnant women is quoted as saying "…some massaged my back and also [showed] patience with me. Oh God! These nurses!! I had the right people to support me" (Mensah et al., 2014;pg.31).

Absenteeism, lateness and general indiscipline is very prevalent in public health facilities than private facilities in Ghana. The concept of dual practice has largely been blamed for this. Most healthcare providers have pointed out for instance that "the combination of 2 jobs is exhausting, leading to decreasing efficiency and bad attitudes towards patients" (University of Ghana, 2018;pg.94). To make matters even worse, Ghana like many other countries employs a care model that generates a negative birthing experience because of the absence of trust in and social support that is needed from healthcare providers. Healthcare has to be provided in a non-abusive and respectful manner. It has to be personalized to the needs and expectations of the woman and the newborn. It has to be provided by healthcare providers who are empathetic, kindles trust and are able to blend their interpersonal skills with the clinical acumen and competence. This is person-centered care! We should also be considering switching to a care model that ensures continuity of care, less use of regional analgesia, episiotomy and instrumental birth. Where there will be no intrapartum analgesia or anesthesia, or spontaneous vaginal birth. Ghana uses a blend of midwife- and doctor-led care models at different levels of care. For instance, care at the regional and tertiary hospitals are doctor-led while care at the district hospital and lower are mostly midwife-led. There is the need to design our healthcare systems to ensure that pregnant women and newborns receive care that is respectful, attentive and avoids needless interventions during and after delivery.

References

Adisah-Atta, I. (2017). Financing health care in Ghana: Are ghanaians willing to pay higher taxes for better health care? Findings from afrobarometer. *Social Sciences*, *6*(3). https://doi.org/10.3390/socsci6030090

Adua, E., Frimpong, K., Li, X., & Wang, W. (2017). Emerging issues in public health: a perspective on Ghana's healthcare expenditure, policies and outcomes. *EPMA Journal*, *8*(3), 197–206. https://doi.org/10.1007/s13167-017-0109-3

Agongo, E. E., Agana-Nsiire, P., Enyimayew, N., Adibo, M., & Mensah, E. (2017). Primary Health Care Systems (Primasys). *World Health Organization*, 1–48. http://www.who.int/alliance-hpsr

Aikins, A. de-G., & A, K. K. (2017). Health and Healthcare in Ghana, 1957-2017. *Research Gate*, 365–384. https://doi.org/DOI: 10.1093/acprof:oso/9780198753438.003.0022 CITATIONS

Akhtar, A. (2011). *Health care regulation in low-and middle- income countries : a review of the literature* (Issue 14). http://www.hanshep.org/resources/further-reading/2011-healthcare-regulation-in-low-and-middle-income-countries-literature-review

Allied Health Professions Council. (2018). *Allied Health Professions Council*. Allied Health Professions Council. http://www.moh.gov.gh/allied-health-professions-council/

Anabila, P., Kumi, D. K., & Anome, J. (2019). Patients' perceptions of healthcare quality in Ghana: A review of public and private hospitals. *International Journal of Health Care Quality Assurance*, *32*(1), 176–190. https://doi.org/10.1108/IJHCQA-10-2017-0200

Annor, I. (2018). *Ghana: baby dies as doctor cuts oxygen supply over non-payment of bills*. https://www.africanews.com/2018/04/11/ghana-baby-dies-as-doctor-cuts-oxygen-supply-over-non-payment-of-bills//

Aranaz-Andrés, J. M., Aibar-Remón, C., Limón-Ramírez, R., Amarilla, a, Restrepo, F. R., Urroz, O., Sarabia, O., García-Corcuera, L. V, Terol-García, E., Agra-Varela, Y., Gonseth-García, J., Bates, D. W., & Larizgoitia, I. (2011). Prevalence of adverse events in the hospitals of five Latin American countries: results of the "Iberoamerican Study of Adverse Events" (IBEAS). *BMJ Quality & Safety*, *20*(12), 1043–1051. https://doi.org/10.1136/bmjqs.2011.051284

Atuoye, K. N., Dixon, J., Rishworth, A., Galaa, S. Z., Boamah, S. A., & Luginaah, I. (2015). Can

she make it? Transportation barriers to accessing maternal and child health care services in rural Ghana. *BMC Health Services Research*, *15*(1). https://doi.org/10.1186/s12913-015-1005-y

Basu S, Andrews J, Kishore S, Panjabi R, S. D. (2012). Comparative performance of private and public healthcare systems in low- and middle-income countries: a systematic review. *PLoS Medicine*, *9*.

