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UNIVERSITY OF SOUTHAMPTON

SCHOOL OF MANAGEMENT

**Healthcare Governance, Ownership Structure and Performance of Hospitals
in Ghana**

By

Patience Aseweh Abor

Thesis for the degree of Doctor of Philosophy

June 2014

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

SCHOOL OF MANAGEMENT

Management

Thesis for the degree of Doctor of Philosophy

HEALTHCARE GOVERNANCE, OWNERSHIP STRUCTURE AND PERFORMANCE OF HOSPITALS IN GHANA

Patience Aseweh Abor

It is argued that healthcare governance should play an important role in the overall functioning and effective performance of hospitals. However, the literature is devoid of how healthcare governance influences the performance of hospitals in Africa and other developing countries. This study examines the effects of hospital boards and ownership structure on the performance of hospitals in Ghana. The study specifically examines the characteristics of hospital boards, ascertains whether the presence of a hospital board and ownership structure affect hospital performance, evaluates the effects of hospital board characteristics and ownership structure on hospital performance, and also investigates the interaction effects of hospital board characteristics and ownership on performance. Based on a sample of 132 hospitals, the study produces a number of results. First, the study indicates that 69% of the hospitals have a board in place. The results also show that all the mission hospitals have a board in place. Half of the public hospitals and 80% of the private hospitals also have a board. The hospitals with a board exhibit varying board characteristics. Using regression models, the results show that hospitals with a board demonstrate lower occupancy, higher discharge and deliver better quality healthcare. In terms of the effect of board characteristics on performance, smaller boards are associated with better health service quality and lower occupancy. Hospitals with greater proportion of outside board members assist management to be cost efficient and improve on their operations leading to higher discharge. The results also show that hospitals with greater representation of medical staff on the board perform better in terms of occupancy but are less cost efficient. Hospitals with CEO duality perform better in terms of efficiency. However, hospitals with separate positions for the CEO and chair perform better in terms of discharge and service quality. Additionally, the evidence suggests that boards with higher female representation deliver better quality of healthcare, resulting in higher discharge rate. Also, frequency of board meetings is associated with lower occupancy, higher discharge and improved health service quality. The results also show that mission-based and private hospitals perform better than public hospitals. Further, the results of the interaction effects suggest that mission-based and private hospitals with effective board governance exhibit better performance than public hospitals. This study makes a number of new and meaningful contributions to the extant literature and the findings support managerialism, stakeholder and resource dependency theories. The findings also have important implications for effective and efficient governance and management of hospitals.

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DECLARATION OF AUTHORSHIP

I, Patience Aseweh Abor

declare that the thesis entitled

Healthcare Governance, Ownership Structure and Performance of Hospitals in Ghana

and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
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Signed:

Date:....21st July 2014.....

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Definitions and Abbreviations

AM – Alternative Medicine

ARV – Antiretroviral

CEO – Chief Executive Officer

CHPS – Community-based Health Planning and Services

CSR – Corporate Social Responsibility

DTAM – Department of Traditional and Alternate Medicine

FH – Faith Healers

GHS – Ghana Health Service

GHSP – Government Hospitals

GOG – Government of Ghana

HC – Health Centres

HIPC – Highly Indebted Poor Countries

ICT – Information Communications Technology

IGF – Internally Generated Funds

IMF – International Monetary Fund

ITN – Insecticide Treated Net

KATH – Komfo Anokye Teaching Hospital

MBP – Mission Based Providers

MDA's – Ministries, Departments and Agencies

MDGs – Millennium Development Goals

MOH – Ministry of Health

MTEF – Medium Term Expenditure Framework

NGOs – Non-Governmental Organizations

NHIS – National Health Insurance Scheme

NPC – National Population Council

OECD – Organization for Economic Co-operation and Development

PC – Poly Clinics

PHMHB – Private Hospitals and Maternity Homes Board

PMDP – Private Medical and Dental Practitioners

QGIH – Quasi Government Institution Hospitals

RTIs – Reproductive Tract Infections

SERVQUAL – Service Quality

STI – Sexually Transmitted Infections

TB – Tuberculosis

TBAs – Traditional Birth Attendants

THB – Teaching Hospital Board

THP – Traditional Health Practitioners

THOSP – Teaching Hospitals

TMP – Traditional Medical Providers

USAID – United States Aid

VCT – Voluntary Counseling Testing

VIF – Variance Inflation Factor

WHO – World Health Organization

5YPOW – Five Year Program of Work

Chapter 1

Introduction

1.1 Background to the Study

Governance has become an increasingly important phenomenon in recent years primarily due to the number of corporate scandals, which have resulted in a decline in shareholder value, a reduction in investor confidence and, in some cases, significant bankruptcies (Klapper and Love, 2004). Good governance is essential in promoting and ensuring fairness, accountability and transparency within organizations (Murphy and O'Donohoe, 2006). Concerns have also been raised regarding the governance processes of healthcare systems and this is mainly as a result of the increasing consumer pressure and regulatory changes. These developments are expected to have implications for the management and performance of hospitals. Therefore, the growing call for more accountability and better performance by hospital boards, given their formal and legal responsibility to maintain organizational viability and effectiveness (see Delbecq and Gill, 1988; Shortell, 1989; Orlikoff, 2005), is certainly in the right direction. These hospital boards are expected to adopt a more critical role in strategy formulation, environmental adaptation, and internal control of hospital management (Weng *et al.*, 2011; Büchner, 2012). This increased interest is in recognition of the fact that effective governance system can lead to improved performance.

Healthcare governance has been conceived of as a shared process of top-level organizational leadership, policymaking and decision-making. The hospital board is a central factor in healthcare governance as it holds the legal responsibility for establishing objectives, and reviewing management's performance to ensure that the health facility is well run. Although the hospital board has the ultimate accountability, the CEO, senior management

and clinical leaders are involved in top-level functions (Bader, 1993; Alexander *et al.*, 2009). Most hospitals have their own governing board and a professional team of executive managers. Together, they constitute the axis of hospital governance, which entails directing the entire functioning and effective performance of a hospital, by defining the hospital's mission, setting its objectives, supporting and monitoring their realization at the operational level (Flynn, 2002; Eeckloo *et al.*, 2004). Efficient governance of hospitals requires responsible and effective use of funds, professional management and competent governing structures (Ditzel *et al.*, 2006).

One important pillar of hospital governance is overseeing the operations of the organization and the board, and the fundamental fiduciary duty of hospital governing boards is to ensure the organization's fidelity to its core mission (Alexander and Lee, 2006). Hospital boards who have an unprecedented need for sound governance structures, policies and processes and well-understood accountabilities also have the responsibility of ensuring quality care, efficiency, responsive service, ready access, fairness, and the motivation of health service providers (Quigley and Scott, 2004). It is important to note that healthcare institutions, whether public or private, for-profit, or not-for-profit, part of a system or independent, must have the public trust to survive and achieve their individual missions. The process or act of governance is typically distinguished from that of management or supervision. Governance involves both the setting of organizational goals and the development of strategies for their achievement, using the traditional structure of a board of trustees, and/or governors or directors, to which the top administrative officer of the organization usually reports (Wisler, 1986; Fennell and Alexander, 1989; Smith *et al.*, 2012). Governance in a hospital setting has added complexity as it concerns not only economic and financial dimensions, but also incorporates societal ones (Eeckloo *et al.*, 2004). In addition, the challenges facing hospitals in today's environment is forcing the contemplation of the meaning of 'good governance' and how it should be implemented.

In recent times, hospital boards have come under greater scrutiny and are being held accountable for the performance of the hospitals. These hospital boards and managers are challenged to reflect on what good governance means and how they can implement it in their own organization. This is due to several major developments in healthcare and healthcare policy (Eeckloo *et al.*, 2004). Therefore, the relationship between board effectiveness and hospital performance is critical for leaders in healthcare. This present study takes a look at how hospital boards and ownership structure affect the performance of hospitals. The focus of hospitals is crucial given their important role and prominent position they assume within the healthcare system of most countries.

1.2 Statement of Research Problem

The capacity of any government to provide a good standard of healthcare is considered as one of the most important elements contributing to a country's standard of living, and hospitals play a major role in the delivery of healthcare. However, in recent times, healthcare institutions seem to be confronted with major challenges, including crisis in health service delivery, difficulty in dealing with the pressures and numerous paradoxes by healthcare organizations (Troyer *et al.*, 2004). The need to improve quality of care and patient safety, in the midst of declining revenues and rising expenses, increasing service demand due to capacity strained, a rising uninsured population, an aging population using more healthcare resources, and more competition between hospitals and physicians, to name a few, make the issues of healthcare diverse and complex (Savage, *et al.*, 1997). The intensity of these issues raises greater concern than ever before and contributes to a loss of public and other stakeholder trust in healthcare institutions (Health Research and Educational Trust, 2007). Storey and Buchanan (2008) argue that progress in healthcare compared with certain other sectors is slow and mistakes continue to occur. The governing board of

a healthcare organization is ultimately accountable for maintaining the public's trust. Hospital boards, management, and clinical leadership are expected to communicate a clear sense of urgency for change, to strengthen the connection between hospitals and their communities as suggested by Suchman (1995). This is necessary to ensure the success of the organization and to address the challenge of transforming healthcare to overcome the numerous obstacles confronting hospitals and healthcare systems today. It is the responsibility of the board to ensure a higher standard of performance and accountability by engaging in practices that foster exceptional governance (Health Research and Educational Trust, 2007). This is because there is increasing recent evidence that suggests good governance is linked to performance (Ntim and Soobaroyen, 2013; Kumar and Zattoni, 2013), though previous studies have suggested otherwise (see Hermalin and Weisbach 1991; Singh and Davidson, 2003).

Despite the numerous challenges facing the healthcare sector, few studies exist on the effect of healthcare governance on hospital performance. The few studies that exist have also mainly focused on a small number of developed countries (see Boeker and Goodstein, 1991; Molinari *et al.*, 1993; Molinari *et al.*, 1995; McDonagh, 2006; Culica and Prezio, 2009). However, political and administrative reforms in many developing countries directly shape what is to be referred to as good governance or best practice. Hence, using findings from such studies (in developed countries) may suggest imposing a false one-best-way model on all countries (Andrews, 2010). Thus, there is a gap in knowledge with regards to how healthcare governance might influence the performance of hospitals from the perspective of developing countries, and Africa in particular. There are several issues confronting the health system of developing African countries, including shortage of appropriately trained and motivated health workers, poor commodity security and supply systems, weak operational health systems, marginalization of African traditional medicine in national health systems, and inadequate community involvement and empowerment. Other

problems include paucity and inadequate use of available evidence and information to guide action, including the use of ICT, effective co-ordination with other sectors and harmony with partners not yet attained, lack of optimal inter-sectoral action and coordination, among others (Africa Health Strategy: 2007–2015 Index). Also, hospitals in some developed countries like the US are mostly based on managed care contracts, multi-hospital system and are run on corporate lines and therefore, their measures of performance are mainly based on profitability (Molinari *et al.*, 1995; Goes and Park 1997). This is often not the case in most countries, especially in Africa, where performance is looked at in terms of quality of care, occupancy, discharge, and efficiency.

This study focuses on one important African country, Ghana, as it provides an interesting setting to investigate the issue of healthcare governance and performance of hospitals. The provision of quality healthcare in Ghana has received a lot of support and attention from both governmental and non-governmental agencies, resulting in Ghana's health sector being seen as one of the best performing health sectors in the West African sub-region (Abekah-Nkrumah *et al.*, 2009). However, there are still agitations within Ghana concerning the performance of the sector considering the massive inflow of resources into the sector. For instance, Bruno *et al.* (2010) suggest that the effectiveness of human resource management policies and strategies is rather weak, resulting in a number of weaknesses that limit their potential to inform decisions of policymakers or health service managers. Another performance area of concern is the slow rate of maternal mortality reduction of 3.3% compared to 5.5% annual rate required to attain the Millennium Development Goals (MDG) 5 target of 185/100 000 by 2015 (World Bank, 1993). Also, it is suggested that 36% of health spending is wasted due to inefficiencies and poor investment (see WHO, 2012). Various media reports on the numerous challenges facing the health sector in Ghana make it important to find out how accountable leadership has been in the governance and management of

the Country's hospitals¹. As the media offers important insights into public thinking (Davies and Shields, 1999), it can be argued that these media anecdotes and reports re-emphasize both the importance and urgency needed in tackling the challenges of governance in the healthcare sector in Ghana.

In addition to this, the performance of health facilities has rather been observed as being unbalanced (Abekah-Nkrumah *et al.*, 2009). It is possible that the performance issue at the health facility level is partly due to a governance challenge, hence the need for this study. This study examines the effect of healthcare governance and ownership structure on the performance of hospitals in Ghana. The study is an important area worth investigating, considering that healthcare governance and ownership structures and for that matter performance measures of hospitals in developed countries may differ from those of developing countries like Ghana.

