

Ashesi University

An Investigation into Ghana's Primary Care System: Challenges and Solutions

By

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Undergraduate thesis submitted to the Department of Business Administration, Ashesi University College. Submitted in partial fulfilment of the requirements for The award of the Bachelor of Science Degree in Business Administration

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April 2019

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Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.
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Acknowledgement

Firstly, I would like to thank God for the life and good favours throughout the four years.

I would like to thank first and foremost my wonderful parents who have guided me and helped facilitate my journey throughout the four years with financial, emotional and knowledgeable support. For, without you guys I would never have made it this far.

I would like to thank Dr. Stephen Emmanuel Armah for his guidance, support and continuous encouragement throughout this project and the reassurance that we mere mortals are also capable of attempting a successful thesis.

To the many anonymous respondents who took the time to listen to my broken Twi as I attempted to interview and ask questions. Thank you for entertaining me (if you ever get the change to read this).

Abstract

Ghana has been plagued by cases in the news of patients being turned away at major hospitals in the country due to overcapacity and a lack of beds This study examines role primary care plays in alleviating the pressure faced at secondary and tertiary facilities assessing and identifies challenges and weaknesses inhibiting its function as a gatekeeper. The paper seeks to assess patient perceptions and understanding of the primary care system, while also taking in to account the role of providers and systematic challenges.

The study population was located within the Greater Accra East District of Ghana and chosen because of the predominance of primary care facilities and the absence of secondary and tertiary facilities. Data was collected using qualitative techniques such as in-depth interviews and questionnaires and analysed using both qualitative and quantitative analysis.

The results revealed generally poor perceptions of primary care by respondents which was largely influenced by the limited facilities, equipment and staff available at primary care facilities. Despite this, the results indicated that finances played a less prominent role as a barrier to the utilization of primary care facilities with waiting times and standard of care being the most prominent barriers. Other deficiencies include: (1) the weak referral system (2) dangers of pharmacy practice (3) lack of specialists (4) The study proposes policymakers expand the clinical responsibilities of physician assistants and nurse practitioners.

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Chapter 1: Introduction

1.1 Background

The World Health Organization (WHO) has pointedly promoted Universal Health Coverage, maintaining that it can be achieved through preventive, promotion, treatment and rehabilitative medicine and initiatives (WHO, 2018). Primary care has been and continues to be a major contributing factor to the achievement of this goal - especially in developed countries. The concept of primary care has effectively been in existence since the term was propounded in the 1920 Dawson report released in the United Kingdom (Starfield, Shi, & Macinko, 2005). Primary care became a cornerstone to the health system in the United Kingdom and various other parts of the world, so much so, that it is often referred to as the 'gatekeeper' to specialist care in many countries where it is predominant (Starfield, Shi, & Macinko, 2005).

The WHO defines primary care as a health care facility which acts as the first point of contact offering: continued, comprehensive and coordinated care (World Health Organisation, 2018). The WHO further goes on to define its coordinative role as providing access to specialists should patients require specialist attention beyond what the primary care clinician can offer (World Health Organisation, 2018). In this definition, the emphasis is placed on primary care's function as a coordinator and its role as a metaphorical revolving door guiding patients in and out of the healthcare system efficiently and effectively.

Therefore, primary care's predominant function is to filter and streamline health cases to decongest secondary and tertiary and ensure efficient use and maximisation of resources.

Primary care facilities generally comprise of: clinics, polyclinics and community health centres.

The positive effects of a strong primary care system are widely researched and documented. Starfield, Shi & Macinko's (2005) research is a focus on the effects of primary care on health. Their study concluded that primary care helps to circumvent and prevent illness and death. Further, their research discovered that primary care is associated with equitable distribution of health, something, they claim, holds in cross-national and national studies (Starfield, Shi, & Macinko, 2005).

Their research is further corroborated by the World Health Organisation report (2004) where the findings showed that a country's primary system is heavily linked with improved health, as well as, higher patient satisfaction and reduced spending on a national level (Atun, 2004)

Thus, based on the above evidence primary care provides more accessible, continued and equitable care for patients. All these characteristics are pivotal and necessary for Ghana and developing countries alike. This paper seeks to contend that primary care's gatekeeping role and coordinative functions are integral to resource allocation - particularly in developing countries such as Ghana where individual health expenditure is high, and resource availability is scarce.

Research conducted by Forrest (2003), revealed that in 1998, European countries with gatekeeping systems spent less on healthcare as a percentage of gross national product than countries without (Forrest, 2003). Further, Forrest (2003) identifies that gatekeeping systems have developed in countries with a shortage of specialists. He, therefore, surmises that gatekeeping is the most appropriate mechanism managing the scarcity of physicians (Forrest, 2003).

Forrest's research (2003) is particularly poignant in Ghana where the scarcity of specialist physicians is an evident problem. Specialists in Ghana are few in Ghana, and the

country loses more and more to the brain drain as many leave and choose not to come back (Drislane, Akpalu, & Wegdam, 2014).

Primary care systems are integral components of a sound healthcare system and thus deserves to be treated with the utmost urgency in Ghana. A developing country such as Ghana with a scarcity of specialists faces inequitable access if its primary care system is not operating to its fullest effect. This is backed up with research from the WHO that suggests countries with a focus on a specialists-based system face more inequity in terms of access (Atun, 2004).

Salisu & Prinz (2009) conducted research on Healthcare in Ghana and found that teaching hospitals serve as the first point of contact as well as referral cases. This was found to be the case in most secondary and tertiary care institutions despite efforts to expand primary care access through the development of the community-based health services (CHPS) program. With these findings, it is evident that the primary care system in Ghana is still not being utilized to its fullest extent. That, the fact that secondary and tertiary care institutions still serve as the first point of contact offers insight into the notion that many are still not utilizing their primary care centres as the first point of contact.

Utilization of primary care in developing countries is a research area Evaezi Okpokoro (2013) identifies in his research paper for the Journal of Public Health in Africa. Stating, "studies which compare the community health needs and the utilization of PHC facilities will provide further insight on the possibility for a health need-fit model as a means of improving the structure and use of PHC which will inevitably improve PHC accessibility and utilization" (Okpokoro, 2013).

The need to focus on the changing community health needs and disease burden of communities in Ghana has become ever-present. Aikins, Addo, Ofei, Bosu & Agyemang

(2012) discuss the changing disease burden from communicable to non-communicable diseases which pose a threat to the country; citing a lack of a coordinated chronic disease policy. The role of primary care in this endeavour is of utmost importance. Studies by Aikins, Addo, Ofei, Bosu & Agyemang (2012) and Aikins, Boynton & Atanga (2010) have thus emphasised the importance of primary healthcare as part of vast array of initiatives targeting the prevention and management of the growth in communicable disease at the community level.

Rajakumar (1978), then chairman of the council for the college of general practitioners in Malaysia, maintained that the need for primary care services in the poorer countries of the world (of which Malaysia was a part of at the time) was far greater than that of developed countries. The trend outlined by Rajakumar in Malaysia is much like the trend outlined in Ghana.

"A great number of people now directed unnecessarily to hospitals can be most efficiently and most considerately be cared for by their own general practitioner or family doctor from well-equipped primary care centres" (Rajakumar, 1978).

Rajakumar's contention was that primary care ought to be considered the 'central axis' of a strong healthcare system, especially given the changing nature of medicine in which the focus is on preventive medicine, early diagnosis and early treatment (Rajakumar, 1978).

Much like Malaysia, Ghana must take primary care's function as a gatekeeper much more seriously than it is currently doing. By researching and studying the constraints to the primary care functions role as a gatekeeper in Ghana, we can actively begin to explore the various avenues to reform the healthcare system, such that, more equitable distribution of healthcare is achieved.

By focusing on preventative, early diagnosis and treatment studies have shown corresponding greater financial efficiency for government healthcare spending, as well as, that of the people. Policymakers ought to take these healthcare issues much more seriously as studies have shown that improved population health has the potential to boost economic development. Bloom and Sachs (1998) contend that the differences in the growth rate of African countries compared to the high growth of East Asian countries is directly attributable the high disease burden of African countries as compared to Asia.

Investment into healthcare is further correlated to significant economic return and is deemed as a productive investment (Mirvis, Chang, & Cosby, 2008). DeVol and Bedroussian (2007) estimated that improvements in the prevention and treatment of common chronic conditions had the potential to add \$905 billion to the United States economy in 2003 and \$5.7 trillion by 2050. What then, are the economic benefits for a developing country with high disease burdens?

1.2 Problem Description

This paper seeks to contribute to the existing, albeit limited literature information available pertaining to the importance of primary care utilization in Ghana. By studying selected areas within the Greater Accra East Municipality, this study hopes to contribute the understanding of primary care utilization while also identifying the more systemic challenges the primary care system faces in its mandate to function as a gatekeeper and streamline healthcare utilization. For the problem at hand concerns itself with the utilization of primary care facilities and the ability of the primary care system to perform effectively as a gatekeeper.

Utilization of primary care facilities is a problem as some studies have found. Yaffee, et al. (2012) found that the rate of bypass of patients who accessed an urban academic

hospital in Ghana instead of closer facilities was 33.9%. Further, only 36.6% of the study's respondents of those who bypassed local facilities were injured. Indicating that a clear majority, 63.4% were less likely to be injured. The study went on to conclude that bypassing care could prove detrimental to the healthcare system of the country (Yaffee, et al., 2012). In the case of primary care, the study revealed that many bypassers had not previously sought for care before utilizing the urban academic hospital.

This poses many problems such as: the inequality of health care facility use and the overabundance of patients at tertiary facilities who could have been treated at local clinics (Yaffee, et al., 2012). This finding is particularly poignant giving that Accra has 3,400 hospital beds in the seven major hospitals which serve a population of 5 million people, indeed, news outlets such as Ghanaweb (2018) have reported several cases of avoidable deaths due to overburdened tertiary facilities. Yaffee, et al. (2012) consequently conclude by stating the importance of understanding "the phenomenon of health care utilization" (Yaffee, et al., 2012) as it has the potential to guide policy decisions, leading to more cost-effective and appropriate access to care and decreases in morbidity and mortality in Ghana.