Bevan, G., & Skellern, M. (2011). Does competition between hospitals improve clinical quality? A review of evidence from two eras of competition in the English NHS. *BMJ (Online)*, *343*(7830). https://doi.org/10.1136/bmj.d6470

Beyai, P. L., Aboagye, P. K., Adutum, N., Salifu, M., & Sedegah, K. (2013). *Implementation og MDG Acceleration Framework (MAF) as a Strategy to Overcome Inequalities in Access to Maternal Health Services in Ghana* (Issue 2). UNDP. https://www.gh.undp.org/content/ghana/en/home/library/poverty/implementation-of-mdg-acceleration-framework--maf--as-a-strategy0.html

Bhattacharyya S, Berhanu D, Taddesse N, et al. (2016). District decision-making for health in low-income settings: a case study of the potential of public and private sector data in India and Ethiopia. *Health Policy Plan*, *31*, 25–34.

Boateng, M. (2016, October). Towel in Stomach Woman Dies. *Ghanaian Chronicle2*. https://www.modernghana.com/news/729001/towel-in-stomach-woman-dies.html

Bonfrer, I., Breebaart, L., & De Poel, E. Van. (2016). The effects of Ghana's national health insurance scheme on maternal and infant health care utilization. *PLoS ONE*, *11*(11), 1–13. https://doi.org/10.1371/journal.pone.0165623

Brown, A. (2019). *Understanding corporate governance of healthcare quality : a comparative case study of eight Australian public hospitals*. 1–14.

Centre for Plant Medicine Research. (n.d.). *Vision & Mission*. Vision & Mission. Retrieved February 7, 2020, from https://www.cpmr.org.gh/about/vision-mission

CHAG. (2019). *2018 CHAG Annual Report*.

Christian Health Association of Ghana (CHAG). (2019). *Christian Health Association of Ghana (CHAG) Annual Report 2018*.

COHSASA. (2020). *COHSASA Healthcare Standards*. http://cohsasa.co.za/healthcare-standards/#:~:text=Healthcare facilities standards are statements,healthcare

professionals%2C staff%2C patients and

Cooper, Z., Gibbons, S., Jones, S., & Mcguire, A. (2011). Does hospital competition save lives? Evidence from the English NHS patient choice reforms. *Economic Journal*, *121*(554), 228–260. https://doi.org/10.1111/j.1468-0297.2011.02449.x

Daily Graphic. (2015). *Lister Hospital implicated in death of woman after surgery*. https://www.newsghana.com.gh/lister-hospital-implicated-in-death-of-woman-after-surgery/

Dalinjong, P. A., Wang, A. Y., & Homer, C. S. E. (2018). The implementation of the free maternal health policy in rural Northern Ghana: Synthesised results and lessons learnt. *BMC Research Notes*, *11*(1). https://doi.org/10.1186/s13104-018-3452-0

Das, J., Das, V., & Tabak, D. (2012). *In Urban And Rural India, A Standardized Patient Study Showed Low Levels Of Provider Training And Huge Quality Gaps*. *December*. https://doi.org/10.1377/hlthaff.2011.1356

Dennis, M. L., Benova, L., Goodman, C., Barasa, E., Abuya, T., & Campbell, O. M. R. (2020). Examining user fee reductions in public primary healthcare facilities in Kenya, 1997-2012: Effects on the use and content of antenatal care. *International Journal for Equity in Health*, *19*(1), 1–13. https://doi.org/10.1186/s12939-020-1150-8

Dennis, M. L., Benova, L., Owolabi, O. O., & Campbell, O. M. R. (2018). Meeting need vs. sharing the market: a systematic review of methods to measure the use of private sector family planning and childbirth services in sub-Saharan Africa. *BMC Health Services Research*, *18*(1), 699. https://doi.org/10.1186/s12913-018-3514-y