This study contributes to the extant literature in a number of respects. First, this study adds to the advancement of the healthcare governance research agenda by looking at the issue of hospital governance and performance from the perspective of an African country. Previous studies have tended to focus on developed countries with different governance systems (see Shortell and LoGerfo, 1981; Alexander *et al.*, 1995; Molinari *et al.*, 1995; Gu *et al.*, 2010). Second, this study examines the characteristics of hospital boards across various ownership forms. This facilitates easy comparison of the characteristics of boards of the various forms of hospitals, which is ignored in prior studies. Third, the present study focuses on both hospitals with boards

¹ The 30th April 2013 edition of the Chronicle newspaper indicates that members of staff of the Korle Bu Teaching Hospital extort monies from patients before attending to them. In February 23, 2012, the media reported agitations by some board members of Korle Bu Teaching Hospital, resulting in the dissolution of the board. In August 2012, the board the hospital was said to have failed in its core business, which is delivering on quality clinical services to the Hospital's patients (August, 2012; joyonline.com). On 29th March 2012, Junior doctors at the Komfo Anokye Teaching Hospital expressed loss of confidence in the board due to incidence of corrupt practices in the Hospital and therefore called for its immediate dissolution and dismissal of the management.

and those without boards in order to ascertain whether or not the presence of a hospital board affects performance. Prior studies focused on only hospitals with boards by just looking at the effects of board characteristics on hospital performance. Fourth, this current study includes ownership structure as a determinant of hospital performance and also shows how different ownership structures together with the effects of the characteristics of hospital boards on performance. To the best of the researcher's knowledge, this is the first study that considers the effects of characteristics of hospital boards on performance depending on the different ownership forms. Fifth, this current study considers non-profit measures of performance, considering the fact that hospitals in developing countries are not purely profit making as pertains in some developed countries. The study also considers hospital performance from both the viewpoints of the patients' and healthcare providers. Prior studies have ignored patients' view of performance. Therefore, it is important to appreciate how patients think of the performance of hospitals based on their governance structure.

1.3 Objectives of the Study

The main objective of this study is to examine the effects of healthcare governance and ownership structure on the performance of hospitals in Ghana. The specific objectives of the study are to:

- i. examine the characteristics of hospital boards in Ghana
- ii. ascertain whether or not the presence of hospital board affects hospital performance
- iii. evaluate the effect of hospital board characteristics on the performance of hospitals
- iv. examine the effect of hospital ownership structure on hospital performance;
- v. investigate the interaction effects of hospital board characteristics and ownership on performance.

1.4 Research Questions

Following the objectives of the study, a number of research questions are formulated. The following research questions are therefore raised:

- What are the characteristics of hospitals boards in Ghana?
- Does the presence of hospital board affect hospital performance in the case of Ghana?
- Do the characteristics of hospital boards affect hospital performance?
- What is the effect of ownership structure on hospital performance?
- What are the interaction effects of hospital board characteristics and ownership on performance?

1.5 Organization of the Study

The remaining of this thesis is organized as follows: Chapter two critically discusses previous literature on the subject matter. The chapter provides a review of the concepts of healthcare governance, and clinical governance, and the principles of good organizational governance as applied in hospitals. It then discusses the hospital ownership and governance models, the importance of healthcare governing boards, and healthcare governance and healthcare quality. The chapter also reviews literature on the effects of hospital board characteristics and hospital ownership structure on performance.

Chapter three provides an overview of the healthcare system in Ghana. It provides a review of the history of the healthcare system, the structure and governance of the healthcare system, and the healthcare financing and resource utilization. The chapter then discusses targeted health programs, health infrastructure, indigenous healthcare system, health sector reforms, and health information technology.

Chapter four includes discussion of the governance theories and the hypotheses development. This chapter discusses the governance theories and the hypotheses development. It also provides a framework for analyzing the effects of hospital governance and ownership structure on performance. The chapter provides a conceptual framework, which shows how the relevant theoretical considerations with justification explain hospital governance. The chapter then explains how the hypotheses are developed to guide the empirical investigations.

Chapter five explains how the theoretical framework is related to the findings and the methodology and methods adopted in the study. This chapter covers the philosophical paradigm and justification, type of study carried out, the population and data source for the study, the data used in the study and the sampling procedure. It also discusses issues of validity and reliability of the data, the method used in analyzing the data, and the ethical issues.

Chapter six presents and discusses the results on the characteristics of hospital boards in Ghana. The analysis on the characteristics of hospital boards is based on the summary descriptive statistics. The chapter also includes the correlation and variance inflation factor analysis to ascertain the degree of multi-collinearity among the explanatory variables.

Chapter seven also discusses the results on the effects of hospital board governance and ownership structure on the performance of hospitals in Ghana. First, the chapter includes a discussion on whether or not the presence of a hospital board affects performance. Second, the chapter discusses the results on the effects of hospital board characteristics on performance. Third, the chapter includes discussion of the results on the interaction effects of hospital board characteristics and ownership forms on performance.

Chapter eight summarizes the main findings and provides conclusions, limitations and areas of further research based on the findings. This chapter also mentions the main contributions of the study and provides relevant policy recommendations based on the findings and in line with the specific objectives of the research.

The next chapter provides a critical analysis of existing literature on healthcare governance and performance.

Chapter 2

Literature Review

2.1 Introduction

This first section gives an introduction of the chapter. Chapter two critically examines the literature on governance and hospital performance. The chapter is organized in seven sections. The next section discusses the concepts of healthcare governance, and clinical governance. The third section discusses the principles of good organizational governance as applied in hospitals. The fourth section covers hospital ownership and governance models and also discusses the importance of hospital boards. Section five of the literature review chapter discusses healthcare governance and healthcare quality. It specifically looks at healthcare quality and the role of hospital boards in delivering healthcare quality. The sixth section of this chapter discusses the existing literature on the effects of hospital board characteristics, including board size, board composition, board participation by medical staff, board leadership structure, board diversity, and frequency of board meetings on performance. The section also discusses the literature on the relationship

between hospital ownership structure and performance. The summary of the key issues discussed in the literature review is provided in the final section.

2.2 Healthcare Governance

Healthcare governance is regarded as the process of steering the overall functioning and effective performance of a hospital by defining the hospital's mission, setting its objectives, supporting and monitoring their realization at the operational level (Flynn, 2002). It includes the responsibility and accountability for the overall operation of the health facility. More specifically, healthcare governance has been conceived of as a shared process of top-level organizational leadership, policy making and decision-making of the board, CEO, senior management and clinical leaders. It is an interdependent partnership of leaders and though the hospital board has the ultimate accountability, the CEO, senior management and clinical leaders are involved in top-level functions (Bader, 1993; Bennington, 2010; Alexander *et al.*, 2003). Bader (1993) suggests the need of having all perspectives in the hospital involved in order to make governance in a hospital setting work effectively.

According to Eeckloo *et al.* (2004), most hospitals have their own governing boards and a professional team of executive managers and together they constitute the 'axis of hospital governance'; they argue that the purpose of the healthcare governance is to enable a more integrated approach of supporting and supervising all hospital activities, including clinical performance. Flynn (2002) and Eeckloo *et al.* (2004) consider healthcare governance as the process of steering the overall functioning and effective performance of a hospital by defining [its] mission, setting objectives and...[having them realized] at the operational level. This supports the position of Taylor (2000) that one of the key elements needed in order to achieve excellence in hospital governance is having a clear mission and an achievement-orientated culture in which to realize it. However, there are

continued reports of poor performance, sometimes with tragic consequences that cause widespread public concern (Davies and Shields, 1999).

One main focus of healthcare or hospital governance is the supervision of the clinical performance of the hospital, which involves the delivery of quality healthcare. The process of ensuring the provision of quality healthcare is explained by what is known as clinical governance, which is seen as an important element of healthcare governance. This study also considers health service quality as one of the measures of hospital performance. Therefore, the concept of clinical governance as a key component of healthcare governance is relevant within the context of this current study.

2.2.1 Clinical Governance

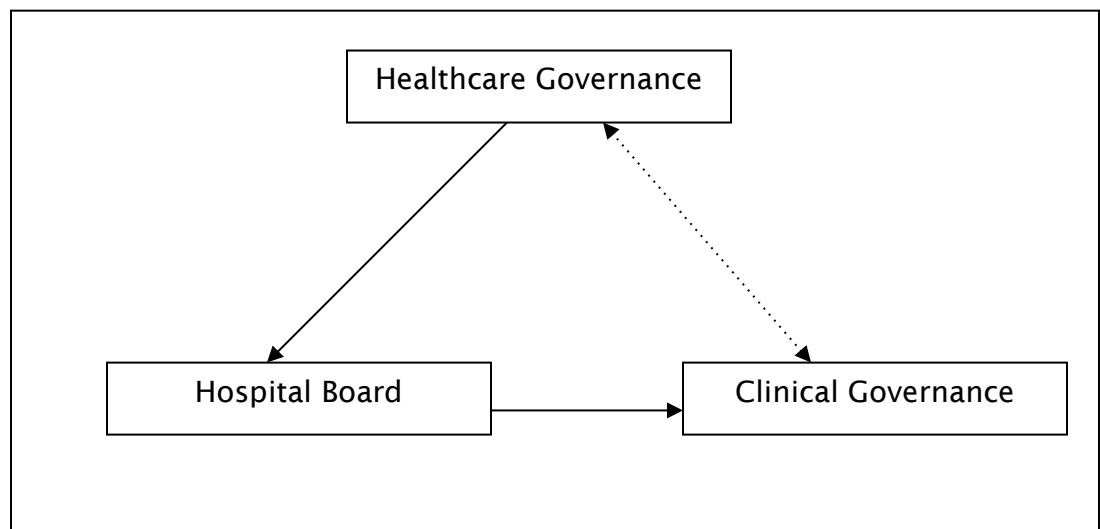
The international debates about the quality of care now include consideration of safety and how to minimize error. The concept of clinical governance has emerged as one strategy for increasing vigilance and spreading responsibility for outcomes. Clinical governance is seen as an important aspect of the healthcare governance system, which has emerged as a result of the complexity of nature of the setting and the service provided within the hospital (Phillips *et al.*, 2010; McSherry and Pearce, 2011). The term clinical governance was first used by World Health Organization (WHO) in 1983 as a way of summarizing the main elements of the provision of quality healthcare. Its evolution was rather slow and was only introduced on a formalized basis by some countries in the latter years of the 1990's (Murphy and O'Donohoe, 2006). Vanu Som (2004) defines clinical governance as a governance system for healthcare organizations that promotes an integrated approach towards management of inputs, structures and processes to improve...clinical quality. She suggests that the main aim of clinical governance is said to accomplish continuous quality improvement in a healthcare setting and is designed to consolidate fragmented approaches to quality improvement.

The concept of clinical governance is considered a framework used to improve the quality of provided healthcare service (Vanu Som, 2004; Nutbeam, 2011). In the view of Donaldson and Gray (1998), it is a framework through which the NHS organizations are accountable for continuing to improve the quality of the service and safeguarding high standards of care by creating an environment in which excellence in clinical care would flourish. Clinical governance, according to Freedman (2002), is also seen as a whole system of cultural change, which provides the means of developing organizational capability to deliver sustainable, accountable, patient-focused and quality assured healthcare. He suggests that it provides the umbrella under which all aspects of quality can be gathered and continuously monitored. Freedman (2002) endorsed this by emphasising that its introduction on a formalised basis means that hospitals now have to report on issues of quality rather than only financial accountability as was previously practiced. Clinical governance attempts to improve the quality of healthcare provided by the integration of the financial, performance and clinical quality aspects of a hospital. The important role played by clinicians has also been recognized in delivering quality in the hospital (Murphy and O'Donohoe, 2006).

World Health Organization (2008) outlines four main dimensions of clinical governance including professional performance, resource allocation, risk management and patient satisfaction. However, subsequently, many other elements have been incorporated as the concept has been rolled out into hospitals. The elements include patient involvement in service delivery, staffing and staff management, continuous professional development, clinical effectiveness, education and training, using available information, and clear lines of accountability and responsibility for clinical care. Based on these varied dimensions, clinical governance can be viewed as a mechanism to facilitate multi-disciplinary teams all working toward the same goal – the continuous improvement of the quality of healthcare. It is hoped that these cooperative working practices will have a positive influence on both the

behaviour of medical professionals and in turn the delivery of care (Vanu Som, 2004; Murphy and O'Donohoe, 2006).

Figure 2.1: Healthcare Governance, Hospital Board and Clinical Governance



Source: constructed by author

Figure 2.1 illustrates the relationship among healthcare governance, hospital board governance and clinical governance. Healthcare governance deals with the process of steering the overall functioning and effective performance of a hospital by defining the hospital's mission, setting its objectives, supporting

and monitoring their realization at the operational level. The hospital board is an important feature of the healthcare governance system, which holds the legal responsibility for establishing objectives, and reviewing management performance to effective and efficient running of the hospital. Clinical governance is also as an important aspect of the healthcare governance system and aims at accomplishing continuous quality improvement in a healthcare setting and is designed to consolidate fragmented approaches to quality improvement. The hospital board is responsible for ensuring clinical governance among other equally important oversight roles it plays. That is, it ensures that the hospital delivers best quality of care and patients are not harmed.

In order to understand the relevance of healthcare governance, the various principles underlining the concept of healthcare governance must be understood. These are discussed in the next section.

2.3 Principles of Good Hospital Governance

It is important to consider the principles of good governance within the context of hospitals. According to Taylor (2000), every management guru and leader may have their own typology of good governance principles grounded in observation-based theory. He, however, suggests that these principles could be combined based on classical and current literature into nine principles of 'good governance' by applying them in a hospital setting. Ditzel *et al.* (2006) also applied these nine principles of good governance to healthcare management. Ditzel *et al.* (2006) suggest that given the importance of the governance function in managing hospitals, it may be timely for policy-makers and citizens alike of countries experiencing health sector change to first consider to what extent their current models of hospital governance meet the specified 'good governance' criteria, and second to address the implications of 'good governance' for their respective country's

healthcare environments. The study first provides a review of the principles of good governance as applied to hospitals.