Community-Based Health Planning and Services (CHPS) facilities according to Johnson et al. (2015) are facilities that exist to improve maternal and child health as well as to reduce maternal mortality in Ghana. They are a primary care initiative, in that, they are intended to be the 'first point of contact' before any access to tertiary or secondary medical facilities. Research shows that despite the success of CHPS facilities especially in rural areas where they feature predominantly, rates of bypass in favour of hospitals are still high. Despite CHPS facilities being less predominant structures in the primary care system in Urban areas the trend still reveals insights pertaining to the strains of on primary care facilities in the country.

In a study conducted by Ariadne Labs and Kwame Nkrumah University of Science and Technology (KNUST) (2017) through the Performance Monitoring and Accountability 2020 (PMA2020) platform, it was found that most women frequently avoided CHPS facilities in favour of hospitals. This is corroborated by Johnson et al. (2015) in their evaluation of the impact of CHPS facilities and the persistent problems of patchy geographical access to care. Ariadne labs' study identified the cause of the high rates of bypass of CHPS facilities and health centres to the higher availability of medicines at hospitals compared to the primary care facilities. However, the research could not pinpoint exactly the underlying cause of the high rates of bypass in favour of hospitals.

1.3 Research Gap

Developing countries have been largely ignored especially pertaining to research and literature on the development of primary care systems and Ghana is no exception. A focus on the development of an efficient gatekeeper seems to be lacking. However, there exists literature pertaining to the factors inhibiting utilization of primary care facilities. Mensah (2003) conducted research to find the factors that caused the underutilization of primary care facilities. Using qualitative methods, it was found, amongst other variables that: income, employment and service cost were important variables contributing to the underutilization of primary care facilities.

However, this research was conducted before the implementation of the National Health Service and thus factors such as income and service cost could be less important today. Further, the research fails to provide healthcare provider perspectives on their impact on utilization. Nevertheless, this research 15 years later is an updated inquiry on the current state of primary care and its utilization. Research also fails to consider

Using the 6th edition of the Anderson Newman model, research into health-seeking behaviour especially regarding research performed in Ghana, the emphasis is placed on the individualistic factors towards health utilization. Appraisal of enabling factors such as the financing of healthcare and organisational structure of the primary care system is largely overlooked. Thus, there is much need for provider perspectives on the efficiency of the organisation and structure of the healthcare system at large from a macro perspective.

1.4 Research Relevance

Borrowing from Evaezi Okpokoro (2013) and his assessment of primary care in Africa, the future of primary care in developing countries is dependent on increased utilization rates through appropriate policy informed by patient and provider perspectives. This is further corroborated by Oladipo (2014) who maintains that utilization rates of health facilities ought to inform the planning of health facilities in different locations.

Further, Ngugi AK et al. (2017) points out that knowledge of utilization rates is important to plan and deliver health interventions and improve health service coverage. Thus, this paper is an important study, in which it is hoped that results inform future policy making and development of health infrastructure informed by patient perspective.

Ghana needs to innovate in terms of the solutions we have on offer pertaining to healthcare and especially primary care. It is of utmost importance and therefore deserves the attention given to it by this research paper. As the studies have shown, an effective primary care system equals

1.5 Research Question(s)

- 1. What are the challenges within the primary care system for healthcare providers?
- 2. What factors contribute to utilization or underutilization of primary care facilities by patients?

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3. How effective is the primary care system concerning its gatekeeper function?

1.6 Research Objectives

This study will conduct its research based on the following set of objectives

- Investigate Ghanaian understanding and perception of clinics and health centres and their role and duty as first points of contact
- 2. Identify factors that could inhibit patients from utilizing clinics and health centres
- 3. Investigate the challenges the primary care and gatekeeper system faces
- 4. Recommend factors that can increase the uptake of primary healthcare facilities by Ghanaians

1.7 Methodology

This research will adopt a qualitative approach to generate an expansive view of the subject at hand. To garner qualitative insights research method techniques such as: interviews, open-ended questionnaires and observations will be used. The study will be limited to a sampling frame of the Greater Accra District based on varying factors such as: socio-economic status and availability of primary care facilities, as well as, secondary and tertiary medical facilities. The results from this study cannot be generalized. It can, however, help to inform decision making and considerations with the findings.

1.8 Organization of Paper

Chapter 1: Introduction

This chapter touches upon the following: research motivation, background, research gap, research relevance, research objectives, research questions, research hypotheses, methodology and finally organization of the paper.

Chapter 2: Literature Review

This chapter focuses on the relevant literature pertaining to primary care both in developed countries and developing. This section will also provide insights as to the various gaps in the existing literature and the dearth of information available in Ghana specific to primary care research.

Chapter 3: Methodology

This chapter presents the various research methods and tools used to form this mixedmethod study. It is an overview of the research design.

Chapter 4: Data Analysis

This chapter focuses on the findings of the research, using the various statistical tools and frameworks to gain an understanding of the data collected and make sound linkages to the research focus at hand.

Chapter 5: Conclusion

This chapter offers a summary of the findings while also providing recommendations as to the way forward for Ghana's primary care sector. Further, the limitations of the research will be expressed here.

Chapter 2: Literature Review

2.1 Introduction

This chapter highlights and assesses existing literature on Ghana's health care system, with a focus on primary care.

2.2 A Discussion of Health-Care Systems and their Different Parts

A healthcare system contributes tremendously to the well-being of a nation economically, much less the physical and mental well-being of its citizens. The necessity of an efficient health system is highlighted by its function in the allocation of scarce resources (Atun, 2012).

The World Health Report conducted by The World Health Organization WHO (2000) defines a health system as all the activities whose primary purpose is to promote, restore or maintain health. Further, the WHO (2007) defines an efficient health system as one that delivers effective health interventions with minimum wastage of resources and equitable access to medical products, vaccines and technologies.

Notably, the WHO's definition does not only lay emphasis on the delivery of healthcare but also the importance of informal education on behalf of citizens to advise themselves based on available health information. Further, an importance is placed on 'leadership and governance' such that frameworks and policies exist to facilitate effective execution of a health system.

Julio Frenk (2010) argues for an expansion of our view of health systems, in that, traditionally debate on health systems has been largely reductionist without viewing the important components such a human resources, financing, hospitals, clinics and technologies in terms of their interrelations. Further, Frenk (2010) adds to the existing definitions of health

systems in that beyond the improvement of health as a defining goal, one must look at the way it is distributed, placing the concept of 'equity' at the heart of an efficient health system.

2.3 Overview of the Health System in Ghana

Abor, Abekah-Nkrumah, & Abor (2008) examination of hospital governance in Ghana cites the ministry of health's four main categories of health service delivery in Ghana. The public, private-for-profit, private-not-for-profit, and traditional systems (Abor, Abekah-Nkrumah, & Abor, 2008).

Ghana's health system is divided into three tiers: primary care, secondary care and tertiary care. Notably, health centres and polyclinics provide primary care facilities, regional hospitals provide Secondary care and teaching hospitals provide tertiary care (Abor, Abekah-Nkrumah, & Abor, 2008).

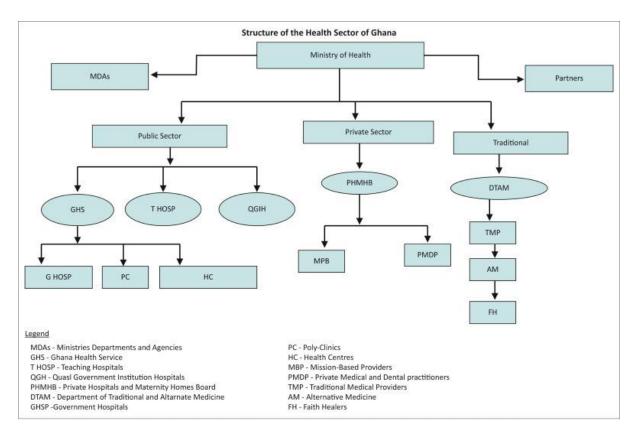


Figure 1 source: (Abor, Abekah-Nkrumah, & Abor, 2008)

Salisu and Prinz (2009) provide a general overview of the structure of the Ghanaian health system using an organization chart from Abor. Showing primary care facilities such as polyclinics and health centres at the bottom of the hierarchy indicating the first point of contact basis.

Data from the Ghana Health Service (2017) shows Ghana's total expenditure on health as a percentage of gross domestic product (GDP) in 2012 to be 5.2%, 0.4% below the African average and 3.4% lower than the global average. Government expenditure on health as a percentage of total expenditure on health in 2011 was 68.3%, 17.5% greater than Africa's average and 29.5% greater than the global average this is indicative of reduced private expenditure on health. However, this is contrary to data on out-of-pocket expenditure on health as a percentage of private expenditure on health which was 91.9% compared to Africa's average of 60.6% and the global average of 52.6%.

			District	Health		Midwife /			Psychiatric
Region	CHPS	Clinic	Hospital	Centre	Hospital	Maternity	Mines	Polyclinic	Hospital
Ashanti	1041	130	25	135	96	73	0	1	0
Brong Ahafo	458	102	18	90	12	41	0	4	0
Central	235	67	12	61	16	35	0	2	1
Eastern	611	116	17	99	14	25	0	2	0
Greater Accra	201	283	6	28	76	85	0	13	2
Northern	386	56	15	96	13	9	0	4	0
Upper East	225	50	6	53	1	2	0	0	0
Upper West	208	14	3	68	8	5	0	5	0
Volta	350	40	17	161	11	16	0	3	0
Western	470	145	18	64	20	37	3	0	0
National	4185	1003	137	855	267	328	3	34	3

Figure 2 Source: Ghana Health Service (2017)

Figure 2 taken from the Ghana Health Service (2017) report on the overview of the health sector in Ghana shows the distribution of public health facilities. Interestingly, Community-Based Health Planning and Services (CHPS) facilities constituted the highest percentage of public health infrastructure, with clinics and health centres coming in second and third. These three types of health facilities constitute the crux of Ghana's primary care system and thus, on the surface Ghana it appears as though a strong focus is placed on the

provision of primary care facilities. CHPS facilities were instituted to promote equity in access to health services, deliver cost-effective and quality primary care services to individuals and households. They are an important primary care initiative and thus from the data in figure 2 represents the majority of healthcare infrastructure in Ghana.