Duku, S. K. O., Nketiah-Amponsah, E., Janssens, W., & Pradhan, M. (2018). Perceptions of healthcare quality in Ghana: Does health insurance status matter? *PLoS ONE*, *13*(1), 1–17. https://doi.org/10.1371/journal.pone.0190911

Eun Woo Nam, S. D., & Ha Yun Kim, Y. S. J. (2015). Improving Maternal Health in the Volta Region of Ghana: Development Action Plan from a Baseline Assessment using 5As Framework. *Primary Health Care Open Access*, *05*(02). https://doi.org/10.4172/2167-1079.1000202

Fenenga, C. J., Boahene, K., Arhinful, D., de Wit, T. F. R., & Hutter, I. (2013). Do prevailing theories sufficiently explain perceptions and health seeking behavior of Ghanaians? *International Journal of Health Planning and Management*, *29*(1).

https://doi.org/https://doi.org/10.1002/hpm.2159

Food and Drugs Authority. (n.d.). *Who We Are*. Who We Are. Retrieved February 7, 2020, from https://fdaghana.gov.gh/index.php/who-we-are/

Gaynor, M., Moreno-Serra, R., & Propper, C. (2013). Death by market power: Reform, competition, and patient outcomes in the national health service. *American Economic Journal: Economic Policy*, *5*(4), 134–166. https://doi.org/10.1257/pol.5.4.134

Ghana Health Service. (2018). *The Health System in Ghana, Facts and Figures*. internal-pdf://0240438844/Facts-and-figures-2015_GHS.pdf%0Ahttp://www.moh.gov.gh/wp-content/uploads/2017/07/Facts-and-figures-2015.pdf

Ghana Health Service (GHS). (2017). *Ghana Ranks 150th safe place for Childbirth in the world*. https://www.ghanahealthservice.org/ghs-item-details.php?scid=34&iid=22

Ghana Gazette (List of Medical & Dental Practitioners Registered in Ghana for 2020), 1 (2020).

Ghana Statistical Service, Ministry of Health, T. D. P. (2014). *Ghana Demographic and Health Survey*. https://dhsprogram.com/pubs/pdf/FR307/FR307.pdf

Ghana Statistical Service, Ministry of Health, T. D. P. (2017). *Ghana Maternal Health Survey*.

GhanaWeb. (2018). *GHS to probe Suntreso Hospital over pregnant woman's death*. https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Ghana-Health-Service-to-probe-Suntreso-Hospital-over-pregnant-woman-s-death-667368

GhanaWeb. (2019). *Exporting Ghanaian nurses to Barbados senseless-Victor Smith*. https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Exporting-Ghanaian-nurses-to-Barbados-senseless-Victor-Smith-755675

GhanaWeb. (2020a). *Private Health Insurance Providers to Withdraw NHIS Services by March 1 over Debts*. GhanaWeb Sourced from ClassFMOnline.Com. https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Private-Health-providers-to-withdraw-NHIS-services-by-March-1-over-debts-868813

GhanaWeb. (2020b). *Ridge Hospital: Doctors leave huge towel in woman's tummy for 9-months after C-section*. https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Ridge-Hospital-Doctors-leave-huge-towel-in-woman-s-tummy-for-9-months-after-C-section-1015147

GHS. (2017). *GHS: Facts and Figures, 2017*.

Goddard, M. (2015). Competition in healthcare: Good, bad or ugly? *International Journal of*

Health Policy and Management, *4*(9), 567–569. https://doi.org/10.15171/ijhpm.2015.144

HeFRA. (2019). *Health Facilities Regulatory Agency: 2018 Annual Report*. Ministry of Health (MoH). http://www.moh.gov.gh/wp-content/uploads/2016/02/MAF-strategic-plan.pdf

Institute for Health Metrics and Evaluation (IHME). (2015). *Health Services Provision in Ghana: Assessing Facility Capacity and Costs of Care*. 1–50. www.healthdata.org

IOM. (2001). *Crossing the Quality Chasm: A New Health System for the 21st Century.* Institute of Medicine

KBTH Obst & Gynae Department. (2020). *KBTH Obstetrics & Gynaecology Annual Report*.