The principles of good governance proposed by Taylor (2000) include knowing what governance is, achievement of strategic ends, board-CEO relationship, unity of direction, unity of command, unity of accountability/responsibility, ownership needs, self-improvement, and understanding the cost of governance. These governance principles are summarized in Table 2.1 and discussed in turn.

2.3.1 Knowing What Governance Is

Knowing what governance is constitutes another good governance principle. Bohen (1995) defines governance as the responsibility and accountability for the overall operation of an organization. Every type of board is mandated with the responsibility of playing an oversight role in the organization in which it presides, as well as obliged with the accountability towards the owners and stakeholders of that organization. This sometimes includes having formal mission statements and clearly defined performance objectives, codes of conduct and procedures spelling out exactly what are required for the governance function (Ditzel *et al.*, 2006). In most developed nations like Canada, boards govern hospitals, whilst the management of these hospitals is delegated to Chief Executive Officers. The board is charged with the responsibility of developing corporate plans and policies, motivating and measuring the performance of organizations against the targeted plans and policies, and serving as advocates of the owners of the hospital (Taylor, 2000). However, implementation of the set policies and plans is the duty of the CEO. Hospital boards also have a duty of forming five strategic relationships in order to pave the way for effective governance and performance. These relationships include: board-CEO relationship, board-

medical staff relationship, board-community relationship, board-mission/goals/values relationship, and relationship amongst board members (Taylor, 2000).

According to Bader (1993), governance is a shared process of top-level organizational leadership, policy making, and decision-making. The CEO, and senior management, as well as clinical leaders, are all involved in top-level function, but the board has the ultimate accountability. Thus, governance is not the prerogative of just board members, but an interdependent partnership of leaders.

2.3.2 Achievement of Strategic Ends

There has been increased demand on all health service providing facilities, from both social and economic circles, to provide the 'right' services at the right place, within the right time, and at an affordable cost in order to ensure effectiveness in the health sector. It is therefore incumbent on all hospital governing boards to set strategic ends (encompassing service and financial performance objectives), and ensure that these are attained and measured. All organizational activities must therefore be synchronized with regards to the values/goals of the organization (Davies, 1999; Taylor, 2000; Ditzel, *et al*, 2006). According to Weber (1947), large organizations must have a plan to deal effectively with the diverse behaviours of the individuals in order to accomplish its goals and objectives. He suggests that every individual within such organizations must occupy a specified position that comes with specific tasks to perform, which he referred to as bureaucracy.

Apart from bureaucracy, strategic planning is another means by which governance can ensure the achievement of strategic ends. Studies have

shown that a strong relationship does exist between strategic planning and organizational effectiveness (see Bradshaw *et al.*, 1992, Carver, 1990a). Higher organizational performance could be a result of better strategic planning. Carver (1990a) argues that if governance is about overseeing an organization's achievement of its strategic goals, then the CEO must be accountable to the board for the achievement of those strategic goals. This is possible if only the board clearly indicates what it hopes to achieve in measurable terms, in a strategic plan. According to Taylor (2000), this strategic planning is, however, quite often influenced by the organization's mission, vision, values, ownership, and community needs.

2.3.3 Board-CEO Relationship

The effectiveness and high performance of an organization largely depends on the mutual trust and confidence throughout the organization, and particularly between the board and the CEO (Likert, 1961; Gillies, 1992). Carver (1990a) asserts that the relationship between the board and the CEO is the single most important relationship in an organization and this relationship is mostly easily misconstrued and tagged with dire political consequences. According to Carver (1990a), governance is not responsibility of the board alone and it is also not the sole responsibility of the CEO. But rather, it is a solemn partnership, a leadership team, which is to be preserved by each member having a devoted loyalty to the greater entity that they govern. Board members and the CEO are said to be equals and colleagues, but it is conflict of interest to have the CEO sit as a voting member of the board, let alone function as the chair of the board (Carver, 1990a; Gillies, 1992).

The board has the mandate to hire, evaluate, and fire the CEO. Carver (1990a) states that monitoring the CEO is as important as hiring him or her in the first place. The board also has the responsibility of providing a connection between the hospital and its moral ownership, monitoring the performance of the CEO, managing the board-medical staff relationship, the board community relationship, and intra-board relationships (Ditzel *et al*, 2006). The CEO is in charge of all parts of the organization put together as a whole, enabling the board to govern by dealing with the whole, and the CEO alone on personal levels (Mintzberg, 1987). The CEO should inform the board to seek its approval whenever he/she finds it expedient to deviate from board policy. Therefore, the board is responsible for articulating the organization's mission, vision, values, goals, and plans, and the CEO is responsible for the implementation and achievements of the ends on time and within budget (Pointer, 1995). However, organizational and executive performance objectives should be determined by both the board and the CEO, ensuring that these objectives are realistic, measurable, doable, and not conflicting one with the other (Harvey, 1978). The board has the right to expect performance, honesty and straightforwardness, from its CEO and the CEO has the right to expect one voice from the board and be accountable to one board, all in unison regardless of the differences within and around it (Carver, 1990a).

2.3.4 Unity of Direction

This principle is derived from classical management principles and it is interlinked with two other principles; *unity of command*, and *unity of accountability and responsibility*. Together, these principles are concerned with the organization and mechanistic functioning of boards. The *unity of direction*, *unity of command*, and *unity of accountability and responsibility* principles relate to the scalar principle of organizational design meaning that the chain of command should flow in a straight line from the top to the bottom of the organization (i.e., from the board's CEO down through the various staff levels in the hospital, and that people in positions of power

within the organization should be accountable for their actions and directly responsible to their superiors) (Ditzel *et al.*, 2006).

According to Fayol (1949), one of the principles of management that explains the role of governance, describe unity of direction as the phenomenon in which an organization has one board of governors, one CEO, one strategic plan, mission or vision at any one time. He posits that anything more would be a recipe for double standards, chaos, waste and eventually, ineffectiveness. It is important for all aspects of the organization's governance system to function in unison to ensure the achievement of strategic goals. It is argued that the creation of governance partnership of the hospital board and the CEO is necessary in pursuing a common mission or vision. There should not in any way be ambiguity in direction so as to ensure the effectiveness of a CEO/organization. Hence, a high level of strategic alignment is necessary for any organization to be strategically successful. Specifically, alignment among the organizations mission, vision, values, goals, strategy, structure, culture, leadership style, resource deployment and investment, incentive system, skills sets, and performance measures (Rumelt, 1974; Hambrick, 1987; Shortell and O'brien, 1994). According to Bader (1996), this strategic alignment is usually under the prerogative of the CEO under the stewardship of the board.

Some researchers (see Juran, 1989; Mintzberg, 1989; Arrington *et al.*, 1995) hold the view that successful change management needed to redirect hospitals, health agencies, and health systems into the next millennium requires the partnership of board and CEO with a common vision of the future, commonly-held knowledge of the primary commitments of the organization and basically know what they intend creating, why and how.

2.3.5 Unity of Command

The principle of *unity of command* is also part of the 'scalar principle' and it requires that decision-making authority or the chain of command should flow in a straight line from the top to the bottom of the organization. That is from the board to the CEO down through the various staff levels in the hospital (Ditzel *et al.*, 2006). Every employee including the CEO should receive orders from only one superior. A deviation from this order can bring about confusion, threaten stability, breed irresponsibility and if not checked, wreak havoc (Fayol, 1949; Mintzberg, 1979; Anderson, 1984). Fayol (1949) observed that a body with two heads is in the social world a monster just as it is in the animal world, and has difficulty surviving.

Gillies (1992) argues that when a CEO is made to report to more than one board, for instance, he becomes more powerful than these boards). Simon (1946) concludes that it is physically impossible for a person to obey two contradictory commands. Whenever there is no unity in command, the relationship between board and CEO is tremendously affected. Thus, split of authority can lead to disorderliness in any organization (March and Simon, 1958; Taylor, 2000).

2.3.6 Unity of Accountability/Responsibility

In organizational theory, the principle of responsibility states that, first subordinates are responsible for their performance directly to their superiors/supervisors, and second, that supervisors are directly responsible for the performance of those they supervise (Anderson, 1984). People in positions of power within the organization should be accountable for their actions and directly responsible to their superiors (Ditzel, 2006). Within an organization, authority should always correspond with responsibility (Fayol, 1949). Whenever this does not happen, decisions are delayed or not even made at all. Hence, it can be detrimental for an organization if the CEO's authority (given him/her by the board) does not match his/her responsibilities. This normally happens when there is no trust between the board and the CEO. Authority is, therefore, a derivative of responsibility.

For organizations like the hospital, four aspects of accountability are paramount and these are political accountability, commercial accountability, clinical accountability, and community accountability. Political accountability deals with the hospital's achievement of all externally imposed mandates within the boundaries set. Commercial accountability is the net value created within the services provided by the hospital. Clinical accountability connotes patient outcomes and satisfaction. Community accountability is the hospital's role in improving the health status of its community (Taylor, 2000). The governance structure and culture of the hospital should enable the achievement of the various forms of accountabilities (Alexander *et al.*, 1995; Gamm, 1996; Griffith, 1996). Any other thing other than single line accountability is not just ineffective in the current challenging environment, but also incompatible with the demands facing healthcare facilities and hospitals. Multiple accountability is said to result in ambiguity, conflicts, confusion, alienation, and withdrawal, which health managers do not need even the least of (Davis and Lawrence, 1978; Joyce, 1986; Rakich *et al.*, 1992; Taylor, 2000).

2.3.7 Ownership Needs

This principle deals with the fact that a hospital's board is ultimately accountable to the organization's owners (Taylor, 2000). Unlike military, government-owned, or church-owned hospitals, corporations (consisting of board members) own publicly listed hospitals themselves and other non-board members. According to Drucker (1990) and Bader (1991), in these corporation owned hospitals, the board is usually accountable to the hospital's mission and values, which is not the case with denominational-owned or government-owned hospitals. However, Bohen (1995) explains that the governing board's role as a voice of ownership is most often overlooked in non-government/non-denominational owned hospitals. In the case of non-profit boards, Taylor *et al.* (1996) suggest that the network is governance not management, survival not routine, and finding out what really matter. In order to ascertain 'what really matters', the boards and its CEO are expected

to identify who the organization's key stakeholders are and they appreciate the need to also understand the constituents they serve (Taylor, 2000). According to Taylor (2000), governors and CEOs must communicate in a strategic manner with their owners and communities in order to satisfy the current demands of governance.

Carver (1990) suggests that governing boards of hospitals or any organization are guardians of the organization's mission, and values, which distinctively set denominational hospitals apart from one another. Rodat (1996) argues that for these hospitals to be seen differently, they must practice and live their distinct mission and values. According to Carver (1990a) and Duncan *et al.* (1995), it is possible to achieve this if governors and CEOs really act as stewards and are particularly dedicated to their core mission and values. Clearly, testing an organization's activity against its mission is the standard check of organizational direction (Carver, 1990a; Taylor, 2000). It stands to reason that the board's dedication to achieving the organization's mission ultimately translates to meeting the needs of the owners of the organization.

2.3.8 Self-Improvement

This principle is strongly based on the premise that hospitals and health systems are not just economic, but also social entities (Saltman, 1997; Ditzel *et al.*, 2006). According to Taylor (2000), there is the need for continuous improvement as an organizational philosophy to permeate all aspects of the hospital from the top to bottom of the organizational ladder, in order to ensure total quality management. Thus, hospital board members should be selected based on their knowledge in business management, financial analysis and strategic planning; as having a fully representative board defeats the whole purpose of governance. Such a board will not focus on the strategic issues, but may be interested in promoting their own interests (Delbecq and Gill, 1988; Taylor, 2000). Taylor (2000) explains that hospital boards are the obvious starting points for continuous self-improvement.

Carver (1990a) and Rovner (1996) suggest that board meetings should not be held regularly as it has the potential of getting the board into operational details, which are not supposed to be their business. Senior management tends to focus on preparing for board meetings as opposed to implementing board policies and decision. Frequent board meetings also put too much workload on other staff and also increase the cost of board business (Taylor, 2000).

2.3.9 Understanding the Cost of Governance

This principle deals with issues such as the payment of board members, direct costs of meetings, staff supporting board activities, and costs associated with errors made by boards (Ditxel *et al.*, 2006). Carver (1990b) explains that apart from being governance centres, most boards are also regarded as cost centres. Taylor (2000) identified five basic cost of governance, including board members' personal opportunity cost, direct expenses on board meetings, cost of staff supporting activities, cost associated with errors made by the board, and costs of ineffectively structured governance-management-organization relationship. All these costs will either be minimized or avoided by an effective governing body.

Most governing boards will impose opportunity cost on its members and for the ineffective and inefficient board that meets unnecessarily, and accomplishes little, a huge cost is still imposed on its governors and is very wasteful of their time. Almost every hospital board function incurs material expenses; for photocopying, couriers, tea/coffee, and so on. These costs are increasingly significant if the hospital has a large board with other committees and sub-committees that meet frequently. Staff time spent on board activities is the single largest, on-going cost of governance, as much of the time of senior management of the hospital is spent preparing for board

questions, writing reports, and doing follow ups on board activities, amongst others. Errors are bound to be made by boards as no board is perfect. However, these errors cost money, and as much as possible should be minimized by the board by ensuring that their actions are consistent with their mission, vision, and policies. The board should also ask questions on strategic issues to ensure that only competent people are elected as directors, as well as focus on outcomes, not means (Carver, 1990a; Taylor, 2000). Anderson (1984) argues that whenever the governance principles, especially any combination of three unity principles are violated, it leads to huge cost to the organization.