Region	Number of Doctors	Doctor Population Ratio
Ashanti	708	7,848
Brong Ahafo	231	11,495
Central	266	9,732
Eastern	218	13,798
Greater Accra	1316	3,582
Northern	216	13,419
Upper East	45	25,878
Upper West	42	18,986
Volta	192	12,749
Western	131	20,659
National	3365	8481

Figure 3 Source: Ghana Health Service (2017)

Data from figure 3 shows the doctor to population ratio.

2.4 Advancements in Ghana's Healthcare System

Among major advancements in Ghana's bid towards universal health care is the National Health Insurance. Post-independence, Ghana initiated a tax-funded public health care policy for all, however, the country met severe economic and financial downturn and could not support such a policy. The collapse of this policy provided the necessary conditions for the development of the 'cash and carry' system (Blanchet, Fink & Osei-Akoto, 2012).

The cash and carry system was not effective, worsening healthcare access for the poor (Blanchet, Fink & Osei-Akoto, 2012). This led to the introduction of community-based health insurance schemes (CBHIS). CBHIS covered only 1% of the population and was as ineffective of a policy as its cash and carry counterpart. The cash and carry system became extremely unpopular and thus a political agenda evolved around the need abolish this system, the opposition party at the time, the National Patriotic Party, campaigned on this premise. Ultimately, upon ascension to power in 2003 the government established the National Health Insurance Scheme (NHIS) under Act 650 (Blanchet, Fink & Osei-Akoto, 2012). This National Health Insurance Scheme (NHIS)

Drislane, Akpalu & Wegdam (2014) in their paper on the medical system in Ghana however maintain that despite the quality of medical care being high wherever it is available, its availability is unevenly distributed with rural areas often suffering in health delivery. Further, they identify a human resource scarcity in physicians, hospital and clinic overcrowding and limited time per patient due to high demand and not enough infrastructure to satiate the demand.

Specialist physicians are few in Ghana, many leave the country in order to train and educate themselves, and however, many stay there contributing the heavy brain drain evident in the country Drislane, Akpalu & Wegdam (2014).

Ghana has advanced in its efforts to improve healthcare outcomes of its citizens throughout the years. Adua, Frimpong, Li & Wang (2017) present an overview of Ghana's health expenditure and outcomes between the years 1995 and 2014. Infant and under-5 mortality rates are down by 50% and 25% respectively, life expectancy increased from 60.7 to 64.8 years and private spending on health has largely reduced.

Despite political efforts to improve Ghana's healthcare some policies of which have largely succeeded in improving quality of life and health outcomes, Karima Saleh in 'The Health Sector in Ghana: A Comprehensive Assessment' notes that from a comparison of Ghana's health outcomes with that of countries with similar income levels and health expenditure Ghana's performance in health outcomes is mixed at best (Saleh, 2012). Capital investments in hospital construction increased, however, this pattern of investment has not been reflected in investment in Community-based Health Planning and Services (CHPS) or primary care facilities (Saleh, 2012).

Awoonor-Williams, Tindana, Dalinjong, Nartey and Akazili (2016) study the alignment of the National Health Insurance scheme and the goals of primary health care. They highlight a key inhibitor or service delivery in the form of reimbursements and call for the need for National Health Agency to take it seriously. This has resulted in a number of private and faith-based health providers to threaten withdrawal from the system – which is a major threat to health service delivery all over the country. Further, Turkson (2009) points out that even with the National Health Insurance Scheme, health providers in Ghana are rude, uncaring, disrespectful and unfriendly.

2.5 Understanding Primary Care

The term 'primary care' still undergoes continuous revision amid bids to truly understand its meaning in its entirety. As such, it has seen several revisions over the years. The Institute of Medicine (IOM) (1978) defined primary care within four critical parameters: accessible, comprehensive, coordinated and continual care. These parameters significantly define the understanding of primary care. Beyond the four parameters established above, the Institute of Medicine (1996) recognized the need for the inclusion of three more additional perspectives: the patient and family, the community and the integrated delivery system. The integrated delivery system encompasses the four critical parameters established above of:

accessible, comprehensive, coordinated and continual care. Many definitions of primary care such as that of the World Health Organization (WHO) (2004), American Academy of Family Physicians (AAFP) (2019) and Alpert and Charney (1973) include the notion of 'first contact' – as against care based on referral (Institute of Medicine, 1996).

Primary care is often misconstrued as being restricted in its capability to that of treatment of basic or 'common' illnesses. The Institution of Medicine's (1996) report begs to counter this claim in defining the scope of primary care. As established, within the definition of primary care lies the notion of 'comprehensive' care. The Institute of Medicine (1996) defines comprehensive care as "care of any health problem at a given stage of a person's life", further, it is maintained that "primary care clinicians receive all problems that people bring – unrestricted by problem or organ system". This very definition of comprehensive care defeats the common perception that primary care is intended solely for basic care especially in developing countries like Ghana.

The Institute of Medicine, however, does recognize that primary care clinicians are not able to treat all cases and therefore the need to refer is evident. This is, where, the coordinative function enters. Upon hospitalization of a patient, the primary clinician is still responsible for follow-ups, bringing forth knowledge of the patient and family history, as well as, social perspectives to the clinician at the secondary or tertiary level (Institute of Medicine, 1996). Primary care clinicians are thus also responsible for the transfer or transition of patients from different health care settings such as from a hospital to clinic. Thus, herein lies the notion of continued care even beyond the primary care setting and the idea of managed care. The coordinative function therefore provides the bridge to other specialized care a patient may need (WHO, 2004).

Community is an essential component of primary care. To ensure effective delivery of care the primary health care service must be significantly invested in the needs of the community. An understanding of the resources, socioeconomic, demographic and cultural belief systems is also essential. An acute understanding of the community feeds into the effectiveness of the healthcare coordinative efforts to ensure continuous structured care. Understanding of the community thus allows primary care clinicians to effectively engage in prevention of illness and promotion of good health (Institute of Medicine, 1996). Without this understanding the efficacy of health promotion efforts leaves much to be desired.

Many studies have identified or referred to primary care as a 'gatekeeper' and have advocated the benefits of such a system in its ability to manage the flow of patients throughout the health system and manage costs for both the patient and government. These arguments can be found in the works of Forest (2003) and Garrido, Zentner and Busse (2011). The Institute of Medicine (1996) directly "rejects the view that the primary care clinician acts mainly or exclusively as a gatekeeper". The reason being, that patients may fear that in the clinician's effort to control the use of health care services this could have underlying effects on the effectiveness of the clinicians diagnose and duties which could be detrimental to the patient resulting in loss of trust and argument Willems (2001) present in his work.

2.6 Value of Primary Care

Starfield, Shi and Macinko (2005) maintain that universal and equitable access to primary care facilities has been achieved in most industrialized. Further, they argue that primary care increases access to health services for relatively deprived population groups.

Greenfield et al (1992) study showed that primary care was more efficient for preventative care after finding that few procedural checks were performed better by

specialists than primary care physicians. This could be explained by Harrold, Field, and Gurwitz's (1999) study comparisons between general physicians and specialists, concluding that treatment of conditions is only better by specialist physicians when the case in the field of special interest.

2.7 Primary Care as a 'Gatekeeper' and Important Considerations

Primary care has come to be synonymous with its role in acting as 'guard' to
specialist care. The effect of this is that it reduces the inappropriate use of specialty services
(Garrido, Zentner & Busse, 2011).

Further, Christopher Forrest (2003) adds that gatekeepers are uniquely placed between organization and individuals who seek a specific form of care of resource only available at those organizations. Hence, for resource allocation developing countries such as Ghana that are heavily burdened at the secondary and tertiary level require the efficient implementation and optimization of 'gatekeeping'.

Despite the general contention that gatekeeping is efficient due to economic scarcity and consideration there are scholars that argue otherwise that burdening physicians with gatekeeping responsibilities hinders medical performance and impedes on rationality. Dick Willems (2001), advocates this position, by maintaining that gatekeeping systems erode trust-based relationships between physicians and patient could be hampered by physician's economic position and tasks. Thus, should Ghana take primary care more serious Willems' research puts forward solutions as to how physicians can perform the simultaneous 'balancing act' of state economic considerations and patient well-being.

A study conducted by Mills and Xu (2017) found that gatekeeping functions backfired in their pilot attempt at establishing a primary care gatekeeping system in rural china.

Amongst the reasons for this failure was due to weak 'primary care capacity' as patients

found primary care facilities to be deeply restrictive in services and technologies. Lack of patient awareness was also a cited problem in the study.

2.8 Utilization of Primary Care Facilities

Carrasquillo (2013) defines healthcare utilization as the use of health care services for preventative care, curing of health problems, promotion of and maintenance of health and well-being and or obtaining information about health status and prognosis.

A study conducted by Mensah (2003) found utilization rates of primary care facilities in the Ga, Dangme West and Dangme East districts to be very low. Only 20.2% of the 580 respondents 'regularly' utilized primary care facilities. The core factors affecting utilization rates were: service cost, transport cost, age and sex, employment, formal education, income and disease type. Mensah (2003) study is backed up by Buor (2003) in which it is determined that travel times and long distances are important factors in the low utilization of healthcare in Ghana.

Ager and Pepper (2005) study patterns of health service utilization and perception of needs and services in rural Orissa. It was found that within selected districts hospitals were utilized most frequently while primary health care centres were the least frequently utilized. They outline three major factors regarding health care decision making which include: reputation, service cost and physical accessibility.

Ngugi et al (2017) discovered that most respondents in their study of health service utilization in Kenya who fell ill but did not utilize a health service either: self-medicated, felt that services were too costly, or illness was not serious enough. The study however found that most of the poor tend to utilize primary health care services. Further, socio-cultural factors were found to have caused underutilization of health facilities in the case of prevailing social norms and household dynamics.