Kodom, M., Owusu, A. Y., & Kodom, P. N. B. (2019). Quality Healthcare Service Assessment under Ghana's National Health Insurance Scheme. *Journal of Asian and African Studies*, *54*(4), 569–587. https://doi.org/10.1177/0021909619827331

Korle Bu Teaching Hospital. (2019). *Korle Bu Teaching Hospital Goes Paperless*. Korle Bu Teaching Hospital. http://kbth.gov.gh/korle-bu-teaching-hospital-goes-paperless/

Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S., Adeyi, O., Barker, P., Daelmans, B., Doubova, S. V., English, M., García Elorrio, E., Guanais, F., Gureje, O., Hirsch, L. R., & Pate, M. (2018). *High quality health systems-time for a revolution: Report of the Lancet Global Health Commission on High Quality Health Systems in the SDG Era*. https://doi.org/https://doi.org/10.1016/S2214-109X(18)30386-3

Lábaj, M., Silanič, P., Weiss, C., & Yontcheva, B. (2018). Market structure and competition in the healthcare industry: Results from a transition economy. *European Journal of Health Economics*, *19*(8), 1087–1110. https://doi.org/10.1007/s10198-018-0959-1

Lee, E. E., & Scott, D. . (2016). Hospital Nurses' Work Environment Characteristics and Patient Safety Outcomes. *Western Journal of Nursing Research2*. https://doi.org/10.1177/0193945916666071

Levesque, J. F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health*, *12*(1), 1. https://doi.org/10.1186/1475-9276-12-18

Makinen, M., Sealy, S., Bitrán, R. A., Adjei, S., & Muñoz, R. (2011). *Private Health Sector Assessment in Ghana*.

Medical and Dental Council. (n.d.). *About Us*. Medical and Dental Practice.

Mendes, W., Pavao, B. AL, Martins, M., & Travassos, C. (2018). The application of

Iberoamerican study of adverse events (IBEAS) methodology in Brazilian hospitals. *International Journal of Quality in Health Care*. https://doi.org/10.1093/intqhc/mzy055

Mensah, R. S., Mogale, R. S., & Richter, M. S. (2014). Birthing experiences of Ghanaian women in 37th Military Hospital, Accra, Ghana. *International Journal of Africa Nursing Sciences*, *1*, 29–34. https://doi.org/10.1016/j.ijans.2014.06.001

Ministry of Finance (MoFEP). (2011). *National Policy on Public Private Partnerships (PPP).pdf*. Ministry of Finance & Economic Planning. https://www.mofep.gov.gh/sites/default/files/reports/economic/ppp_policy.pdf

Ministry of Health (MoH). (2014). *Ghana National Newborn Health Strategy and Action Plan 2014-2018*. Ministry of Health (MoH). https://www.healthynewbornnetwork.org/hnn-content/uploads/FINAL_Ghana-Newborn_Strategy_2014July10.pdf

Ministry of Health (MoH). (2020a). *Covid-19: Government to begin construction of 88 district hospitals this year- Nana Addo*. https://www.moh.gov.gh/covid-19-government-to-begin-construction-of-88-district-hospitals-this-year-nana-addo/

Ministry of Health (MoH). (2020b). Ghana National Newborn Health Strategy and Action Plan (2019-2023). In *Animal Genetics*. MoH.

Ministry of Health (MoH). (2020c). *National Health Policy: Ensuring healthy lives for all Revised Edition MINISTRY OF HEALTH REPUBLIC OF GHANA*.

Ministry of Health (MoH), G. (2016). *National Community-Based Health Planning and Services (CHPS) Policy*.

Ministry of Health (MoH) Ghana. (2014). *Ministry of Health Ghana Holistic Assessment of the Health Sector Programme of Work 2014*. http://www.moh.gov.gh/wp-content/uploads/2016/02/Holistic-Assessment-2015.pdf

Ministry of Health (MoH) Ghana. (2016). *Ghana National Healthcare Quality Strategy*. Ministry of Health (MoH).