Table 2.1: Principles of Good Governance

Principles	Application
Knowing what governance is	CEO is responsible to board for implementing its policy plans and strategic directions. Board is responsible for developing corporate policies and plans; monitoring and measuring organizational performance against those policies and plans; and acting as a voice of the ownership of the hospital. Board's governance responsibilities are to provide a linkage between the hospital and its moral ownership; monitor the performance of the CEO; and develop an explicit statement of values for the

hospital.

Achievement of strategic ends	To be effective by providing the right service, at the right place, at the right time, and at an affordable cost. Hospital governance structures must be such that performance objectives can be set, measured and accomplished
Board-CEO relationship	Relationship is typified by a high level of mutual confidence and trust throughout the organization and particularly between the board of directors and CEO. Governance viewed as a solemn partnership between board and CEO. Board members and the CEO are equals; they are colleagues. Organizations should be conceived of as a number of concentric circles with clients in the outermost circle and the CEO in the inner circle.
Unity of direction	The CEO and board should function as a common body to pursue a common end. There should be only one board of governors, one CEO, one strategic plan, mission or vision, at any one time.
Unity of command	Orders should be received from one superior only. Decision-making authority should flow in a straight line from the top to the bottom of the organization.
Unity of accountability and responsibility	Authority is a derivative of responsibility. Every employee, including the CEO, must be held accountable for the exercise of authority in executing his/her responsibilities.

Ownership needs.	A hospital board's ultimate accountability is to the organization's ownership.
Self-improvement and quality management	Continuous improvement should be part of an organizational philosophy and should permeate all hospital management and governance practice.
Understanding the cost of governance	These include board member's personal opportunity costs, direct board meeting expenses, the costs of staff supporting board activities, the costs associated with errors made by boards, and the costs of ineffectively structured governance-management-organization relationships.

Source: Ditzel *et al.* (2006), page 7.

2.4 Hospital Ownership and Governance Models

Hospital boards are ultimately accountable to the organization's ownership. With respect to church-owned and government-owned or military, there is, in fact, a particular owner. Many other hospitals owned by a number of shareholders have their own boards and the owners may be board members or non-board members. The board's responsibility of hospitals owned by shareholders other than a denomination or government is mainly to the hospital's mission and values (Drucker, 1990, Bader, 1991; Taylor, 2000). It is important to understand the various models of healthcare governing board and the general importance of the healthcare governing boards.

2.4.1 Models of Healthcare Governing Board

The major ownership types include for-profit, non-profit, and public ownership. The non-profit hospitals are normally owned by religious groups and non-governmental organizations. Both non-profit and public hospitals have non-profit making motives. For-profit ownership entails shareholders who expect a return on their investment. Therefore, for-profit hospitals are expected to reward their shareholders in the form of dividends by generating short-term and long-term profits. Non-profit hospitals, though they need short-term surpluses to finance their operations (Chang and Tushman, 1990), are mainly responsible to their communities to provide necessary quality services rather than generate long-term profits. The existing literature suggests that not-for-profit firms have different objective functions other than profit maximization. The objective function may include issues regarding maximizing quality, quantity and/or prestige, helping to fulfill demand for local public goods or meet the needs in the community; or maximizing the well-being of specific important constituencies, such as the medical staff or consumers (Newhouse, 1970; Pauly and Redisch, 1973; Weisbrod, 1988; Frank and Salkever, 1991; Ben-Ner and Gui, 1993; Lakdawalla and Philipson, 1998). Consequently, whereas for-profit and non-profit hospitals both attempt to generate short-term profit margins, for-profit hospitals' financial responsibility to shareholders is likely to result in higher long-term profitability than hospitals in the non-profit sector. Certainly, for-profit chains would be expected to show higher operating margins because of the financial interests of their stakeholders than non-profit hospitals.

Gregg (2001) also argues that together with a clear ownership structure, non-profit healthcare institutions also lack the principle of maximization of profit. However, in corporations, profitability and share value constitute the most important criterion to assess decisions. Eeckloo *et al.* (2004) suggest that in hospitals, the objectives are less unequivocal and often contradictory. The

main objective is of course to provide qualitative specialized care. But next to this, hospitals must also pay attention to the accessibility of this care and the financial equilibrium of the hospital's exploitation.

The ownership type of the hospital has implications for the form of governance system adopted by the hospital. In a for-profit context, a well-defined relationship between ownership and control is the predominant aim of any model of corporate governance. This relationship is generally referred to as the 'accountability' of management and board of directors towards shareholders. Governance of non-profit hospitals starts from a totally different situation: since there are no real owners, the emphasis has shifted from the shareholders to the stakeholders. As healthcare is a social good, each group of stakeholders merits recognition of its interests, and not merely because of its contribution to the added value of other groups (Eeckloo *et al.*, 2004).

The governance forms of not-for-profit and for-profit hospitals can be looked at along the philanthropic and corporate models of governance. The philanthropic board model is typically associated especially with non-profit organizations. The corporate model on the other hand is associated with the commercial sector and therefore can be found in for-profit hospitals (Johnson, 1986). Some healthcare experts have argued that the philanthropic model, with its emphasis on asset preservation and constituent representation, has worked well and thus needs only minor modifications to become adaptive to the current environmental conditions facing hospitals (Umbdenstock *et al.*, 1990; Griffith, 1988). Others, however, have broadly questioned the capacity of the traditional, voluntary board model to meet the new strategic challenges posed by a competitive healthcare environment (Barrett and Windham, 1984; Delbecq and Gill, 1988; Shortell, 1989; Weiner and Alexander, 1993a). Alexander *et al.* (1988) explained the main differences between philanthropic and corporate boards with respect to board size, heterogeneity, inside

directors, CEO participation on board, CEO accountability to board, limit to consecutive terms, board compensation, and strategic activity. These differences are presented in Table 2.2 and discussed in the subsequent paragraphs.

Table 2.2: Governing Board Types

Philanthropic Model	Corporate Model
Large board size	Small board size
Wide range of perspectives and Backgrounds	Narrow, more focused range of perspectives and backgrounds
Less corporate representation on board	Greater corporate representation on board
Less physician representation on board	Greater physician representation on board
Numerous participants in new board member selection	Few participants in new board member selection
Constituent/community representation criteria for new board member selection	Skills/expertise criteria for new board member selection
Less management influence in new board member selection	Active management participation on Board
Little management participation on board	Greater management influence in new board member selection
No limit to consecutive terms for	Limit to consecutive terms for board

board Members	Members
No compensation for board service	Compensation provided for board Service
Emphasis on asset preservation	Emphasis on strategic activity
Large number of standing committees	Small number of standing committees
Less active strategic committees	More active strategic committees

Source: Adapted from Alexander et al. (1988), page 317 and Weiner and Alexander (1993a), page 328.

Board size is the number of board members on the board. Philanthropic boards are often depicted by a large number of members and they tend to represent a wide range of interest (Pfeffer, 1972). Historically, the major role of hospital trustees has been to maintain or enhance the legitimacy and prestige of the institution within the community, as well as to attract resources to the hospital from the surrounding environment (Alexander *et al.*, 1988). Corporate boards on the other hand are usually smaller in size and tend to focus as a function of the narrower constituencies to which the organization is responsible (Zald, 1969; Mace, 1971; Ewell, 1987). Gu . (2010) suggest that hospital governance models are changing, shifting from a large, largely philanthropic model to a smaller ‘corporate’ model.

Heterogeneity of the board is considered in terms of age, gender, racial or ethnic background, area of residence, and occupation of the board members. The range of perspectives and backgrounds on philanthropic boards are much broader than corporate boards in the sense that they tend to influence a wide range of constituencies and stakeholders. Corporate boards, however, tend to focus on fewer shareholders (Pfeffer, 1973, 1972; Johnson, 1986). It stands to then reason that philanthropic boards are more likely to have

members with diverse characteristics in terms of age, gender, racial or ethnic background, area of residence, and occupation than corporate boards. The more business-like orientation of corporate boards is particularly likely to be reflected in greater occupational homogeneity (Alexander *et al.*, 1988).

Inside directors are management members who are on the board. Philanthropic boards are normally made up of fewer inside directors because of their emphasis on environmental linkages and community relations (Deegan, 1982; Morlock and Alexander, 1986). Corporate boards often comprise of a large number of inside directors since they have knowledge of the internal working of the organization. Greater insider representation on the board is also seen as a form of reward to a manager, and to achieve greater correspondence between organizational operations and policymaking (Juran, 1966; Mace, 1971).

CEOs tend to play a very significant role on corporate boards than they do on philanthropic boards. This is mainly because CEOs of philanthropic organizations mostly share power with other professional and management groups, thus diluting their influence on the boards (Zuckerman *et al.*, 1979; Alexander and Morlock, 1985). CEOs of corporate organizations have traditionally held more power vis-a-vis the boards and the businesses because of their ultimate authority over all aspects of running the organization (Mizruchi, 1983). Strong executive influence on the board is considered important in improving the linkage between policymaking and operations, lessening conflict between management and board members, and facilitating selection of directors whose views are consistent with the philosophy of the organization (Johnson, 1986; Alexander *et al.*, 1988).

Corporate boards tend to make a clearer distinction between policymaking and operations of the organization than their philanthropic board

counterparts do (Vance, 1968; Mace, 1976). It is more likely to see its role to include formulation of institutional policy and strategic decision-making, with delegation of responsibility and authority to the CEO for daily operations. This distinction of the board's strategic role and the CEO's operational responsibilities improves the board's monitoring of the CEO's activities and hospital performance. Routine, formal CEO evaluations by the board are seen as an important method of monitoring and improving CEO performance, as well as indirectly establishing stronger linkages between operations and policymaking (Ewell, 1972; Alexander and Morlock, 1985; Alexander *et al.*, 1988).

Term of the board is how long board members are allowed to serve on the board. In the corporate board model, there are often limitations placed on the number of consecutive terms board members may serve, to keep the board from becoming too conservative and stale (Pfeffer, 1973; Johnson, 1986; Kovner, 1978). On the other hand, philanthropic boards tend to be self-perpetuating bodies. This means, board members of philanthropic boards may serve on the board indefinitely or in other cases are allowed to select their successors (Ewell, 1982; Alexander *et al.*, 1988).

In terms of board compensation, philanthropic boards have traditionally avoided compensating board members. This is mainly due to the voluntary nature of board service (Johnson, 1986). Corporate boards, on the other hand normally pay board fees to their members for board service. Although corporate board members are only rarely fully compensated for the value of their time, it is considered that even a token gesture in this regard strengthens the bond between the corporate board member and the organization (Rehm and Alexander, 1986; Ewell, 1982; Alexander *et al.*, 1988).

With respect to board strategic activity, philanthropic board members are likely to view themselves as trustees concerned with preserving the assets of the organization and fulfilling fiduciary responsibilities. In the corporate board model, board members often focus on establishing overall policy direction of the organization (Prybil and Starkweather, 1976; Kaufman, 1979; Ritvo, 1980). Alexander *et al.* (1988) argue that, in the current healthcare climate, for instance, corporate boards are more likely to be concerned with the hospital's competitive position.

2.4.2 Importance of Hospital Boards

Hospital boards are an important element of healthcare governance and they play a crucial role in the healthcare delivery system. They are accountable for the overall performance of their healthcare organizations and also contribute in shaping the hospital or health facility they represent, thus impacting the healthcare system at large.

There are different views in the literature regarding the roles of governing boards. One early study found that board members perceived their roles as fundraising, establishing operating procedures, enlisting the support of others, budgeting and fiscal control, and balancing the organization with differing viewpoints (Fenn 1971). Widmer (1993) argues that some boards act mainly as policy makers, focusing on establishing mission and a strategic direction for the hospital. Others assume the role of boundary spanners, focusing on building and maintaining relations with key external constituencies and fundraising; while still others devote much of their time and attention to overseeing the performance of the hospital and its management team. Green and Griesinger (1996) suggest that governing boards had 10 major areas of responsibilities: mission and policy, strategic planning, program evaluation, board selection and tenure, board development, selection and evaluation of executive director, resource mobilization, financial management, community interaction, and the

resolution of disputes. Roberts and Connors (1998) stated that the main responsibilities of governing boards of non-profit healthcare delivery organizations encompass five basic elements: (a) setting the direction; (b) assuring effective management; (c) enhancing the assets; (d) achieving quality goals; and (e) acting as stakeholders on behalf of the communities served. Hevesi and Millstein (2001) found that the most important responsibilities identified by board members were strategic planning, financial oversight, fundraising, operational oversight, and community relations. Alexander *et al.* (2003) noted that the act of governance involves the process of formulating the organization mission and vision, setting and monitoring the goals, and developing strategies.

Jaklevic (2003) reported the results of the a governance survey, which indicated the following top five factors that were rated by participating trustees as very important to effective governance: (a) board endorsement of additional education for trustees (92%); (b) conducting a formal CEO performance review (91%); (c) board composition of mostly outside independent directors (81%); (d) chairman of the board is an outside director (80%); and (e) regular board and trustee performance evaluation (76%). According to Adams (2005), overall, the literature pointed to 13 attributes of effective boards. Effective boards have dedicated trustees, an effective chairman, and an organized and disciplined operation. They use their power as a group, engage in strategic planning, and monitor ethical performance. Effective healthcare boards formulate specific financial policies, make decisions regarding quality of care, and educate their trustees. These successful boards also implement a governance information system, crisis prevention and management procedures, self-assessments, and regular audits (Adams, 2005).

After discussing the various governance models and the importance of hospitals boards, it is necessary to look at how the healthcare governance affects the delivery of healthcare quality.