To corroborate Ngugi et al (2017) socio-cultural findings and approach; Ganle

Otupiri, Parker and Fitzpatrick (2015) found that socio-cultural barriers severely impeded on

utilization of maternal and newborn healthcare services in Ghana despite abolition of user –

fees. The study thereby helps to remove preference to the prevailing understanding by

scholars that income and wealth and physical geographical barriers are the most important
factors causing underutilization. By placing emphasis on factors such as religious beliefs and
practices, religious dictums, rituals and lack of power by women, as well as, freedom to make
decisions we can begin to fully comprehend patient decision making on utilization patterns.

Patient satisfaction is an important determinant to the continued utilization of primary care services, a factor incorporated into the Anderson, Davidson and Baumeister (2016) model framework. In Ghana, Ofei-Dodoo (2019) points out, however, the dearth in the literature on patient satisfaction of primary care facilities in Ghana. His study reveals high rates of patient satisfaction with primary care facilities based on factors such as: waiting time, respectfulness, clear communication, decision-making, privacy, choice and cleanliness. Ofei-Dodoo (2019) inclusion of waiting time is consistent with Bielen and Demoulin (2007) determination that waiting time is a determinant of service satisfaction.

This would generally indicate general levels of satisfaction amongst the population with primary care facilities in the country. However, this still does not explain the phenomenon of the rate of bypass of primary care facilities as Yaffee, et al., (2012) highlights in their study. Indeed, factors such as: quality of facilities, availability of medicines and ability to diagnose illnesses are not considered. Mensah (2003) study would support the assertion of Odei-Dodoo (2003) study to be misleading and ought to be taken with a pinch of salt given Mensah (2003) results of 20.2% utilization of primary care facilities within the study population. While, of course, the results of the study are not generalizable, Yaffee, et

al. (2012) findings of 36.6% rate of bypass would certainly support Mensah (2003) and not Ofei-Dodoo (2019).

2.9 Future of Primary Care – Important Talking Points

Primary care has undergone several revisions over the years and as health care needs expand; the need to become more innovative in not only what we consider to be under the umbrella of 'primary care', but also, considerations in how primary care is delivered and who delivers this care must be considered.

Physician shortages pose a significant threat to the effectiveness of primary care as it hinders the ability of primary care providers to fulfil their mandate and meet community needs and expectations. This problem is perhaps the most significant issue in Ghana and other developing countries alike. The doctor-to-patient ratio was according to Adua, Frimpong, Li, & Wang (2017) based on data from the Ghana Health Service 1:10,000 in 2010, 1:9,043 in 2014. To further exacerbate this, data indicates a heavy skew of physicians located in Accra and Kumasi, leaving rural areas and other regions particularly the Northern region with inadequate healthcare personnel. Abdulai, Abobi-Kanbigs, Joseph, Adiiboka, & Solomon (2017) study identified that in the three northern regions which account for 17% of the population and 45% of the land mass in Ghana only 7.4% of the country's physicians in 2011 served in the three regions. Further, the brain drain has also contributed significantly to the inadequate number of physicians available in the country. Adua, Frimpong, Li & Wang (2017) maintain that 57% of doctors and 24% of nurses are working abroad.

Bodenheimer and Smith (2013) challenge the notion of the 'physician shortage' problem which is concerned largely with the number of clinicians needed and advocate for a reframing of the problem to a 'demand-capacity' mismatch. In doing so, the questions one begins to consider are in line with how one can increase capacity and meet demand through a

review of health care policy, adoption of technology and an embracing of innovation. While it is certainly evident that the number of physicians available in the country ought to increase, this literature review seeks to challenge the notion that this is the only solution as propounded by many studies and called upon by many in the public forum.

Bodenheimer and Smith (2013) argue that the 'demand-capacity' mismatch could thus, be solved through the review of current primary care practices by increasing the capacity of nonphysicians such as nurses and physician assistants through a reallocation of clinical responsibilities (Bodenheimer & Smith, 2013). Bodenheimer and Smith (2013) further argue that registered nurses, licensed vocational nurses, licensed practical nurses, pharmacists, psychologists, clinical social workers, physical and occupational therapists and health educators are significantly underused. Their study determines whether reallocation of clinical responsibilities could increase capacity, 3 types of care were identified: preventive, chronic and acute. It was estimated that 60% of preventive care could be performed by non-clinicians, 25% for chronic and 10% for acute (Bodenheimer & Smith, 2013).

Other studies corroborate this assertion of empowering physician assistants and nurse practitioners especially, to perform greater roles within the primary care space. Dill, Pankow, Erikson, & Shipman (2013) argue in their paper for this same assertion, maintaining that there is evidence to suggest that quality of care and patient satisfaction does not suffer when these types of providers are seen. Their study further explored the willingness and perception of patients to receiving care from nurse practitioners and physician assistants. It was found, that consumers or patients were not averse to accepting a greater role for physician and nurse practitioners within primary care practice (Dill, Pankow, Erikson, & Shipman, 2013).

The primary concern with the reallocation of clinical responsibility lies within the scope of practice. Bodenheimer and Smith (2013) identify that the performance of tasks by

nonphysicians is significantly limited by the laws and regulations that determine what work can be performed by whom. Indeed, without these changes, the specific laws stand to pigeon hole physician assistants and nurse practitioners and remove their ability to perform certain tasks which they know they can perform.

This issue is a problem amongst Ghanaians whode have a negative perception of primary care provision due to the perceived lack of usefulness of these facilities that are manned by physician assistants and nurse practitioners because of a shortage of physicians.

Community pharmacies in the country play extremely important roles in the provision of health services especially in developing countries as they are the first points of contact many people have with the health system. Smith (2009) study of the quality of pharmacy practice in low- and middle-income countries supports this assertion and identified pharmacies to be the first points of contact within the health system. Smith (2009) cited the challenge of determining the quality of professional pharmacy practice in low-and middleincome country citing a limited evidence base. Nevertheless, the study identified a deficient standard of care provided by pharmacists such as: lack of presence of pharmacists or other trained personnel, inappropriate advice for common symptoms contravening with guidelines and inappropriate supply of medicines among the problems with pharmacy practice in lowand-middle-income countries. Miller and Goodman (2016) studied pharmacy practice in lowand-middle-income countries in Asia and discovered that pharmacy practice was typically characterised by insufficient history taking, lack of appropriate patient referral, poor adherence to treatment guidelines, an inappropriate supply of medicines and insufficient counselling. These deficiencies are highlighted in Smith (2004) study indicating and providing evidence that Ghana is not an exception to these deficiencies.

Of course, given the large role pharmacies play as first points of contact, they are inevitably part of the primary care system given the designation of the term 'primary care' as the first point of contact. The deficiencies highlighted through Smith (2009), Smith (2004) and Miller and Goodman (2016) are a cause for concern. For if these deficiencies continue to persist the role of primary care and the efficient implementation of the system hangs in the balance. Which is why it is the researcher's estimation that the future of primary care in Ghana and developing countries alike must include the consolidation and expansion of the role of pharmacies and is supported by studies such as Smith (2004) who argues for the increased expansion of the role of pharmacies in primary healthcare provision.

3.0 Conceptual Framework

Behavioural Model

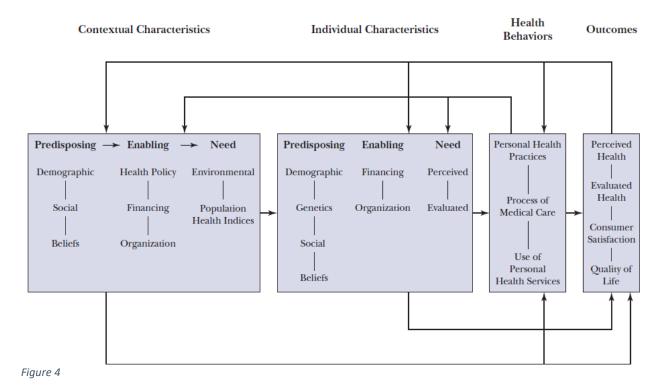


Figure 4 is a diagrammatic framework of the 6th edition of the Anderson-Newman (1973) framework which is used in many studies such as that of Abor, Abekah-Nkrumah, Sakyi, Adjasi, & Abor (2011) and Mensah (2003) assessing utilization rates of health care

facilities. This framework is essential in understanding health utilization behaviour of patients providing researchers with important considerations.

The framework describes three parameters towards understanding health-aseeking behaviour, these are predisposing factors, enabling factors and need perceptions. The first factor, predisposing factors, take into consideration demographic factors such as age and sex that increase susceptibility to certain diseases or illnesses, social and belief factors take into consideration individual's ability to cope with problems presented to him or her based on factors such as, education, occupation and ethnicity, as well as, social networks of family and friends (Anderson, Davidson and Baumeister, 2016).

An individual's enabling factors include: financing of health care through insurance, income and wealth generating an ability to pay (Anderson, Davidson and Baumeister, 2016). Finally, individual needs are based off perceived need and response to symptoms of illness, pain and worry, the framework maintains that perceptions about the seriousness of health symptoms lead to the decision to receive or not to receive care.

Anderson, Davidson and Baumeister (2016) framework does not only consider individual characteristics, but it also takes into consideration external factors that influence decision making on whether to utilize health facilities. Thus, importance is placed on socio-cultural factors such as the prevailing cultural norms and political perspectives regarding how health services should be used (Anderson, Davidson and Baumeister, 2016). Further, government legislation is placed central to the delivery of care by health facilities by providing policy guidelines, finance and overall how medical care is distributed and organized.

This framework enhances this study and helps in structuring how the research should be conducted. Contrasting with Mensah (2003) study on utilization rates of primary care

facilities in Ghana, she uses the Anderson-Newman (1973) model that does not take into consideration many external factors such as socio-cultural factors, government legislation or frameworks that influence the way health services are accessed and utilized by populations.

The framework is further consistent with Anderson (1973) review of healthcare utilization frameworks and his conclusion that healthcare frameworks and studies ought to include several different approaches that incorporate socio-cultural, socio-psychological, sociodemographic, organisational and social systems dimensions to fully understand healthcare decision making by an individual. The Anderson, Davidson and Baumeir (2016) is the most appropriate framework for this study as it helps to guide understanding health utilization behaviour not only from the individualistic level but also from the enabling organisational structure of the health care system and facilities in and of themselves.