Ministry of Health, G. (2014). Health sector medium term development plan. In *Ministry of Health (MOH)* (p. 75).

Ministry of Health Ghana. (n.d.). *Policy, Planning, Monitoring & Evaluation Policy Planning, Budgeting, Monitoring and Evaluation Directorate (PPBMED)*. Retrieved February 6, 2020, from http://www.moh.gov.gh/policy-planning-monitoring-evaluation/

Ministry of Health Ghana. (2018). *Alternative Medicine Council*. Alternative Medicine Council.

http://www.moh.gov.gh/alternative-medicine-council/

MoH/GHS. (2020). *Standards for Newborn Health Services in Ghana* (Issue June). MoH/GHS.

MoH. (2013). *Private Health Sector Dev Policy*.

MOH. (2014). Health sector medium term development plan (2014-2017). *Ministry of Health (MOH)*, 75. https://doi.org/10.1016/S0041-3879(54)80075-4

MOH Ghana. (2018). *Holistic Assessment of 2017 Health Sector Programme of Work*. 110.

Mwaniki, M. K., Baya, E. J., Mwangi-Powell, F., & Sidebotham, P. (2016). "Tweaking" the model for understanding and preventing maternal and neonatal morbidity and mortality in Low Income Countries: 'inserting new ideas into a timeless wine skin.' *BMC Pregnancy and Childbirth*, *16*(1). https://doi.org/10.1186/s12884-016-0803-5

Myjoyonline. (2020). *Institute of Languages boss sues Ridge Hospital MD, Ghana Health Service and Attorney-General over alleged medical negligence*. https://www.myjoyonline.com/news/health/institute-of-languages-boss-sues-ridge-hospital-md-ghana-health-service-and-attorney-general-over-alleged-medical-negligence/

National Academies of Sciences, Engineering, and M. (2018). *Crossing the Global Quality Chasm: Improving Healthcare Worldwide*. The National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK535653/pdf/Bookshelf_NBK535653.pdf

Neale, G., Woloshynowych, M., & Vincent, C. (2001). Exploring the causes of adverse events in NHS hospital practice. *Journal of the Royal Society of Medicine2*, *94*(7), 322–330.

NHIA. (2019). *National Health Insurance Authority 2018 Annual Report* (Vol. 23).

Nilsson, L., Borgstedt-Risberg, M., Soop, M., Nylen, U., Alenius, C., & Rutberg, H. (2018). Incidence of Adverse Events in Sweden During 2013-2016: A Cohort Study Describing the Implementation of a National Trigger Tool. *BMJ Open2*, *8*. https://doi.org/10.1136/bmjopen-2017-020833

Nsiah-boateng, E., Asante, F. A., Spaan, E., & Velden, K. Van Der. (2018). *Perception of quality health care delivery under capitation payment : a cross-sectional survey of health insurance subscribers and providers in Ghana*. 1–12.

Nursing and Midwifery Council. (2020). *Nursing and Midwifery Council of Ghana*. Nursing and Midwifery Council of Ghana. https://www.nmcgh.org/t3f/en/

Nyabor, J. (2018). *Doctor Jailed 10 years for defrauding NHIS*. Citi Newsroom. https://citinewsroom.com/2018/06/doctor-jailed-10-years-for-defrauding-nhis/

Nyabor, J. (2019). *Private Health Providers Threaten Court Action over NHIA Debt*. Private Health Providers Threaten Court Action over NHIA Debt. https://citinewsroom.com/2019/08/private-health-providers-threaten-court-action-over-nhia-debt/

Otchi, E.-H., Esena, R. K., Srofenyoh, E. K., Marfo, K., Agbeno, E. K., Asah-Opoku, K., Ken-Amoah, S., Ameh, E. O., Beyuo, T., & Oduro, F. (2019). Types and prevalence of adverse events among obstetric clients hospitalized in a secondary healthcare facility in Ghana. *Journal of Patient Safety and Risk Management*, *24*(6), 238–244. https://doi.org/10.1177/2516043519881524