2.5 Healthcare Governance and Healthcare Quality

Service quality in healthcare has been identified as a major issue in the healthcare systems in both developed and developing countries. The issue of quality in health is currently dominating policy agenda mainly because it is seen as a means of achieving better health outcomes for patients (O'Connor *et al.*, 1994; Dagger and Sweeney, 2006). The problem of healthcare quality is even more acute in developing countries with high population growth rates compared with existing healthcare services. Most people in developing countries have limited access to quality healthcare. Obviously, high population growth rate places additional demands on the health sector in providing the best quality of care for the people. The quality of healthcare has traditionally been measured using objective criteria, such as mortality and morbidity. Although these indicators are essential in assessing clinical quality, softer and more subjective assessments are often overlooked. In reality, the healthcare sector has been slow in moving beyond a supply-side approach to quality assessment. However, as the industry structure changes, the role patients play in defining what quality means has become a critical competitive consideration (Donabedian, 1992; Jun *et al.*, 1998). Patient satisfaction, their perception of quality of care and the efficiency of healthcare institutions are very crucial in taking critical decisions in the healthcare sector (Gilbert *et al.*, 1992).

The need for improvements in healthcare at the hospital level has led to a move for the more active involvement of boards and management teams in the review of quality and safety measures. Interest in the role of governance in improving quality and safety has also grown among governments increasingly preoccupied by the growing amount of public resources

dedicated to the healthcare sector, a phenomenon that has prompted them to require greater accountability on the part of healthcare providers and healthcare organizations. Indeed, these hospital boards are under greater scrutiny than ever before when it comes to quality oversight, and recent trends have pushed hospital boards to engage in quality improvement (Clough and Nash, 2007; Braitwaite and Travaglia, 2008; Jiang *et al.*, 2008; Pomey *et al.*, 2008). The essence of engaging boards in improving care is based on the idea that an active board, in partnership with executive leadership, can provide the will and set system-level expectations and accountability for high performance and elimination of harm in order to dramatically and continuously improve the quality of care (Conway, 2008; Baker *et al.*, 2010). Certainly, hospital boards have the ultimate responsibility of ensuring improvement in the quality of healthcare provided by the hospital (Kroch *et al.*, 2006).

2.5.1 Healthcare Quality

Health service or healthcare quality has traditionally been looked at in terms of measures of structure, process and outcome (Campbell *et al.*, 2000; Parchman *et al.*, 2002). Structure considers the accessibility and relative quality of the many components of healthcare, whilst process considers the appropriateness of care, location and timing. However, assessment has often focused on the perspectives of healthcare providers, such as cost, length of stay and patient mortality. Little attention has been paid to assessing quality from patients' perspective of healthcare. Patient-reported measures of healthcare quality really aim at including the patient's perspective across a range of quality concerns in the assessment process (Groves and Wagner, 2005).

The Institute of Medicine (2001) provides a framework for measuring healthcare quality and they indicate that healthcare should be:

- *safe* – avoiding injuries to patients from the care that is intended to help them;
- *effective* – providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively);
- *patient-centered* – providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions;
- *timely* – reducing waits and sometimes harmful delays for both those who receive and those who give care;
- *efficient* – avoiding waste, including waste of equipment, supplies, ideas, and energy; and
- *equitable* – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socio-economic status.

A number of other conceptual frameworks for evaluating the quality of care have been provided with respect to service quality in healthcare. Patients' perspective of quality may include their desired health outcome (Mitchell and Lang, 2004; Swan and Boruch, 2004), their relationship with healthcare providers, the qualifications and performance of healthcare providers, and access to and choice of healthcare (Campbell *et al.*, 2002; Hibbard, 2003).

According to Grönroos (1982), quality can be looked at in service firms in terms of technical quality ("what" service is provided) and functional quality ("how" the service is provided). The customers perceive what he/she receives as the outcome of the process in which the resources are used (i.e., the technical or outcome quality of the process). But he/she may also, and often more importantly, perceive how the process itself functions (i.e., the functional or process quality dimension). For some services, the "what" (or technical quality) might be difficult to evaluate. For example, in healthcare the

service providers' technical competence, as well as the immediate results from treatments, may be difficult for a patient (a customer) to evaluate. Lacking an ability to assess technical quality, consumers rely on other measures of quality attributes associated with the process (the "how") of healthcare delivery. For healthcare service, consumers would likely rely on attributes such as reliability and empathy to assess quality (Kang and James, 2004).

Grönroos (1982) also stressed the importance of corporate image as a relevant component in the perceived service quality model, so that the dynamic aspect of the service perception process was considered as well. The issue here is that customers bring their earlier experiences and overall perceptions of a service firm to each encounter because customers often have continuous contacts with the same service firm (Grönroos, 2001). He argues that a favourable and well-known image is an asset for any firm because image has an impact on customer perceptions of the communication and operations of the firm in many respects. If a service provider has a positive image in the minds of customers, minor mistakes will be forgiven. However, if mistakes occur more frequently, the image of the service firm will be damaged. If a provider's image is negative, the impact of any mistake will often be magnified in the consumer's mind. In a word, image can be viewed as a filter in terms of a consumer's perception of quality (Kang and James, 2004).

Donabedian (1966; 1980; 1992) also considered two types of quality in the management of healthcare and these are technical and interpersonal processes. This framework defines technical care as the application of medical science and technology to healthcare, while interpersonal care represents the management of the interaction that occurs between the service provider and consumer. Within this conceptualization, a third element, the amenities of care, also contributes to healthcare quality. The amenities of

care describe the intimate features of the environment in which care is provided. Brook and Williams (1975) suggested a conceptualization similar to that proposed by Donabedian (1966, 1980, and 1992) in which technical care reflects how well diagnostic and therapeutic processes are applied and interactive care concerns the interactive behavior between the service provider and patient. Ware *et al.* (1978) and Ware *et al.* (1983) also recognized the interaction between a healthcare provider and a patient, the technical quality of care, and the environment as important dimensions of patient satisfaction. They also supported the inclusion of a fourth dimension reflecting the administrative aspects of service provision (Dagger *et al.*, 2007)

Similarly, McDougall and Levesque (1994) put forward a model of service quality, comprising the three underlying dimensions of outcome, process, and environment and a fourth dimension, enabling, which reflects factors that make the service experience easier for the customer. Rust and Oliver (1994) also proposed a three-component model in which the overall perception of service quality is based on a customer's evaluation of three dimensions of the service encounter: (1) the customer-employee interaction, (i.e., functional or process quality), (2) the service environment, and (3) the outcome (i.e., technical quality). While research supports the contention that the service environment affects service quality perceptions (Bitner, 1992; Spangenberg *et al.*, 1996), it is conceptually difficult to distinguish the notion of service environment from the concept of functional quality that has been suggested in the literature. For example, Brady and Cronin (2001) proposed three factors comprising the service environment. These are ambient conditions, facility design, and social factors. The definition offered by Brady and Cronin (2001) suggests, however, that the service environments are elements of the service delivery process. Kang and James (2004) suggest that, in the interest of parsimony, it seems best to include elements of the service environment as components of the functional dimension. Service quality comprises the dimensions of interpersonal quality, outcome quality, and environmental quality (Brady and Cronin, 2001; Kang and James, 2004).

Clearly, these models suggest that service quality perceptions comprise four important dimensions, namely, functional or interpersonal quality, technical quality, environmental quality, and administrative quality. As well as providing a foundation for the development of health service quality scale, the merging of these dimensions with SERVQUAL has most recently seen the SERVQUAL dimensions positioned as descriptors of these overarching dimensions (Brady and Cronin, 2001; Dagger *et al.*, 2007).

The SERVQUAL scale was developed based on a marketing perspective with the support of the Marketing Science Institute (Parasuraman *et al.*, 1988). Its objective was to provide an instrument for measuring service quality that would be applicable across a broad range of services with minor modifications in the scale. SERVQUAL provides a foundation for a growing body of research that pertains to the creation of quality among service industries. The developers of the SERVQUAL model suggest that, while each service industry is unique in some aspects, there are five dimensions of service quality that can be applied generally to service firms. These dimensions are: (1) tangibles - physical facilities, equipment, and appearance of personnel; (2) reliability - ability to perform the promised service dependably and accurately; (3) responsiveness - willingness to help customers and provide prompt service; (4) assurance - knowledge and courtesy of employees and their ability to inspire trust and confidence; and (5) empathy - caring, the individualized attention the firm provides its customers (Parasuraman *et al.*, 1988; Babakus and Mangold, 1992). The SERVQUAL deals more with functional quality as opposed to technical quality.

Most of the service sectors consider that quality is explained by perception and expectation and that there is a relationship between the perception of the consumers on the quality of the services and their satisfaction (Cronin and Taylor, 1994; McAlexander *et al.*, 1994). It has been suggested that patient

satisfaction is a major quality outcome in itself and the extent to which healthcare users are satisfied with their local providers may be a key factor underpinning their health behaviour and healthcare utilization (Hadorn, 1991; Deroose *et al.*, 2001; Rakin *et al.*, 2002). Service quality perceptions are generally defined as a consumer's impression about an entity's overall excellence or superiority (Bitner and Hubbert, 1994; Boulding *et al.*, 1993; Cronin and Taylor, 1992; Parasuraman *et al.*, 1985, 1988). This impression is often described in terms of the difference between consumers' expectations of service and the performance of actual service. These studies usually use the SERVQUAL scale to measure service quality or consumers' overall satisfaction. According to this scale, quality defines a gap between expectations (E) and perception of performance (P) and if the performance exceeds expectations, the consumer will attain more satisfaction (Kopalle and Lehman, 2001). These expectations are based on one's own and others' experiences.

Previous studies have used the SERVQUAL model in the context of healthcare services. Wisniewski and Wisniewski (2005) and Rohini and Mahadevappa (2006) supported the original 5-factor structure. Headley and Miller (1993) identified 6 dimensions in a primary care clinic, Lytle and Mokwa (1992) found 7 dimensions among patients of a healthcare fertility clinic, and Reidenbach and Sandifer-Smallwood (1990) extracted a 7-factor solution in an emergency room setting. Also, Carman (1990) recognized 9 dimensions in a multi encounter hospital setting, and Licata *et al.* (1995) identified 12 factors in a healthcare setting when using the original SERVQUAL scale (Dagger *et al.*, 2007).

2.5.2 The Role of Hospital Boards in Healthcare Quality

Hospital boards are expected to respond to clinical, operational and regulatory issues associated with quality of care. According to the Institute for Healthcare Improvement (2008), the hospital board's mission is to ensure

that the best possible care is delivered and that patients are not harmed. Reinertsen (2003) also suggests that board members (and members of a quality committee) have a key role in the process of ensuring alignment of those activities with the goals and mission of the organization. There are a number of important policy issues, which are critical to the operation of healthcare organizations and hospital boards are required to pay attention and provide oversight. This oversight obligation is based upon the application of the fiduciary duty healthcare board members owe the organization. The board members are supposed to provide duty of care and duty of obedience to the organization's purpose and mission (Callender *et al.*, 2007).

Callender *et al.* (2007) explain that the duty of care, in most cases, requires directors to act (1) in 'good faith', (2) with the care, an ordinarily prudent person would exercise in like circumstances, and (3) in a manner that they reasonably believe to be in the best interests of the corporation. The 'good faith' analysis normally focuses upon whether the matter or transaction at hand involves any improper financial benefit to an individual and/or whether any intent exists to take advantage of the corporation. The 'prudent person' analysis focuses upon whether directors conducted the appropriate level of due diligence to allow them to render an informed decision. In other words, directors are expected to be aware of what is going on around them in the organization and must in appropriate circumstances make such reasonable inquiry as would an ordinarily prudent person under similar circumstances. The final criterion focuses on whether directors act in a manner that they reasonably believe to be in the best interests of the corporation.

Hospital boards' obligations with respect to quality of care may arise in two distinct contexts: *the Decision-Making Function* and *the Oversight Function*. The *Decision-Making Function* is the application of duty of care principles as to a specific decision or a particular board action, and the *Oversight Function* is the application of duty of care principles with respect to the general activity

of the board in overseeing the operations of the corporation (i.e., acting in good faith to assure that a reasonable information and reporting system exists). Board members' obligations with respect to supervising medical staff credentialing decisions arise within the context of the decision-making (Callender *et al.*, 2007).

In terms of the duty of obedience to corporate purpose, hospital boards are required to further the purposes of the organization as set forth in its articles of incorporation or bylaws. Typical articles of incorporation of a non-profit healthcare provider might describe its principal purpose as the promotion of health through the provision of inpatient and outpatient hospital and healthcare services to residents in the community. Given that the board is responsible for reasonably inquiring whether there are practices in place to address the quality of patient care, it is fair to state that the concept of quality of care is inseparable from, and is essentially subsumed by, the mission of the organization. The various provisions of the law dealing with the relationship to the medical staff also provide a link to the duty of obedience to corporate purpose. These include, for example, traditional provisions that confirm the responsibility of the board for (a) the conduct of the hospital as an institution, (b) ensuring that the medical staff is accountable to the governing board for the quality of care provided to patients, and (c) the maintenance of standards of professional care within the facility and requiring that the medical staff function competently. The 'duty of obedience' concept with respect to assuring compliance with law also might be considered to incorporate a duty to assure compliance with laws and accreditation principles that require the governing board to assume ultimate responsibility for organizational performance, which includes the quality of the provider's medical care (Callender *et al.*, 2007).