Chapter 3: Methodology

3.1 Introduction

This paper seeks to find out: the challenges the primary care system faces from healthcare provider perspectives and the factors that contribute to the underutilization of primary care facilities by patients. For this study three actionable objectives were developed:

- Investigate Ghanaian understanding and perception of clinics and health centres and their role and duty
- 2. Identify factors that could inhibit patients from utilizing or underutilize clinics and health centres
- Investigate the challenges the primary care and gatekeeper system faces from a systematic viewpoint

The research conducted will be predominantly qualitative as it is concerned with understanding human behaviour (Minchiello, 1990). Further, drawing from Ambert, Adler & Detzner (1995) they assert that qualitative research seeks to assess and learn why people do what they do, how they think and make meaning of experiences and events. This method is best suited for this research as it seeks to fill a gap in which much research overlooks the experiential view of the population as patients and rarely seek to assess their informant perspective and understanding towards building a more effective health system.

3.2 Research Design

As established, the research will be qualitative in order to gain insights into patient and provider perspectives. This will include use of explorative research methods. Inductive reasoning shall be adopted throughout the study developing generalisations informed by the observations and research findings. Despite its qualitative orientation the study also contains quantitative data that was analysed to generate general insights and summaries of the

perception of primary health care amongst the population of Greater Accra East. This data was also collected to allow for comparison with other research offering a comparison with similar data and therefore validation. Thus, the research could also be considered a mixed method study despite its concentration on qualitative insight.

3.3 Population and Location of Study

The research will focus on primary care facilities specifically clinics and health centres within the Greater Accra East district. Subjects within this population include healthcare administrators, doctors and nurses – for the provider perspectives. Patients and local surrounding population of healthcare facilities for patient perspectives.

The study will be focused on the Greater Accra East district which has, according to 2005 midyear estimations, a population of 258,478 people. This district has only one functional CHPS compound, 3 health centres, 1 small clinic and no government hospitals and polyclinics. The research will focus on four main areas within the Greater Accra East district: Dome, Madina, Kwabenya and Haatso. This district was chosen because of the high prevalence of primary care facilities as against secondary and tertiary level facilities. In fact, the district boasts of no secondary and tertiary facilities.



Figure 5: Image by Rarelibra for public domain use, distributed under CCO 1.0 License

3.4 Sampling Techniques/Methods

This qualitative study employed a combination of both random sampling and purpose sampling techniques. Purposive sampling is non-random and does not need underlying theories or a set number of informants (Tongco, 2007). This technique was useful since the researcher decides what needs to be known, selecting respondents with the: expertise, knowledge or experience with regards to that which the researcher is trying to find out. In the case of this study, it is important to selectively sample participants from primary care facilities with exposure to the relevant information.

Doctors, nurses and healthcare administrators will be interviewed to generate provider perspectives. Random sampling is an approach this study adopts as it reduces the occurrence of sampling bias (Bryman, 2012). This sampling technique was applied towards the administering of the questionnaires which sought to generate as wide a range of insights as possible from the 'ordinary' Ghanaian. This was done to generate insights as close to the general perception of the urban Ghanaian as much as possible.

3.5 Sample Size

A total of 15 participants were interviewed and a sample size of 100 participants was targeted for the purpose of administering questionnaires. This sample size was deemed adequate based on the works of Crouch and McKenzie (2006) and Daniel (2012).

3.6 Data Collection Tools

Semi-structured interviews were used in this study to gain insights into respondent experiences and understanding that simply conducting only surveys and questionnaires will not be able to harness. The purpose of the semi-structured interview as opposed to fully structured is to allow for a degree of spontaneity and potential follow up questions that may not have been anticipated or planned therefore enriching the information and data to be

gathered. In line with ethical standards and consideration, each participant of the interviews were given consent forms.

3.7 Data Analysis

As an exploratory study, themes and insights that shed light on the perception and understanding of the Ghanaian primary care industry were developed using content analysis. Quantitative data from the questionnaires were collated using Microsoft Excel and summarized using graphs. Content analysis allows the researcher to develop further and deeper insights into the subject matter - in the case of this study, Ghana's primary healthcare system and its role as a gatekeeper (Bryman, 2012).

3.8 Reliability and Validity

Golafshani (2003) in the paper 'Understanding Reliability and Validity in Qualitative Research' asserts claim made by Campbell (1996) who attributes consistency of data to verifiable examination of raw data, reduction products and process notes. This study seeks to follow Golafshani (2003) and his discussion on 'triangulation' which seeks to converge sources of information to form themes or categories in a study in order to ensure validity. By combining the use of multiple data collection techniques from surveys to interviews it is hoped that there is convergence through the filling of gaps left from sole data collection from surveys or just for example. Acharya et al (2013) maintain that stratified random sampling reduces variability from systematic sampling contributing to overall reliability and validity.

3.9 Ethical Considerations

Consideration pertaining to confidentiality of respondents and participants of the interviews will be strictly adhered to. Consent forms will be signed by interviewees and participants of the interviews, further, participants reserve the right to withdraw from the study in line with maintaining the voluntary nature of participation. The study's research

material and tools, as well as, the paper itself also gained approval by the Ashesi Institutional Review Board for Human Subjects Research

Chapter 4: Data Analysis and Findings

4.1 Introduction

This study focuses on some of the challenges and potential solutions within Ghana's primary healthcare sector and its role as a gatekeeper. A total of 15 semi-structured interviews were conducted, 11 of which informed the need for follow up questionnaires. Of the follow-up surveys a total of 89 respondents participated in the research. This chapter seeks to present and appraise the results of the qualitative data and make connections between the data and the objectives specified in chapter one.

4.2 Demographics of Study

104 respondents participated in the study, out of which 89 were participants who responded to the hand administered questionnaires. 40% of respondents to the questionnaires were female and 60% were male. In terms of age, the majority of respondents, constituting 52% of respondents fell between the ages of 18-25 years. 24% of respondents fell between 26-35 years and 15% fell between 36-50 years. In terms of level of formal education, the majority of respondents constituting 49%, had either completed or were enrolled at the tertiary level, 28% had completed senior high school and 20% had completed junior high school. 67% of respondents had national health insurance while 33% of respondents did not. Professions represented amongst respondents were: coconut seller, teacher, businessmen/women, salespersons, marketers, fuel attendants, taxi drivers, shop keepers.

4.3 Data Analysis and Findings

Using structured interviews and questionnaires, local members of the Greater Accra East population specifically Kwabenya, Haatso and Dome were studied. In the analysis of the responses, themes were identified in relation to the research objectives.

4.3.1 Research Objective One: Investigate Ghanaian understanding and perception of clinics and health centres and their role and duty

This research objective is important as it sheds light on whether the healthcare system is truly understood by the public. It serves as an important reference point or baseline test towards understanding the use and general perception of primary care facilities. The following questions were asked during semi-structured interviews to assess whether Ghanaians understood the role of clinics and health centres as the first point of contact: what is your first point of contact for an ailment? and do you understand that you must go to a clinic or other primary care facility before accessing hospitals?

The research revealed varying understandings of the role of clinics and health centres. In the preceding interviews before the administering of questionnaires, it was revealed that clinics and health centres were second points of contact. With many respondents admitting to only going to a clinic or health centre after their visit to a pharmacy. "I go to the pharmacy first, if I am still feeling ill or I am still not happy I will then go to the clinic or the hospital" a respondent said. This was further backed by results from the questionnaire in which it was revealed that the first point of contact for 65% of respondents was pharmacies, not clinics or polyclinics as only 15% stated that clinics would be their first point of contact. This finding is rather contrary to that of Salisu and Prinz (2009) Ghana health report that polyclinics serve as the first point of contact for primary care in urban centres.

Yet, in-depth interviews revealed that most respondents understood that they had to visit the clinic or polyclinic before one could have access to hospitals, however, this did not translate to actual utilization of those primary care facilities. There were, also, participants who expressed that they did *not necessarily* have to visit the clinic first and that rather one respondent maintained that going to the clinic or health centre "depends on illness or sickness and the severity of it". Thus, here, we see that the respondent attributes the choice between a clinic and pharmacy on self-determination of the severity of one's own illness. Other respondents determined that one could bypass the clinic for a hospital in the case of an emergency.

Among the responses on the role of clinics and health centres, respondents were asked to differentiate between a clinic and a hospital. Themes that emerged from responses were: the *size of facilities, inadequate equipment and infrastructure, treatment of minor ailments and first aid.* Few respondents shed light on the primary healthcare function of 'referrals. This finding is further reflected by 47% of respondents, who, when asked '*Do you have to go to a clinic before going to a hospital*' responded 'no' representing the majority. Despite this, 29% of respondents indicated that it 'depended'.

In probing deeper into the response of it 'depends' the explanation respondents gave regarding this heavily relied on the concept of self-determination of the severity of one's illness. It is not clear, however, that the illnesses or ailments respondents were referring to were justifiable as emergencies significant enough to warrant a bypassing of clinics and health centres. The general perception of clinics and health centres however, is that they are merely 'first aid' centres capable of treating 'minor' illnesses and ailments. There is little indication that respondents perceived clinics and health centres as capable of managing continuous care after their referral to a secondary or tertiary hospital.

70% of respondents indicated that they would bypass a clinic in favour of going to a hospital and a further 69% maintained that if they were not well they would choose to go to a hospital rather than a clinic. In explaining why they would bypass a clinic in favour of a hospital, some common themes emerged. Better care at hospitals, the seriousness of condition, proximity and emergencies. A respondent maintained that "depending on the condition the clinic may not be suitable", another respondent maintained that "some illnesses are not for the clinic" and another said, "I believe the hospital has more logistics and equipment to diagnose me properly as compared to the clinic". Another respondent said, in relation to hospitals, "I trust them better". However, 23% of respondents stated they would not bypass the clinic for the hospital, a further 28% maintained that if faced with a choice between a clinic and a hospital would choose a clinic. In explaining why, a respondent maintained that clinics had a "shorter waiting time". Another respondent said, "I'd be attended to a lot guicker than at a hospital", another stated that "It seems more convenient" while another response in relation to the clinic was that "it's closer to me and its usually not serious enough for me to go all the way to a hospital. If I need a hospital, I'll be referred there". The theme or common insight amongst these respondents is convenience. Whether, convenience in waiting time for care or convenience in terms of proximity. These respondents shed led light on the positive aspects of the distribution of primary care facilities. However, it is not clear whether these respondents patronise private primary care facilities or government facilities as this could significantly explain why the responses are as they appear.