Pamela, A. (2020). *President Akuffo-Addo commissions 307 ambulances in fulfillment of the '1 constituency 1 ambulance' initiative.* https://www.graphic.com.gh/news/general-news/ghana-news-president-akufo-addo-commissions-307-ambulances-in-fulfillment-of-the-1-constituency-1-ambulance-initiative.html

Health Institutions Act 829 Facilities Act , 2011 Act 829 Health Institutions and Facilities, 1 (2011). http://hefra.gov.gh/wp-content/uploads/2018/03/Act-829-Health-Institutions-and-Facilities-Act2cl-2011.pdf

Pearson, L., Gandhi, M., Admasu, K., & Keyes, E. B. (2011). User fees and maternity services in Ethiopia. *International Journal of Gynecology and Obstetrics*, *115*(3), 310–315. https://doi.org/10.1016/j.ijgo.2011.09.007

PharmAccess. (2016). A Closer Look At The healthcare system in Ghana. In *PharmAccess* (Issue October, p. 1). https://www.pharmaccess.org/wp-content/uploads/2018/01/The-healthcare-system-in-Tanzania.pdf

Pharmacy Council. (2017). *About Us*. About Us. https://www.pcghana.org/about-us/

Powell-Jackson T, Macleod D, Benova L, Lynch C, C. O. (2015). The role of the private sector in the provision of antenatal care: a study of demographic and health surveys from 46 low- and middle-income countries. *Trop Med Int Health*, *20*, 230–239.

Ramya, N., Kowsalya, A., & Dharanipriya, K. (2019). Service Quality and its Dimensions. *EPRA International Journal of Research and Development (IJRD)*, *4*(February). https://www.researchgate.net/publication/333058377_SERVICE_QUALITY_AND_ITS_DIMENSIONS

Renfrew, M. J., McFadden, A., Bastos, M. H., Campbell, J., Channon, A. A., Cheung, N. F.,

Silva, D. R. A. D., Downe, S., Kennedy, H. P., Malata, A., McCormick, F., Wick, L., & Declercq, E. (2014). Midwifery and quality care: Findings from a new evidence-informed framework for maternal and newborn care. *The Lancet*, *384*(9948), 1129–1145. https://doi.org/10.1016/S0140-6736(14)60789-3

Rochefort, C., Adams, O., Calhoun, L., & Shaw, D. (2017). Professionalism: Super Hero or Human. *Canadian Journal of Physician Leadership*, *3*(3). https://physicianleaders.ca/assets/cjplvol3num32017.pdf

Saleh, K. (2013). *The Health Sector in Ghana: A Comprehensive Assessment*. https://www.ncbi.nlm.nih.gov/books/NBK535653/pdf/Bookshelf_NBK535653.pdf

Salkever, D. S. (1976). Accessibility and the demand for preventive care. *Social Science and Medicine*, *10*(9–10), 469–475. https://doi.org/10.1016/0037-7856(76)90114-1

Sfantou, D., Laliotis, A., Patelarou, A., Sifaki- Pistolla, D., Matalliotakis, M., & Patelarou, E. (2017). Importance of Leadership Style towards Quality of Care Measures in Healthcare Settings: A Systematic Review. *Healthcare*, *5*(4), 73. https://doi.org/10.3390/healthcare5040073

Sheff, M. C., Bawah, A. A., Asuming, P. O., Kyei, P., Kushitor, M., Phillips, J. F., & Kachur, S. P. (2020). Evaluating health service coverage in Ghana's Volta Region using a modified Tanahashi model. *Global Health Action*, *13*(1). https://doi.org/10.1080/16549716.2020.1732664

Survey, M. H., & Indicators, K. (2017). *Ghana Maternal Health Survey Key Indicators 2017*.

Thomas, C., Makinen, M., Blanchet, N., & Krusell, K. (2016). *Engaging the Private Sector in Primary Health Care to Achieve Universal Health Coverage*. Joint Learning Network for Universal Health Coverage (JLN).