Lister (2006) suggests that the board has a key role in establishing policies and guidelines that help to drive the quality transformation process. The

board plays a role in defining priorities for the executive team and medical staff leaders (Spath, 1998) and has to integrate financial, strategic and quality planning (Bader, 2007). The board also has a role in nurturing the organization's commitment to a continuous improvement agenda (Spath, 1998) and has to translate their values into effective oversight (Keroak, 2007). In order to be effective, the board must commit itself to the process and translate that commitment into identifying strategic priorities and monitoring plans that actively engage all staff (Stanton, 2006). The board has to ensure that the clinical and organizational initiatives in place to enhance quality and safety are ongoing processes and involve long-term effort to improve services and healthcare outcomes (Braithwaite, 2008) and move the quality agenda forward (Becker 2006; Pomey *et al.*, 2008). Sandrick (2007) contends that, overall, the board should serve as the driving force behind all quality and safety efforts in the organization.

The board can communicate its commitment to quality improvement through membership on various staff committees. The board must also ensure that medical staff is involved in quality improvement (Weiner and Alexander, 1993b; Weiner *et al.*, 1997; Pomey *et al.*, 2008). The board needs to invest in processes that promote the legitimacy of a safety and quality culture and it tends to depend on close connections with key stakeholders within the organization: managers, physician leaders in quality improvement processes, and other professionals (Lister, 2006; Weiner *et al.*, 1997). Leape (2005) recommends four important areas boards should consider in ensuring quality and these are: implementation of health system information; wide diffusion of proven and safe practices; spread of training on teamwork and safety and quality; and full disclosure to patients following injury.

Baker *et al.* (2010) argue that the capacity of board and board quality committees to function effectively and to move appropriately between fiduciary, strategic and generative modes relies on trust as well as skills. Boards, senior leadership and medical staff need to develop an understanding

of each other's role and create strong collaborative relationships for achieving the organization's goals. One important approach for improving the role of healthcare boards' in quality is creating new structures and processes. They conclude in their paper that in adopting a greater focus on quality and patient safety, board members need to develop knowledge and judgment concerning the factors influencing quality and safety of care, without losing sight of their responsibilities to focus on the strategic organizational issues. A more co-operative approach on governance does not exclude the importance of a clear accountability framework and relationships between senior leadership and boards. But it underlines the need to go beyond monitoring and control to focus also on how boards can help organizations to develop the internal capacity for continuous improvement.

The next section provides a review of the empirical literature on how hospital boards and ownership structure are related to performance.

2.6 Healthcare Governance, Ownership and Performance

The extant literature suggests that hospital board characteristics and ownership structure affect the performance of hospitals. It is expected that structuring effective board governance tend to influence performance. The effectiveness of the board may depend on how the board is structured in terms of its characteristics. Therefore, each of these board characteristics as well as the ownership structure may have varying effects on performance. Previous studies (see Young *et al.*, 1992; Molinari *et al.*, 1995; Alexander *et al.*, 1995; Eeckloo *et al.*, 2004; Prybil, 2006; Gu *et al.*, 2010; Büchner, 2012) have shown that the performance of the hospital is affected by its hospital board characteristics and these include board size, board composition, board participation by medical staff, board leadership structure or CEO duality, board diversity, and frequency of board meetings. Others (see Barros, 2003; Weng *et al.*, 2011) have also established that ownership structure has an effect on hospital performance. Some control variables, hospital size, hospital

age and location of the hospital are also discussed as important determinants of hospital performance.

2.6.1 Board Size

Board size is said to be associated with a wide range of expertise on the board and the breath of participation in decision-making (Zahra and Pearce, 1989). It is a common notion that larger boards by reason of the increased range of expertise they have in terms of stakeholder representation can enhance corporate reputation and image, and are better for organizational performance because decision-making is much easier. Additionally, larger boards are associated with higher managerial monitoring, which makes it difficult for a powerful CEO to dominate, thereby improving efficiency and performance for shareholders by ensuring conformance to corporate regulations and norms (see Ntim and Soobaroyen, 2013). This assertion is firmly supported by the stakeholder and institutional theories, which seem to suggest a positive association between larger boards and effective decision-making (Forbes and Milliken, 1999; Aguilera and Cuervo-Cazurra, 2004; Aguilera *et al.*, 2007; Zattoni and Cuomo, 2008). In the view of Haleblan and Finkelstein (1993), the major advantage of large boards is the greater collective information that the board possesses about factors affecting the value of firms. Haleblan and Finkelstein further explain that a board with many directors has a large amount of information that enriches the performance of the outsiders' monitoring and advisory function. Young *et al.* (1992) also suggest that to the extent that the structure of the governing board is not appropriate for the information-processing requirements of the organization's strategy, financial performance will be affected negatively. They gave the example that a hospital with a large and diverse board is expected to perform better than a hospital with a relatively small and occupationally homogeneous board. de Andrés-Alonso *et al.* (2009) note that the greater the volume of resources that an organization manages (income), the larger the size of the board and that monitoring a large entity requires a

greater number of trustees and a breadth of knowledge that compensates for the costs of coordination and free-rider problems that a large board incurs.

There is, however, a contrary position that smaller boards are more efficient than larger boards. According to Kovner (1990), few board members may lead to more commitment of each board member and more timely decision-making process. Lipton and Lorsch (1992) argue that large boards tend to reduce effectiveness, thereby making it easier for the CEO to control. They further explain that when a board has more than ten members, it becomes more difficult for all of them to express their ideas and opinions. Jensen (1993) also suggests that keeping boards small can help improve their performance and that when boards get beyond seven or eight people, they are less likely to function effectively. He argues that the major problem with large boards is the associated coordination costs and free-rider problems. The assertion is supported by the agency theory, which suggests that when a board size increases, control and monitoring capabilities are impeded. It then becomes difficult to co-ordinate activities within a firm and this often creates problems. Accountability by directors is thereby increased with smaller boards (see Baysinger and Butler, 1985; Kosnik, 1990). According to Bader (1991), boards are able to function better when they are a workable size, usually numbering up to 15 members. Any number above or below this number renders the board ineffective.

In the case of board size, the healthcare literature suggests seven as the ideal size for a corporate-model board (Delbecq and Gill, 1988; Shortell, 1988). Delbecq and Gill (1988) examined governance structures of thirteen (13) medical centres in the US as reported by healthcare leaders. The findings of their study indicated that healthcare leaders believe that large boards are not ideal for the purpose of developing timely and strategic policies. In the opinion of the healthcare leaders, larger hospital boards are too cumbersome to allow for rapid deliberation and ability to arrive at a final decision in a

timely fashion. Also, larger boards are engaged in tangential dialogue not focused on strategy critical to the future of the organization. Bader (1991) also suggests that in health systems with several boards, the system works best with lean governing boards having the average of seven to ten members. According to Bader (1991), the smaller the individual boards are within a system, the higher the probability that they will remain focused on the system and their role in it rather than organization-specific issues. Kaufman *et al.* (1979) examined whether the size and occupational configuration of hospital governing boards were related to the institutions' efficiency and quality of care and found that larger boards were associated with higher costs. Smaller number of governing boards within a health system would ensure that boards focus more on their role within the system rather than specific roles with a particular organization. In another study, Gu *et al.* (2010) found that higher performing hospitals tended to have smaller boards. Using a regression model, Büchner (2012) surveyed 1,400 German hospitals and examined how board characteristics affect their financial performance. She found that board size has a negative impact on performance and suggests that board size should not exceed a critical threshold, because a large board might delay decisions.

Stakeholder and resource dependency theories tend to explain board size. Stakeholder theory suggests that the interests of all these stakeholders are treated as if they have intrinsic value to the organization and that no one set of interests will dominate over another (Murphy and O'Donohoe, 2006; Jamali, 2008). The organization's stakeholders may include workers, suppliers, clients, owners, and society who tend to have an interest in the operation of the organization (see Simmons 2004). Stakeholder theory suggests that a good representation of all the stakeholder groups on boards is necessary for effective governance of the organization (Christopher, 2010). Hospitals are likely to have a board with representations from several stakeholder groups (Eeckloo, *et al.*, 2004). Resource dependency theory also explains relevance of board members in terms of the expertise they bring to

bear in ensuring effective governance of the organization and access to resources. The theory suggests the need for a well-diversified board, since each board member is expected to bring their expertise and experience that could benefit management in the form of quality advice. Hospitals tend to have board members from diverse background and expertise (see Pfeffer, 1972; Pfeffer and Salancik, 1978).

2.6.2 Board Composition

Board composition is considered as the proportion of outside directors on the board and is related to the level of independence of the board. Having greater proportion of outside directors on a board could be considered to be a management innovation as one of other mechanisms to mitigate agency costs between management and shareholders (see Chizema and Kim, 2010). One aspect of good governance discussed in expert forums was the selection criteria used when appointing new board members. Greater importance was given to the composition of the board and increased expertise in hospital business (Culica and Prezio, 2009). Boards, in the past tended to represent shareholders (in the case of for-profit organizations) or the community (in the case of not-for-profit organizations). In recent time, however, there has been a change in focus from shareholders to stakeholders. This change is significant in that it depicts an extension of the board's role to include greater involvement with the organization's 'insiders' (Starkweather, 1988). In the case of hospitals, these insiders include the CEO and other medical personnel. Therefore, hospital boards will typically be made up of inside directors, such as the hospital CEO, and outside directors who bring in a variety of expertise to serve on the board.

Inside directors are said to be more familiar with the organizations' activities and can act as monitors to top management, especially if there is a course to perceive that an opportunity could advance into positions held by executives who do not have the requisite competence. Jermias (2007) found that board

independence has a negative effect on the relationship between innovative efforts and performance. His results are consistent with the managerialism theory, which proposes that inside directors are in a better position than outside directors to motivate managers to undertake profitable projects because they have superior access to firms' specific information. Delbecq and Gill (1988) and Molinari *et al.* (1993) maintain that a high proportion of directors with business-related occupations provided boards with up-to-date operational information and financial and strategic expertise.

However, Fama (1980) argues that outside directors may play the role of professional referees to ensure that competition among insiders triggers actions consistent with shareholder value maximization. From a theoretical stance, the appointment of outside directors is a way of improving legitimacy by serving as a sign of congruence between corporate practices and societal expectations. Thus, the presence of independent directors can help by improving efficiency, and thereby reduce agency problems between executives and owners, as well as advance the interests of other stakeholders (Ntim and Soobaroyen, 2013). Supporting this position, Fama and Jensen (1983) explain that external board members have a particular incentive to monitor the behaviour of management on behalf of shareholder because of their reputation, and also because the value of their human capital is seen to be dependent on their acumen as decision control specialists. Jensen (1993) adds that a high proportion of outside directors provide a better forum for decision-making and that board monitoring quality will be stronger with more external or non-executive directors, but will decrease with the presence of many executive directors on the board. Generally, the board is considered to be more independent when there is greater percentage of outside directors. Having more external or non-executive directors increases the independence of the board (Yermack, 1996; John and Senbet, 1998).

Some studies point to the important role of outside directors in monitoring and advising and these have the tendency of enhancing performance (Byrd and Hickman, 1992; Brickley *et al.*, 1994). Dalton *et al.* (1999) suggest that the independence of directors is an essential requirement for board effectiveness. Gautam and Goodstein (1996) are also of the view that insiders cannot adequately monitor top management's performance, and therefore there is the need to include outside directors to monitor the performance of the CEO and other managers (Baysinger and Hoskisson, 1990). According to Ibrahim *et al.* (2007), inside directors work for the CEO – who is likely to chair the board – on a daily basis and would be more prone to conform to the CEO's wishes. They depend directly on the CEO for their career advancements, and will thus be reluctant to oppose and challenge strategic proposals of the CEO. In support of this position, Conger *et al.* (2001) found that limiting the proportion of inside directors on the board is an important board power factor that leads to more effective governance. They reported that directors on boards with 10% or less inside directors rated their performance as more effective on both their success in developing external relationships for their organizations and on their internal strategic roles than did directors on boards with a higher percentage of insiders. However, others like Forsberg (1989) and Bhagat and Black (2002) found no relationship between the proportion of outside directors and various performance measures.

Having external board members is supported by the stakeholder and resource dependency theories. According to the stakeholder theory, the composition of the board should consider representatives of all interested parties in order to ensure consensus among stakeholders (Christopher, 2010). The resource dependence theory prescribes for greater involvement of external directors who can provide quality advice and con access to resource to facilitate the smooth running of the organization and therefore enhance overall performance (Pfeffer 1972; Pfeffer and Salancik, 1978; Middleton, 1987).

2.6.3 Board Participation by Medical Staff

The inside board members in a hospital will typically include the CEO, as well as medical staff members. The CEO is placed on the board to provide administrative information concerning the hospital, while the medical staff members keep the board informed about the hospital's service and delivery issues (Medical Leadership Forum, 1992). Managerialism and resource dependency theory both provide likely explanations of why hospitals benefit from involving inside or outside physicians in their governance. In addition to their operational knowledge of the hospital, medical staff can refer their private practice patients to the hospital, thereby serving as patient referral links. Alternatively, outside physician board members help to keep hospital boards informed concerning patient care issues and practices. Together, both theories provide reasonable explanations underlying the enhanced hospital performance of boards with inside or outside physician participation (Molinari *et al.*, 1995). Alexander *et al.* (1995), suggest that physician participation in governance is not only desirable, but essential and that physician participation in governance may serve to reduce potential conflict between the goals of the system and those of the medical groups and may align the interests of the organization and affiliated physicians. According to Young *et al.* (1992), having medical staff being represented on the board enables members gain necessary information about the internal efficiency of the hospital. Gardner (1992) argues that medical personnel, such as nurses have a special role to play on hospital governing boards by keeping the board focused on the well-being of patients. She explains that quality assurance is one area of significance where those with a healthcare background can make a big difference to the board. Gautam and Goodstein (1996) support this position by arguing that medical personnel who serve on hospital boards place their greatest emphasis on patient care and technological breakthroughs.