Interestingly, respondents, despite negative perceptions on the use of primary care facilities, 60% maintained that health professionals along the primary care level did treat them nicely or 'fine'. Indicating that service quality and patient relation between respondents and health professionals was not a huge problem. However, 11% of respondents said they were not treated nicely while another 29% stated that it 'depended' and thus were mixed

towards different occasions in which they would receive quality service and occasions in which they would not.

In assessing whether respondents understood the differences between primary, secondary and tertiary care a majority of 65% of respondents claimed they did not understand the differences between the different strata as compared 35% who did. This suggests a poor understanding of the fundamentals of the healthcare system. In order to aid participants' responses examples would be given in which they would thus determine where example facilities would fall under given the different definitions. For example, asking where Korle Bu would fall under or where a local clinic would fall under. Many simply maintained the assumption that the healthcare system was simply akin to a flat organisational structure thus feeding into the perception that one could simply walk into any healthcare facility.

4.3.2 Research Objective Two: Identify factors that could inhibit patients from utilizing clinics and health centres

Respondents were asked questions which determined the accessibility and utilization of primary care facilities. Questions asked were: when was the last time you visited the clinic? how do you rate the cost of service at clinics and health centres? what is the major factor that constitutes a constraint to you as far as the utilization of facilities at the health centre is concerned? The majority, that is, 61% of respondents stated that the last time they visit the clinic was either 1 year ago or more than a year ago. With 26% and 35% respectively. Figure 6 depicts the varying utilization factors. Interestingly, 31% of respondents claimed *long waiting periods* as a major constraint towards their decision to utilize a primary care facility. 29% maintained the standard of care to be the most problematic. It was intriguing to find that finance played a less prominent role in the utilization of primary care facilities. A prevailing reason for this phenomenon could be

attributed to the National Health Insurance Scheme and its effect on the accessibility of healthcare especially among the poor.

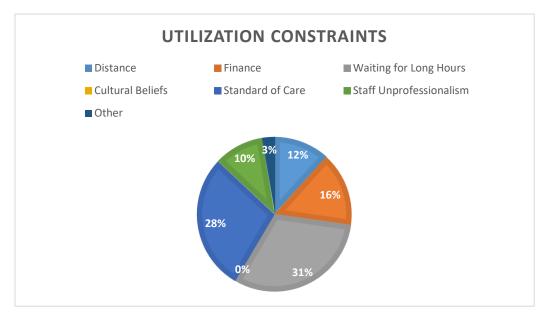


Figure 6

67% of respondents had national health insurance as against 33% who did not. Further many respondents viewed the national health insurance as a negative. One respondent claimed that they had observed that national health insurance card holders were 'segregated' and treated as 'paupers'. Associating better, more efficient treatment to the ability to pay out of hand. This discriminatory practice was shared amongst a variety of respondents who maintained much the same thing.

4.3.3 Research Objective Three: Investigate the challenges the primary care and gatekeeper system faces on a macro and micro level

To assess the challenges, the primary care system faces interviews were conducted with two health centres consisting of health care personnel who were available on the day of meeting to generate an understanding of the challenges faced by providers. A former CEO of Korle Bu was interviewed to generate a perspective of the primary care system from a macro systematic viewpoint, as well as, from the tertiary level.

Evolving Primary Care Definition

Interview with the former CEO of Korle Bu revealed interesting insights with regards to the changing role and definition of primary care. "the concept of primary care has changed meaning, to be the first point of contact, not the disease entity"..."primary care is more about where is the first place someone goes to when they are ill, so it ceases to be a structure like a clinic" therefore, "primary care is a function, meaning that wherever you go to they should be able to manage the condition". These insights reveal the interesting concept of primary care, such that, primary care facilities are merely more than just clinics, health centres and polyclinics. But rather the insights reveal that the concept concerns itself with where people go to first for their care and more importantly, the ability of those facilities to be able to 'manage' care.

This, though, raises interesting questions on the current facilities we would classify as 'primary care facilities. As this research revealed, 65% of respondents' first point of contact is the pharmacy. Yet, despite this, one would not traditionally include pharmacies as important players in the administering of care or beyond their role as simply medicine dispensaries. Thus, the expanding definition needs to be explored further in the discussion. The respondent further states "so it doesn't matter whether it's a clinic or a health centre, it's not as relevant as a facility having the capacity to know what to do when you come in. So, if you come in with a broken leg, they shouldn't tell you we don't have an orthopaedic surgeon here, so they'll refer you, no, they should be able to manage the pain, immobilize it, do the basics to avoid you doing further harm to yourself". The question, therefore; is whether clinics and polyclinics are able to perform these roles and whether pharmacies are ready to play expanded roles within the primary care space given the results indication of pharmacies being the first point of contact for patients.

The Detrimental Role of Pharmacies within the Primary Care Gatekeeper System

When asked whether pharmacies are equipped to be part of the primary care system the fundamental insight interviews revealed about pharmacies and their utilization revolved around 'convenience'. It is through this that several issues and challenges arise. Principle amongst these is the breakdown of professional and regulatory practice amongst the average pharmacy in Ghana. Cultural issues of a need for quick easy access to medicine has been facilitated by the breakdown of professional practices in pharmacies.

A respondent maintained that "somebody will say he has got a headache, that is his issue, he doesn't feel sick, so the first point is he'll go to anybody in the health space, but I'd rather go to anybody who can give the medicines". Here we see the central notion of convenience that will continue to spring up in our discussion but perhaps most importantly we see the negative perception of clinics, health centres and polyclinics as spaces perceived to be a waste of time.

The need is there from patients and pharmacies are willing to supply that need despite professional codes. This insight was revealed by one interviewee who talked about the willingness of pharmacies to prescribe medications while health professionals at the clinic and health centre level are not. "If I come to the clinic and you know I have to give you medicine A but medicine A is above my paygrade, so you have to go to a facility where they can write a prescription for you because I am not authorized professionally to give it to you...at the pharmacy level they will give it to you anyway because the regulatory system is not strong enough"..."if the medicine is a prescription the pharmacist should tell you to go see a doctor to give you a prescription, so there's a breakdown in regulation and professional practice". Hence, patients do not see the need to first go to a clinic or health centre as the first point of contact if pharmacies can give them what they want and more conveniently.

The choice of going to a pharmacy, identified in this study, stems from economic convenience. Wherein, the idea that one needs to pay for a consultation from a pharmacy and just 'walk-in' and receive a free consultation over the counter and still walk out with a remedy in the form medication – patients pay no consultation fee.

This thus provides the foundation of the challenges within the primary care system and its function as a 'gatekeeper'. The breakdown in professional practice and regulation with pharmacies does not reinforce the use and beneficial need for clinics and health centres as it contributes to the notion that clinics and health centres are useless entities. This poses a serious risk to patients since one interviewee explained "here the pharmacy is trying to...its business is that he has to sell his medicines and that is a primary issue. Apart from that they say well let's provide a service and the service may not be in the primary interest of the patient". In providing a 'service', pharmacies, therefore, undermine the importance of clinics and health centres and often in their referrals will refer patients to secondary and tertiary level institutions not primary care facilities. Further, with pharmacies being the first point of contact, a respondent highlighted the danger of no history taking. Such that, when patients transition from the pharmacy to the secondary level, professionals often have no idea on the medical history of patients because their first point of contact has been a pharmacy for several years.

Challenges Faced by Primary Care Providers

Two primary care facilities were visited, and respondents gave insights regarding some of the challenges faced. Amongst the concerns were *lack of staff, lack of equipment, insufficient facilities and the National Health Insurance*.

Lack of Staff

Interviewees revealed that staffing was a major problem in their ability to deliver quality service. One respondent revealed that they do not have the ability to hire more employees due to financial restrictions." *government doesn't post nurses to private clinics*" one respondent noted. This thus limits the productive output of the primary care facility and therefore their ability to serve all the patients that come in through the doors. Further, in both health facilities, they both lacked medical doctors or physicians and were rather limited to the knowledge of physician assistants or medical assistants as one respondent states "there's one medical doctor but he doesn't come around often".

Lack of Equipment/insufficient Facilities

The health personnel interviewed mentioned this constraint frequently. The ability to conduct certain laboratory tests significantly hampers their ability to diagnose and is, therefore, a significant contributing factor towards the high rate of referrals to facilities that can handle such diagnostics. Respondents expressed concerns with regards to the unavailability of ambulances which makes referring critical patients difficult. The respondent maintained that "often we have to send patients to the hospital in a taxi", this was one of the many problems.

National Health Insurance

National health insurance has been a problem for some health facilities. One respondent maintained that a problem they faced was with regards to national health insurance and the perception and understanding patients regarding the ability of the scheme to cover the cost of their medical expenses. This thus supports the claims made by some respondents who maintained that they often had to pay out-of-pocket for health care.

Challenges with the Gatekeeping Structure

When asked how effective the gatekeeper system is, one respondent maintained "I don't think it works that effectively here because people can just walk into a hospital and there are not enough 'lower' level facilities, if there are enough lower level facilities the current hierarchical structure does not mandate them effectively to do what they can do at that level". A few problems are highlighted in this quote. The first, that the primary care system is not functioning effectively in its role as a 'gatekeeper' and that second, this role is being hampered by a variety of factors such as: inadequate number of facilities, inadequate mandate of personnel, insufficient capacity, lack of specialists, rules and regulations, poor enforcement of referral system and rigidity of public facilities to changing disease burden.