Ugaz, J. I., Chatterji, M., Gribble, J. N., & Banke, K. (2016). Is household wealth associated with use of long-acting reversible and permanent methods of contraception? A multi-country analysis. *Global Health Science and Practice*, *4*(1), 43–54. https://doi.org/10.9745/GHSP-D-15-00234

University of Ghana, S. of P. H. (2018). *State of the Nation's Health Report* (Vol. 19, Issue 14).

Vesel, L., Manu, A., Lohela, T. J., Gabrysch, S., Okyere, E., Ten Asbroek, A. H. A., Hill, Z., Agyemang, C. T., Owusu-Agyei, S., & Kirkwood, B. R. (2013). Quality of newborn care: A health facility assessment in rural Ghana using survey, vignette and surveillance data. *BMJ*

Open, *3*(5), 1–11. https://doi.org/10.1136/bmjopen-2012-002326

Wadge, H., Roy, R., Sripathy, A., Prime, M., Carter, A., Fontana, G., Marti, J., & Chalkidou, K. (2017). *EVALUATING THE IMPACT OF PRIVATE PROVIDERS ON HEALTH AND HEALTH SYSTEMS*.

Wang, W., Temsah, G., & Mallick, L. (2017). The impact of health insurance on maternal health care utilization: Evidence from Ghana, Indonesia and Rwanda. *Health Policy and Planning*, *32*(3), 366–375. https://doi.org/10.1093/heapol/czw135

WHO, UNICEF, UNFPA, W. B. G. and U. (MMEIG). (2019). *Trends in Estimates of Maternal Mortality Ratio (MMR; maternal deaths per 100,000 live births) maternal deaths and lifetime risk of maternal death, 2000-2017*.

WHO. (2013). The Health Sector in Ghana: Facts and Figures 2018. *Centre for Health Information Management of the Policy, Planning, Monitoring and Evaluation- Ghana Health Service*, 1–50. https://doi.org/10.1596/978-0-8213-9599-8

Witter, S., Drame, F. B., & Cross, S. (2009). Maternal fee exemption in Senegal: is the policy a success? *African Journal of Midwifery and Women's Health*, *3*(1), 5–10. https://doi.org/10.12968/ajmw.2009.3.1.39409

World Health Organization (WHO). (2015). *Statement on Caesarean Section Rates. Department of Reproductive Health and Research, WHO*. https://apps.who.int/iris/bitstream/handle/10665/161442/WHO_RHR_15.02_eng.pdf?sequence=1

World Health Organization (WHO). (2016). *Medicines Transparency Alliance Ghana*.

Table 1: Comparison of health status between CHAG and GHS

Health Status indicators: 2012-2018 (Pg. 48 CHAG Annual Report)											
Variable	2012	2013	2014	2015	2016	2017	2018	National	Source	Developing countries (2016)	Source
Total no of Deliveries	114,205	117,313	119,141	110,228	136,669	110,109	143,242				
Total ANC Attendance	507,034	632,282	620,223	560,394	641,554	684,800	748,657				
Maternal Mortality Rate (per 100,000 LB)	158	168	167	145	109	152	124	127.3	Inst. Mat Mort., DHIMS2, 2018	239	WHO: MNCAH, Stillbirths 2015
Neonatal Mortality Rate (per 1000 LB)	5.5	7.1	9.8	6.5	13	9	8.2	7.7	Inst. Mat Mort., DHIM	52	WHO: MNCAH, Stillbirths 2016

									S2, 2019		
Infant Mortality Rate (per 1000 LB)	6.6	7.9	10.9	8.6	12.9	10.1	8.9	8.5	Inst. Mat Mort., DHIM S2, 2019	107	WHO: MNCAH, Stillbirths 2016
Under 5 Mortality Rate (per 1000 LB)	21.1	19.5	17.3	15.1	18.3	14	6.5	4.9	Inst. Mat Mort., DHIM S2, 2019	177	WHO: Key Facts 2015
Still Births Rate (per 1000 LB)	26	24	21	21	20	19	19	1.4	Facts & Figs, GHS, 2018	18.4	2015 Worldwide Est.: WHO Neglected Tragedy of Stillbirths