In their study of 131 hospitals, Shortell and LoGerfo (1981) found that medical staff board participation improves hospital quality outcomes, such as

surgical mortality rates. This view is supported by Ibrahim *et al.* (2007) who argue that directors whose occupational background is in healthcare are less interested in the organization's strategic direction but are more concerned with the immediate need to deliver quality services. Goes and Zhan (1995) also found physician board involvement to be the most effective method for improving hospital performance. Molinari *et al.* (1993) examined the participation by the CEO and medical staff among acute care in California hospitals. They found that medical staff board participation has a significantly greater influence on hospital performance than CEO board participation. Additionally among hospital boards with medical staff participation, boards that granted voting privileges to medical staff were considered to be more effective than those boards with non-voting medical participation. Both findings are consistent with the managerialist perspective because the medical staff members' knowledge regarding the clinical aspects of the hospital, as well as their ability to influence the board's decision-making through their voting privileges, is likely to lead to clinically and fiscally sound board decisions. Consequently, boards with participation by the medical staff are expected to be more effective than those without medical staff participation and, among boards with medical staff participation, those with voting medical staff participation will be more effective than those with nonvoting medical staff participation. Molinari *et al.* (1993) again suggest that given physician interests in state-of-the-art diagnostic and therapeutic technologies, it is plausible that medical staff board participation may result in imprudent capital investments that impair the fiscal viability of the hospital. In another study, Molinari *et al.* (1995) found significantly positive impact of physician (inside or outside) board participation on hospital operating margin. Their findings suggest that, physician involvement in hospital governance significantly benefits the hospital. Prybil (2006) also found that high performing hospitals had a greater proportion of medical staff voting members. This study showed that medical staff representation on the board was the most strongly identified characteristic associated with overall board performance. This position is supported by a recent study by Gu

et al. (2010) who found that higher performing hospitals tended to exhibit greater percentage of physician directors.

Kovner (1990), however, argue that the information provided may be biased to varying degrees and that a physician's vision for the hospital may be viewed through his or her own professional perspective, rather than from a broader overall perspective of service provision. In their study, Ibrahim *et al.* (2000) found that compared to those with a healthcare background, directors who did not have such a background were more concerned with economic and legal issues.

Managerialism theory suggest the need for hospital boards include the CEO and inside medical staff members who are expected to provide administrative information concerning the hospital and also keep the board well informed about issues regarding the hospital's service delivery (Molinari *et al.*, 1995). Medical staff members' knowledge regarding the clinical aspects of the hospital, as well as their ability to influence the board's decision-making, is likely to lead to clinically and fiscally sound board decisions (Molinari *et al.*, 1995). Therefore, hospitals with medical staff participation on the board are expected to be more effective than those without medical staff participation. Resource dependency theory also explains the importance of having medical staff on the hospital board. The medical staff members on the hospital board provide useful up-to-date information to the board to take informed decisions regarding the hospital's service and delivery issues (Medical Leadership Forum, 1992). This theory suggests the need of having skilled board members to ensure effective governance and drive the organization in the right direction (Christopher, 2010).

2.6.4 Board Leadership Structure

The board leadership structure is an important determinant of organizational performance. The board leadership structure may either have a board system where the CEO also acts as the board chair or a system where the CEO is different from the chairman of the board. The position of the CEO on a board may vary from being a full member of the board or just being in attendance when required. As a full member of the board, the CEO may either be the chairman of the board or simply stay as an ordinary member. The CEO has been considered integral to the functioning of the board, in that they bring valuable information to the decision-making process (Weiner 1993). McDonagh *et al.* (2006) suggest that the integral role of the CEO is an important factor related to board performance. They explain that the CEO plays a unique role, as this person represents both management and governance, which makes the issue of leading the board even more critical.

Molinari *et al.* (1997) found that the CEO participation on boards was associated with enhanced hospital financial performance. Shivdasani and Yermack (1999) also suggest that, the presence of the CEO on key committees is likely to increase board monitoring. Orlikoff (2005) argues that considering the challenges healthcare boards face today, the CEO faces greater pressure in engendering a good relationship with the board. In addition, Orlikoff describes the board as a multifaceted paradox in which the CEO plays a dual role: both leading and reporting to the board. Although the board is a single entity, it is composed of many unique individuals; some boards interact as partners and leaders, while others as followers. This variation and complexity require skilled leadership and diplomacy to bring about the board's effectiveness.

There is however an issue that arises as a result of the positions of the CEO and the board chair. The issue is whether the CEO should also serve as the board chair or the positions of CEO and chairperson should be occupied by two persons. CEOs may be considered with some suspicion, as their position

on the board could be viewed as self-serving and thereby defeating the stance of the stakeholders theory. Boards would, therefore, be mindful of the possibility of bias embedded in information received from the CEO (Weiner 1993). Also, arising from this ambiguity are issues of power and authority between the board and the CEO (Heuerman 1989; Goodwin 1992). Such a situation may necessitate the need to decouple the positions of the CEO and the chairman of the board. Fama and Jensen (1983) argue that concentration of decision management and decision control in one individual reduces board's effectiveness in monitoring top management. Brickley *et al.* (1997) support this position by suggesting that a board structure where the CEO also acts as chairperson leads to leadership facing conflict of interest, thus, giving preference for the system where the CEO's role is separated from that of the board chairperson. Separating the functions of the CEO and board chair may be viewed as enhancing the board's monitoring and control ability, and improving director's information processing capacities (Sanders and Carpenter, 1998). Culica and Prezio (2009) found greater involvement of board chairs in hospital overall performance in contrast to the other board members. Rechner and Dalton (1991), however, found that firms with CEO duality have stronger financial performance relative to other firms. This position is what the stewardship theory postulates.

2.6.5 Board Diversity

In more general terms, board diversity refers to the various features that may be present among the board of directors that can affect decision-making (Carter *et al.*, 2003; Van der Walt and Ingley, 2003). These board characteristics with respect to board diversity include those that are more visible, such as gender, ethnicity, and age and those that are less visible, including religion, occupation and education (Mahadeo *et al.*, 2012). Board diversity provides access to unique resources otherwise difficult if not impossible to reach (Goodstein *et al.*, 1994), as supported by the resource dependency theory. In the view of Carter *et al.* (2003), board diversity is essential in governance for two basic reasons. First, it promotes a better

understanding of the market place, increases creativity and innovation, and makes problem solving effective. Secondly, it promotes more effective global relationships and increases board independence because people with different gender, ethnicity or cultural background might ask questions that would not come from directors with more traditional backgrounds (see Arfken *et al.*, 2004).

The literature tends to emphasize more on board diversity on the basis of gender (see Burke 1994; Burke, 1997; Siciliano, 1996; Bilimoria, 2000; Carter *et al.* 2003). Boards of diverse gender background can improve the independence of the board and enhance managerial monitoring. The independence of the board and their effective monitoring are mostly associated with improved performance. Board diversity through the inclusion of females has been identified as an important determinant of performance. The management literature suggests that firms would benefit by engaging women on their boards of directors (Burke 1994; Burke, 1997). Pearce and Zahra (1991) observed in their study of the impact of boards on firm performance that a representation of diverse interests, as posited by the stakeholder theory, including the number of female and minority members, was an important characteristic of an effective board. Bilimoria (2000) presents a case that having women on boards is desirable business practice because it is likely to improve the reputation of the firm, strengthen the strategic direction (by better understanding women's issues that may impact on such direction) and contribute positively to the firm's female employees. Siciliano (1996) reports that boards with increased gender diversity are more likely to enjoy high levels of social agency mission achievement. Burke (1997) reports a significantly positive relationship between the number of females on boards and revenue and profit margins. In a study by Singh *et al.* (2001), they found that boards with female directors could be associated with higher revenue and profitability. Carter *et al.* (2003) also found a positive relationship between board diversity (in terms of women and minorities) and firm value.

There is increasing recognition of the importance of women on hospital boards (see Adams, 2005; Galindo, 2006; Elstad and Ladegard, 2010). Hospital boards generally seek to recruit the most talented, dedicated, and accomplished people, and increasingly those people are women and people of colour with different perspectives, experiences, social network relationships, and problem-solving approaches. Elstad and Ladegard (2010) suggest that the higher the ratio of women, the greater the level of perceived influence, perceived social interaction outside the boardroom, and to some degree, perceived information sharing. Kazemek *et al.* (2000) noted that the proportion of female board and committee members serving healthcare organizations is inadequately small, even though national studies have revealed that women make a majority of decisions about healthcare in their families. A 1999 survey conducted by the Governance Institute in California showed that only 23% of healthcare board members were female (Adams, 2005). According to Galindo (2006), many recognize that increasing the diversity of hospital governance (and for that matter, hospital management) is not simply a moral or social issue, but also a question of effectiveness and competitiveness. Thus, hospitals, like many other organizations, strive to increase the diversity of their boards.

Board diversity is also explained by the stakeholder and resource dependency theories. Diversity with respect to gender may suggest the hospital's way of reflecting its patients and the community it serves as explained by the stakeholder theory. Hospital boards recruit the most talented, dedicated, and accomplished people, and often those people tend to be women with different perspectives, experiences, social network relationships, and problem-solving approaches (Galindo, 2006; Elstad and Ladegard, 2010). According to Goodstein *et al.* (1994), board diversity also provides access to unique resources, otherwise difficult, if not impossible to reach, as supported by the resource dependency theory. The literature suggests that women tend

to bring certain experiences and perspectives to bear in boardroom discussions and this ensures effective governance.

2.6.6 Frequency of Board Meetings

Board meetings are important in engaging the board to regularly review processes and procedures to ensure the effectiveness of its internal control system. These meetings also help the board to ensure that it receives relevant non-financial information to enable it assess the performance of the firm. The time a board spends together is its most precious commodity. A board is only truly a board, empowered to make decisions and take action when it is meeting. Therefore, ensuring that the board has the right type of information to govern, that its meeting time is spent wisely and productively, and that all communication with board members is designed to maximize the value of each meeting, are critical to governance effectiveness. In examining what distinguishes good boards from great boards, it was concluded that exceptional boards make meetings matter (Board Source, 2005). Eeckloo *et al.* (2004) suggest that the rate of meetings can be an indicator for the authority of the board. A board meeting only a few times a year is likely to act more as a general assembly than as a real governing body. An extremely high rate of board meetings, on the other hand, may lead to an amalgamation of the tasks of the board and the executive management.

Empirical evidence also shows that meeting frequency is an important dimension of an effective board (see Witt, 1987; Vafeas, 1999; Eeckloo *et al.*, 2004). For instance, Vafeas (1999) found that the annual number of board meeting increases following share price declines and operating performance of firms improves following years of increased board meetings. This suggests that meeting frequently is an important dimension of an effective board. Lipton and Lorsch (1992) found that the most widely shared problem directors face is lack of time to carry out their duties, and that board meeting time is an important resource in improving the effectiveness of a board. It is,

however, suggested that board meetings are not necessarily useful because the limited time the outside directors spend together is not used for the meaningful exchange of ideas among themselves or with management, a problem that is a by-product of the fact that CEOs almost always set the agenda for board meetings (Fan, 2004). Witt (1987) notes that outstanding people who cannot always make monthly meetings may be available on quarterly basis and that time available for board meetings need not be reduced. Witt (1987) argues that policy issues are discussed in greater in depth at longer meetings. In their study, Culica and Prezio (2009) found that boards that met less than six times a year had higher marginal profit on average over three years than hospitals whose boards met more than 12 times every year. Meeting between 7-12 times was associated with lower financial performance than having six or less meetings, but still significantly higher than the hospitals whose boards met more than once per month. That means, holding a board meeting almost every month or more often was not a good method to increase financial outcomes. A potential explanation for their finding may be that having meetings spaced out allowed for more time to get information in advance and preparation for meetings is necessary for improved performance (Culica and Prezio, 2009).

Board meeting time is regarded as an important resource in improving the effectiveness of a board (Lipton and Lorsch, 1992). Frequency of board meetings can be explained by the resource dependency theory in the sense that by having relevant information on regular basis, board members are better informed to contribute positively to the operations of the hospital and also assist in providing relevant resources to the hospital. Thus, with time being a very important resource to be used in addressing the numerous challenges facing hospitals, the resource dependency theory supports having frequent board meetings.

2.6.7 Hospital Ownership Structure

Health economists have drawn upon the general ownership literature in explaining the ownership structure and health services. The property-rights theory suggests that since private providers, especially for-profits, have well defined control rights, they have strong incentive to invest in innovations, but may over-emphasize cost control at the expense of non-contractible quality (Hart, 1995). For-profit organizations are presumably the most market-oriented providers and would have higher incentives to introduce new services and technologies that attract more consumers (Banaszak-Holl *et al.*, 1996). On the other hand, government-owned providers lack clear control rights to implement changes, and this constraint softens incentives for innovations. The property rights model predicts that private owners achieve lower costs, but quality may be higher or lower.