Mandate of Personnel

Ghana's healthcare system along all levels suffers from a shortage of skilled physicians, especially specialist doctors. The primary care level is perhaps the biggest sufferer of this problem. As a result, most clinics, health centres and polyclinics are staffed by nurses, physician assistants and midwives with a specific mandate and set of roles and responsibilities. A consequence of this is that their diagnostic potential is limited or stunted, narrowing their ability to treat and diagnose a wider variety of illnesses and diseases. To get a general sense of the problem one respondent summarises the issue. "an ophthalmic nurse who can check your eyes just as well as any specialist ophthalmologist, she can check it and diagnose glaucoma, yet, she cannot treat the glaucoma, but she can find it...she knows the medicine she can give you, so why must she see it and yet refer you to an ophthalmologist". The central problem here is that inability of skilled health personnel who man primary care facilities and yet are unable to fully discharge their knowledge on cases they see each day. It thus, contributes to the inefficiencies of the healthcare system given the constraints on the availability of doctors.

Lack of Specialists Along Primary Care Level

There is a lack of specialists at the primary care level. One respondent attributed the lack of specialists at this level to the availability in numbers and to the perception of the primary care level being" *too low to have specialists*". The respondent compared Ghana's situation to Thailand where they have specialists working at the primary care level. The subsequent lack of specialist physicians along the primary care level contributes to a topheavy infrastructure due to a heavy concentration of specialists at the 'top' of the healthcare ladder at secondary and tertiary institutions. This thus leaves the primary care level significantly short-changed and hampers its ability to manage the flow of patients to the secondary and tertiary level.

Poor Enforcement of Referral System

This is a significant issue that needs to be addressed. This challenge refers to the doctors and healthcare professionals not insisting on referrals in order to be seen at the secondary and tertiary level. It is through this loophole that feeds the patient perception that one can simply walk into a hospital with any issue. When asked why doctors do not insist on referrals the respondent highlighted moral and ethical issues. "it's a human issue, the guy who is coming is actually sick even though it could have been treated at the lower level, you're actually sick so there's a moral issue here. If you want to follow the rules I can see you're actually sick and insist on a referral but by the time you go and come you'd have been". Here, the moral hazard is highlighted. It is often difficult to reject patients because they have no referral. The respondent highlighted the fact that the gatekeeper system needs to be stronger to not place physicians at the secondary and tertiary in such positions as to have to

reject patients. The respondent, therefore, highlighted "the only disincentive because the cost, when you come what it is going to cost you to get care for that basic at the secondary or tertiary level is going to become so phenomenal, that next time you'll say let's go here first".

The Rigidity of Public Primary Care System and Facilities to Changing Disease Burdens

Respondent highlighted the changing disease burden of Ghana, especially amongst urban demographics like Accra." we know people are going to live longer, we know therefore we are going to have older people, we also know that lifestyles have changed significantly, as well as, eating habits and therefore obesity is on the rampage". The Respondent highlights the rapidly changing disease burden of the country based on the change in lifestyles amongst the population.

The country is facing a shift from non-communicable diseases to communicable as diseases such as: hypertension, stroke, diabetes and cancers have become top 10 causes of death (Aikins, Addo, Ofei, Bosu, & Agyemang, 2012). Therefore, the respondent maintained that the rapidly changing face of disease in the country should consequently impact the kind of training people should have for both the general population and health professionals. Perhaps most importantly as well, the design of health facilities. This assertion is largely consistent with Aikins, Addo, Bosu & Agyemang (2012) in which they maintained that health services, especially along the primary and secondary level, be strengthened to reduce congestion at the tertiary level.

When asked whether the system can quickly adapt to these changes the respondent was pessimistic in his response, citing the fundamental issue of poor governance and poor high-level policy decision making. "The data is available the issue is that at the high level of policy they decide how to shift the care this way and that way. Deciding we are now going to create hospitals like this and we are now going to focus on public education to ensure the

people know that this is what is happening. We are going to change laws to change the kind of food we have in this country, to change oil content and to change sugar content." ... "so, the data exists but those that have to that kind of thinking, still they don't". This response excerpt highlights the availability of data and trends with which policymakers can utilize, however, unfortunately, this is not being done. Thus, contributing to a rigid healthcare system, but perhaps, more importantly, a rigid primary care system. Further, the respondent highlighted the highly centralized nature of the primary care system such that the responsiveness of facilities along the primary care level is dependent on the Ghana Health Service Headquarters.

Due to the rigidity of the public health infrastructure, private facilities are faced with picking up the slack of public facilities and are set to capitalize on the changing disease burden and subsequent demand. Certainly, this is a potential problem for the poorest of the poor who will be faced with a widening inequality in the accessibility of private health facilities due to the inadequacies of public infrastructure.

4.4 Summary

The state of Ghana's primary care system and its role as a 'gatekeeper' is a cause for concern. The study revealed much the same insights as the existing literature revealed. The general poor perception of the public towards the health care system and the ability of clinics, health centres and polyclinics to adequately solve and diagnose their health concerns. Yet, perhaps the most concerning feature of all is the rigidity or lack of responsiveness of existing health infrastructure to the ever-changing disease burden the data show the country is facing. The importance primary care and its role as a gatekeeper cannot be understated, for it stands to be the most important health care policy in tackling universal access to healthcare and to also ensure the health of the population amidst changing disease burdens.

4.5 Discussion of Research Study

The results pertaining to the utilization or underutilization of primary care facilities was interesting. The results revealed *waiting times* and *standard of care* to be the two most important barriers towards the utilization of primary care facilities. This is contrary to Mensah (2003) study in which it was found that finances were the most important barriers to utilization. A possible explanation for this result could be due to the implementation of national health insurance, as, 65% of respondents were holders of national health insurance. This finding is somewhat positive as it indicates increased accessibility of healthcare due to the institution of insurance.

Mensah (2003) and Buor (2003) determined the distance to be a major factor in the utilization of facilities. This study sought to try to assess this by asking respondents through the questionnaire that if faced with accessing a hospital and clinic which were adjacent to each other, which would they choose? 69% indicated that they would rather go to the hospital instead of the clinic. This find intimates the possible irrelevance of distance and proximity in patient choice and decision making. It also shows the extent of distrust in primary care facilities, such that, given patients current level of understanding and current perceptions they would not choose to go to a clinic even if it were the closest thing to them. This supports the finding in which the standard of care was the second most important factor in determining utilization.

The study revealed that many patients did not actually go to the clinic or health centre as the pharmacy was the first point of contact for an ailment. Upon further evaluation of this phenomenon, in-depth interviews revealed the dangers of this practice especially given the severe deficiencies with pharmacy practice in Ghana. The deficiencies outlined such as: insufficient history taking, lack of appropriate patient referral, poor adherence to treatment

guidelines, inappropriate supply of medicines and insufficient counselling are consistent with Smith (2004) and Miller and Goodman (2016). These deficiencies pose a huge threat to patient safety, diagnosis and the primary care system at large.

The misconception that Ghanaians view primary care facilities such as clinics and health centres as places primarily for 'basic' illnesses and concerns was also confirmed in the results. This misconception is contrary to the very definition of primary care supplied by the WHO (2003) and the Institute of Medicine (1996). For the very definition of primary care includes the provision of comprehensive care. Thus, if the common perception is that primary care facilities are for basic ailments it is indicative of a failure of primary care facilities in Ghana to fulfil their mandate. It is not, however, difficult to understand why perceptions of care at the primary care level are as they are. Given the finding, primary care providers face constraints in their ability to perform their mandate due to inadequate facilities, lack of staff and restricted roles and mandate. Yet, perhaps the most important factor is the restriction of the mandate of primary care providers due to the restrictive nature of the law. As Adjase (2015) wrote in his commentary physician assistants form the bedrock of primary care in Ghana. Indeed, the facilities visited for this research are manned by nurse practitioners and physician assistants. Interview respondents revealed that the tendency or the rate at which primary care providers will refer cases is high due to this restrictive capacity. This finding feeds into Bodenheimer and Smith (2013) and Dill, Pankow, Erikson, & Shipman (2013) study which investigates the increased role physician assistants and nurse practitioners can play in the provision of primary care services.

The findings on the detrimental role of pharmacies is consistent with that of Smith (2013) and Miller and Goodman (2016) in terms of the factors of appeal for patients. These factors being: limited time and funds to consult a physician, long opening hours, availability

of medicines and geographic accessibility. These factors were summarised in terms of 'convenience' for the patient.

To help assess the efficacy of the primary care system this study seeks to pit the results of the research against the established definitions and functions set by the WHO and Institute of Medicine (IOM). The study revealed that primary care fails around two central pillars the coordinative and comprehensive functions.

Coordinative Function

Amongst the interview respondents, it was revealed that the primary care system fails to coordinate with patient care once referrals are made. In that, patients access secondary and tertiary care and fail to report back to the primary care facility that referred them there. This absence in function contributes to the congestion along the secondary and tertiary level. Further, the limited diagnostic capabilities of primary care facilities exacerbate the need for referrals. As such, many patients may be referred for cases that could have been solved at the primary care level instead of the secondary or tertiary level.

Comprehensive function

The study revealed several constraints toward the comprehensive delivery of care at the primary care level. Namely factors such as: lack of facilities, lack of specialists at the primary care level, the limited mandate of health providers and availability of medicines.

Chapter 5: Conclusion and Recommendations

5.1 Introduction

This research was conducted to understand the challenges of the primary healthcare system and its functioning role as a 'gatekeeper'. The study revealed the understanding and perceptions of the primary care system amongst the general population of the Greater Accra East district generating a general overview of patient viewpoints. The study also revealed insights generating viewpoints from the healthcare provider perspective and made efforts to shed a bird's eye view on the system.

5.2 Conclusion

The views of respondents in this study regarding barriers to the utilization of primary care facilities were contrary to that found in existing literature. Which, it was found that finance and income were the predominant barriers to the utilization of primary care facilities. Respondents identified 'long waiting periods' as the primary factor that could prevent utilization of primary care services. This result is perhaps a representation of the effectiveness of government policy in the implementation of the national health insurance scheme in 2003, since, 67% of respondents were recipients of the scheme.

The study revealed that amongst primary care providers the challenges faced centred around: lack of staff, lack of equipment and inadequate facilities and national health insurance. These factors were not surprising and are widely documented in the media and in existing literature.

Perhaps the most interesting and relevant insights generated in this research revolves around the study and assessment of the primary care system and the subsequent assessment of its role as a gatekeeper. The problems identified with the system were: the detrimental role of pharmacies, inadequate mandate of health professional along the primary care level, lack of

specialists along the primary care level due to scarcity and negative perceptions, poor enforcement of referral system and the rigidity of the public primary care system and facilities to changing disease burdens. The latter, being perhaps the primary cause for concern in the country.

Fundamentally, patient perspective can will only and can only improve if there is an attempt to raise the profile of the primary care system by improving efficiency and plugging the loopholes that exist in the system. Employing a plethora of methods such as: educating the public, adapting health policy to the changing times, improving health infrastructure and personnel, increasing the mandate of health personnel and expanding national health insurance coverage and plugging of deficiencies along the pharmacy level – all alongside government policy of the construction of more medical facilities.

In short, Ghana cannot be said to have an 'efficient' or effective primary healthcare infrastructure despite government attempts to build more and more health facilities and commission of CHPS facilities. As, the problems within the primary healthcare system are far more systemic than the surface level solution of the provision of more facilities. Of course, the number of facilities does play a role in the delivery of care in terms of increasing accessibility, however, the questions that thus arise are: how efficient is the investment on these facilities for every Ghana cedi or dollar spent? Are these facilities able to achieve their mandate and discharge their duties effectively? And can capacity be increased through an expansion of the roles and responsibilities of physician assistants and nursing practitioners?

5.3 Policy Recommendations

The following recommendations were based on the findings of the research and conclusions of the study:

- A review of the current mandate of nurses and other health professionals who are the predominant health care providers in primary care facilities in the absence of and scarcity of physicians. This will increase the output of primary care facilities by expanding the scope of capability of health professionals amid scarcity.
- Review the current understanding of primary healthcare to include pharmacies
 as a key first point of contact. This includes a review of the regulatory practice
 and professional practice of pharmacies to ensure patient safety and a more
 streamlined primary care system.
- The government of Ghana should review current policy to match the changing disease burdens in the country. This includes a thorough review of the current design of health facilities, as well as, training of the public and health professionals.
- The government of Ghana should ensure that the organisational structure of the health system isn't rigid so as to ensure rapid response to changing health dynamics.
- A review of the referral system to create disincentives for the population to simply bypass the primary care level for 'any illness' they may be feeling.
 This could perhaps be in the form of cost disincentives; however, this recommendation is dependent on the increasing capacity and capability of primary healthcare facilities.
- Incentivizing physicians to view the primary care level and work in the clinics and health centres as an attractive place

5.4 Limitations of Study

This study did not adopt an in-depth quantitative analysis approach, as such, certain correlation and trends beyond surface level statistics may have been missed. Further, the literature concerning this study and more specifically the concept of 'gatekeeping' and the primary care system was relatively few in Ghana. Thus, the majority of literature was found outside of the shores of Ghana.

Also, the researcher's limitations were predominantly time and financial constraints which reduced the extent of travelling possible, thus limiting the researcher to only one district within Accra within which to conduct the research. Thus, the research cannot be said to be generalizable to the whole of Ghana.

5.5 Recommendations for Further Studies

It is recommended that further research:

- Be conducted to find out the feasibility and viability of legal and policy changes to facilitate an expansion of clinical responsibilities of physician assistants and nurse practitioners
- Be conducted to find out the economic costs for both the citizens and government of
 Ghana of an inefficient gatekeeper system

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Appendices

Research Participant Consent Form

Study: An Investigation into Ghana's Primary Healthcare System: Challenges and Solutions

You are kindly invited to take part in a research conducted by *Albert Wilfred Cole* a final year Business Administration student at Ashesi University.

The aim of this study is to

• Understand the challenges the primary care sector faces in increasing utilization rates

Your participation in this study will:

• Include an interview lasting not more than 1 hour

Your participation in this study is entirely voluntary, you are well within your rights to withdraw and or skip answering any question you do not wish to answer.

The benefits of the study include:

- Identifying the challenges presented to the primary care sector
- Identification of potential solutions and areas of improvement
- Improving patient-provider interaction

Risk Involved:

There is no risk involved in this study

Confidentiality

All information collected will be kept confidential and safe. All hardcopies will be sealed and kept from public notice. Softcopies will be saved with a password. Participants' name and any disclosing information would not be included in the study.

If you have any questions, you can contact the researcher at (albert.cole@ashesi.edu.gh)/ +233 0570543898 or my supervisor at searmah@ashesi.edu.gh

This study and consent form has been reviewed by Ashesi IRB for Human Subjects Research. For further information contact the committee through the irb@ashesi.edu.gh

Consent:

I have read this informed consent and have agreed to participate in this study.

Participant's signature......

Draft Interview Questions

This interview would collect tangible information about the use of ornamental plants in Accra. All information provided by you will be kept highly confidential. You are free to participate and stop at any time. This survey will be solely used for academic purpose.

*These questions are drafts and are intended to gain insights from patient and provider perspectives

Participant Profile

- 1. What is your age?
- 2. What is your average monthly income?
- 3. Gender....
- 4. What type of healthcare institution do you work in?

Recognition of Challenges

- 5. What prevents you from performing your duties to full effect?
- 6. How effective is patient-provider communication?
- 7. Has the implementation of national health insurance scheme improved patient utilization?
- 8. On average how many patients do you serve per day?
- 9. Is there employee appraisal on performance?
- 10. Are there available opportunities for employee training and enhancement?
- 11. Is your institution over or underutilized?
- 12. Has utilization improved with any government policy or initiative?
- 13. Do you understand or know where you are supposed to go before going to a hospital?
- 14. Do healthcare providers understand problem/needs?
- 15. Do you healthcare providers provide adequate attention to issues?
- 16. How satisfied are you when visiting primary care facilities?
- 17. Where is your first point of contact for a health issue?
- 18. Is transportation a problem in accessing primary care centres?
- 19. Does your primary care facility tailor its services to the predominant health care needs of the community?

Ashesi University Department of Business Administration Survey / Interview Questions

Section I – Personal Information

- 1. Sex:
- 2. Age:
- 3. Income Range per day/month:
- 4. Occupation:
- 5. Educational Attainment:
- 6. Religious Affliation:
- 7. NHIS (yes or no):
- 8. Children?

Section II – Health Seeking Behaviour/Utilization

- 9. How sick or ill do you have to be before you decide to go to a clinic/hospital?
- 10. What is your first point of contact for an ailment?
- 11. Have you been to a clinic before? Was your experience positive or negative?
 - a. Answer:
- 12. What is the biggest impediment to your use of clinics or other primary care facilities?
 - a. Standard of care
 - b. Finances
 - c. Distance
 - d. Cultural reasons
 - e. Other:
- 13. Do you understand that you have to go to clinic or other primary care facilities before accessing hospitals?
- 14. How long does it take to access your local health facility?
 - a. Less than 10 minutes
 - b. 10-30 minutes
 - c. 30-45 minutes
 - d. 45 minutes 1 hour
 - e. > 1 hour
- 15. Do health providers engage the community in any way?
- 16. How would you rate cost of healthcare?
 - a. Expensive
 - b. Moderate

- c. Cheap
- 17. Does NHIS help much in accessing healthcare?

Understanding patient – provider relationship / Experience

- 18. Do you feel inferior when receiving care from nurses, physicians, physician assistants?
- 19. Do you walk away feeling confident in health provider understanding of problem?
- 20. Do you experience problems with communication at your local health facility?
- 21. Are you confident in your health providers diagnosis?
- 22. If not, do you seek second opinions and from where?
- 23. Do you have to wait long periods before gaining access to a physician or any health professional?
- 24. Does your local health provider engage the community in any way?

This questionnaire is intended for research purpose only. This questionnaire seeks to understand the factors that inhibit utilization of primary care facilities and to assess whether participants understand the healthcare system. Your participation is entirely voluntary, and you can decide not to complete the questionnaire at any point in time. You can ask me questions, skip any question or completely withdraw from the study at any point in time. Your responses will be anonymous and will never be linked to your identity. Thank you for your input.

Background I	Information
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1. Gender:
a. Female [] b. Male [] c. Other []
2. Which category below includes your age?
a. below 18 [] b. 18-25 years [] c. 26-35 years [] d. 36- 50year []
e. above 50 years []
3. What is your level of formal education?
a. No formal education [] b. Primary [] c. JHS []
d. SHS [] e. Tertiary []
4. Do you have National Health Insurance?
5. Profession
Awareness of/Understanding of primary care system
6. Do you understand the difference between primary, secondary and tertiary healthcare facilities?
a. Yes [] b. No []
7. Have you been to a clinic before?
a. yes [] b. no []
8. If no, why?
9. What do you know about clinics or health centers as against hospitals?
10. Do you have to go to a clinic before going to a hospital?

a. yes [] b. No []
11. If no, why not?
12. Would you bypass a clinic to go to a hospital?
a. yes [] b. No []
13. If yes, why?
Health Seeking Behavior
14. What is your first point of contact if you are not feeling well?
a. Clinic [] b. Pharmacy [] c. Chemical shop [] d. traditional healer [] e. Church [] f. family []
15. How ill do you have to be before you go to a clinic or health center?
a. Not very ill b. Very ill []
16. If you're not well between a clinic and a hospital which one would you choose?
a. clinic [] b. hospital []
17. why?
Accessibility and Utilization
Constant of the control of the contr
18. When was the last time you visited the clinic or health center?
18. When was the last time you visited the clinic or health center? a. This Month [] b. Last Month [] c. Within the year [] d. 1 year ago [] e. more than a year ago []
a. This Month [] b. Last Month [] c. Within the year [] d. 1 year ago [] e. more than a year ago
a. This Month [] b. Last Month [] c. Within the year [] d. 1 year ago [] e. more than a year ago
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 a. This Month [] b. Last Month [] c. Within the year [] d. 1 year ago [] e. more than a year ago [] 19. How do you rate the cost of service at clinics and health centers? a. Very expensive [] b. Moderate [] c. Reasonable [] d. Cheap [] 20. What is the major factor that constitute a constraint to you as far as the utilization of facilities at the health center is concerned a. Distance [] b. Finance [] c. Waiting for long hours [] d. Cultural beliefs [] e. standard of care [] f. staff unprofessionalism [] g. Other,