Private (for-profit) providers will generally achieve lower costs for a given service than their government counterparts (Shen *et al.*, 2005). Given the prevalence of not-for-profits in the health sector, much theoretical work by health economists focuses on not-for-profit providers and how they differ from for-profit firms (Shen *et al.*, 2005). The extant theories indicate that not-for-profit firms have an objective function different from that of profit maximization. Examples include maximizing quality, quantity and/or prestige (Newhouse 1970) instead of, or in addition to, maximizing net revenue (Lakdawalla and Philipson, 1998). Similarly, not-for-profit providers also focus on helping to fulfill demand for local public goods (Weisbrod, 1988) or meet unachieved needs in the community (Frank and Salkever, 1991); or maximizing the well-being of specific important constituencies, such as the medical staff (Pauly and Redisch, 1973) or consumers (Ben-Ner and Gui, 1993).

The major ownership categories include for-profit, non-profit, and public ownership. For-profit ownership involves individuals (shareholders) who invest capital in return for claims on future profits. Thus, for-profit hospitals

have a responsibility to shareholders to generate short-term and long-term profits. In contrast, non-profit hospitals, while needing short-term surpluses to finance their operations (Chang and Tushman, 1990), have a primary responsibility to their communities to provide necessary, quality services rather than to generate long-term profits. Consequently, whereas for-profit and non-profit hospitals both attempt to generate short-term profit margins, for-profit hospitals' financial responsibility to shareholders is likely to result in higher long-term profitability than hospitals in the non-profit sector. Private hospitals have greater strategic flexibility, higher environmental sensitivity and higher demand for promoting market status (Goes and Park, 1997). Private hospitals do not have financial support from the government; hence, they have higher residual claimants to provide incentives for profit and further development (Kimberly and Evanisko 1981; Young *et al.*, 2001). Public hospitals on the other hand have the financial support of the government and have to take numerous policy-related responsibilities into consideration. Therefore, they tend to adopt a conservative and stable policy (Milgrom and Roberts 1992). Price (1992) suggests that a high level of bureaucracy and lack of rapid reaction to market conditions lower public hospitals' innovation in healthcare.

Private or for-profit hospitals are wholly responsible for organizational performance in a competitive environment, hence, they adopt or extend new medical technology proactively (Rajshkha *et al.*, 1991). While for-profit organizations would be expected to show higher operating margins because of the financial interests of their stakeholders than non-profit hospitals, in a Californian study, it was found that for-profit hospitals had higher margins only for 1985. The steep recession for California hospitals during the latter 1980s are negatively impacting margins for all ownership hospital types (Molinari *et al.*, 1995). Other previous studies found that private hospitals performed better than the public hospitals (Barros, 2003; Weng *et al.*, 2011). Hence, existing studies have indicated that boards function differently

depending on whose interest they are protecting in terms of ownership. This can be explained by the stakeholder theory.

2.6.8 Hospital Size

The hospital size is looked at in terms of the number of beds in the hospitals. Hospital size is an important determinant of hospital performance. Large hospitals are said to have several advantages over smaller ones, including the availability of more resources, greater ability to raise capital and most important, a larger physician base for recruiting participants as well as usually a broader range of specialty services (Saleh, *et al.*, 2002). However, the empirical literature is inconclusive in terms of the relationship between hospital size and performance. A number of previous studies have found that small hospitals are unstable and more likely to close (Lynch and Ozcan, 1994; Longo *et al.*, 1996; Snow, 1996), while other studies have shown that at-risk small hospitals have already closed and future downsizing will occur in larger hospitals in an effort to squeeze excess capacity out of the system (Cleverly, 1991; Rogers, 1996). Though Goldstein *et al.* (2002) did not find that larger hospitals always perform better, they argue that mergers, partnerships, and other forms of consolidation currently observed in the market place indicate that managers in the hospital industry understand the advantage of size (Japsen, 1996).

Alexander and Lee (2006) found in their study that hospital size was positively related to efficiency, occupancy, and cash flow but was negatively associated with adjusted admissions. Larger hospitals may record higher total expense ratio and therefore cannot be said to be efficient. They are also likely to record higher occupancy and lower discharge. Therefore, the provision of quality care may be a challenge in larger hospitals considering the large number of patients that have to deal with. Smaller hospitals on the other hand are more likely to show better levels of efficiency and high discharge.

This may be based on the provision of better health service quality, given the smaller numbers of patients associated with smaller hospitals.

2.6.9 Hospital Age

Age is also relevant in influencing performance. The extant literature suggests that over time, organizations are able to build innovative capacity based on their knowledge base and experience. They discover what they are good at and learn to be more efficient. Organizations specialize and find better ways to standardize, coordinate, speed up their operations, reduce costs and subsequently improve quality and performance (Jovanovic, 1982; Ericson and Pakes, 1995). According Cohen and Levinthal (1990), older firms tend to have a richer functional and productive knowledge base which can enhance the organization's ability to exploit innovation and improve the diverse developments of technological innovation. Sorensen and Stuart (2000) also suggest that older organizations will have perfected the routines, structures, incentive programs, and other infrastructure that are needed to develop or adopt new technologies and bring them to market.

The age of the hospital can therefore affect the performance of the hospital. Older hospitals have been argued to record better hospital performance. The reasoning here is that older hospital may have accumulated years of experience and therefore are able to translate such experience into better performance. The learning curve resulting from long years of operations by older hospitals leads to enhanced efficiency, delivery of better health service quality and eventually higher discharge. Younger hospitals on the other hand may not have accumulated such experience and therefore are likely to record lower performance in terms of efficiency, discharge and health service quality. Kimberly and Evanisko (1981) found that age of the hospital was significantly associated with the level of hospital technological innovation and this has the tendency of increasing performance.

2.6.10 Location of Hospital

The issue of location is an important factor for service providers such as hospitals (Goldstein *et al.*, 2002). Hospitals located in urban centres may have access to better infrastructure compared to those situated in rural areas. Henry (1994) and Hudson (1995) explain that hospitals in rural locations have struggled in recent years and their survival may depend on developing. Robinson and Luft (1985) also suggest that that hospital location is important because the largest segment of a hospital's market share comes from an area of proximity to the hospital. Young *et al.* (1992) also argue that hospitals located in affluent communities will typically treat a high volume of well-insured patients and this will positively affect performance.

The extant literature suggests that hospitals located in the urban areas tend to perform better than those located in rural communities. Rural hospitals are said to be at a disadvantage to urban hospitals (Henry, 1994; Hudson, 1995). It can be hypothesized that hospitals located in the urban area perform better than hospitals located in the rural community. Hospitals in urban centres are often better resources with infrastructure than those in the rural areas. Better infrastructure available to urban-based hospitals enables them to deliver better health service quality and show higher performance. Also, urban communities may have quite a number of hospitals and therefore, such competition may enhance competition and performance. Rural hospitals on the other hand experience less or no competition in their immediate region, therefore, they are likely to exhibit less performance compared to urban-based hospitals. Goldstein *et al.* (2002) suggest that hospital location is significantly related to performance, but that a hospital's choice of strategy can moderate the effect of location. Alexander and Lee (2006) however found that hospitals in rural areas, compared with those in urban areas, had a greater share of the local market.

2.7 Chapter Summary

This chapter has provided a discussion of the literature on healthcare governance, ownership structure and the performance of hospitals. The chapter looked at the concepts of healthcare governance and clinical governance. Healthcare governance was defined to include the process of steering the overall functioning and effective performance of a hospital by defining the hospital's mission, setting its objectives, supporting and monitoring their realization at the operational level (Flynn, 2002).

The principles of good hospital governance were discussed and these were identified to include knowing what governance is, achievement of strategic ends, board-CEO relationship, unity of direction, unity of command, unity of accountability/responsibility, ownership needs, self-Improvement, and understanding the cost of governance. It is expected that when hospitals adhere to these principles of good governance they are likely to experience better performance. The chapter also reviewed literature on hospital ownership and governance models. The major ownership types include for-profit, not-for-profit, and public ownership. The not-for-profit hospitals are normally owned by religious groups and non-governmental organizations. Both not-for-profit and public hospitals have not-for-profit making motives. For-profit ownership entails shareholders who expect a return on their investment. The ownership type of the hospital obviously has implications for the form of governance system adopted by the hospital. The extant literature suggests that hospital governing boards and the professional team of executive managers constitute the axis of hospital governance.

The literature chapter also discussed the importance of hospital boards and the role they play in healthcare quality. The essence of hospital governance is to ensure a more integrated approach of supporting and supervising all hospital activities, including clinical performance. Governing boards are recognized as being an important target for intervention for policymakers hoping to improve care in hospitals. High-performing and low-performing

hospitals are said to be differentiated by the level of board activities. The chapter then considered the literature on the effects of board characteristics, including board size, board composition, board participation by medical staff, board leadership structure and duality, board diversity, and frequency of board meeting on hospital performance. It also discussed other control variables such as hospital size, hospital age and location of the hospital as important determinants of hospital performance. The literature also discussed the effect of ownership structure on hospital performance.

It is important to understand how corporate and healthcare governance structures vary across countries (Jenkinson and Mayer, 1992; Roe, 1993). The next chapter provides an overview of the healthcare system in Ghana, as this is relevant in appreciating hospital governance structures generally, but the Ghanaian hospital context in particular.

Chapter 3

Overview of the Healthcare System in Ghana

3.1 Introduction

Improving the health status of the population of any nation has been identified as an important ingredient in influencing its socio-economic development. Policies directed at healthcare provision seek among other things to offer access to sustainable quality health and in developing countries, improving the delivery of health services is critical to the achievement of the Millennium Development Goals (MDGs). In Ghana, the

mission of the Ministry of Health (MoH) as captured in its policy document is to contribute to socio-economic development and wealth creation by promoting health and vitality, ensuring access to quality health, population and nutrition services for all people living in Ghana and promoting the development of a local health industry. This mission puts the concept of health beyond the confines of curative care to other socio-economic determinants of health. The ultimate goal of the health sector is to ensure a healthy and productive population that reproduces itself safely. Three key objectives have been set out to achieve this goal of the health sector and these are: to ensure that people live long, healthy and productive lives and reproduce without an increased risk of injury or death; to reduce the excessive risk and burden of morbidity, mortality and disability, especially in the poor and marginalized groups; to reduce inequalities in access to health, populations and nutrition services and health outcomes (MoH, 2007). The attainment of these policy objectives is very critical to the efficient functioning of the healthcare system in Ghana.

The structure of a country's healthcare system is critical in ensuring efficient healthcare delivery. Understanding the healthcare system is also important in explaining the hospital governance structures. This chapter provides an overview of the healthcare system in Ghana. It provides a review of the history of the healthcare system, the structure and governance of the healthcare system, and healthcare financing and resource utilization. It then discusses targeted health programmes, health infrastructure, indigenous healthcare system, health sector reforms, and health information technology. The final section of this chapter summarizes the key issues discussed in the chapter.

3.2 Ghana's Healthcare System

The history of Ghana's healthcare system can be looked at under three eras: the pre-colonial era (1844), the colonial era (1844-1957), and the post-colonial era (1957 to date). In the pre-colonial era, the country had no

organized health system and modern medical care was not available at the time. The key providers of healthcare were the traditional health practitioners, including herbalists, bonesetters, priest healers and traditional birth attendants (Yeboah, 2003).

The colonial era witnessed the establishment of modern healthcare on a limited scale; however, this was not organized as a national system to benefit all people. The few who were privileged to benefit from this health system were mostly Europeans and their Ghanaian house helps (Kunfaa, 1996). Other Ghanaian indigenes who also utilized orthodox medical care included labourers from the mines, forestry/timber industry and construction workers so as to prevent the Europeans from getting infected by these workers. Healthcare during this period was centralized and basically curative, which forms the root for the current urban and curative bias healthcare system (Yeboah, 2003). Clearly, Ghana's healthcare system has been modeled along the lines of its colonial masters, Britain. The first government health services in Ghana can be traced back to 1880 when the Gold Coast Medical Department was established and concentrated on providing healthcare for the European population and government officials in particular. The healthcare system was focused on curative rather than preventive health services (Akortsu and Abor, 2011). Most of the healthcare facilities were, therefore, located in the core administrative districts with a centralized form of administration. The centralized healthcare system existed even after Ghana's independence in 1957.

The post-colonial period commenced from 1957-1980's during which various governments (military and democratic) put in place strategies and policies to bring up the existing health system to modern standards. These expectations were, however, not met. It started with the Kwame Nkrumah government, which ambitiously took steps to expand health services to every part of the country since economic conditions at the time were good. A number of

commissions were set up and charged with the responsibility of restructuring the health system inherited from the colonial masters. Recommendations made by these commissions differed from the colonial health system mainly in the scope of health facilities the nation should have. This led to the formulation and implementation of a national plan referred to as the 7-year National Development Plan (1963-70) with the objectives of extending and modernizing existing hospitals (30 out of 37 Government Hospitals were targeted) and also constructing additional health posts.

The 7-year plan was abandoned when the first military intervention took over government in 1966 and put in place a 2-year Development Plan (1968-70), which aimed at reversing the urban biased health system, with equity being the key driving force. This was to be achieved by allocating resources to enhance rural health throughout the country, emphasizing on preventive and promotive health, including maternal and childcare, health education, water and sanitation and school health, training of more community and public health nurses, constructing more health posts in deprived regions and districts, and strengthening inter-sectoral collaboration, especially with the Ministry of Education in order to develop the school health programme.

There was a similar military intervention by Abrefa Busia (Prime Minister), whose government continued with various health reforms till the final coup in the 1980's by Ft. Lt. Jerry John Rawlings during which the concept of Primary Healthcare was emphasized and Decentralization of Health Service Administration Policy was strongly advocated and backed with the Local Government Law PNDC Law 207 of 1988. This policy sought to strengthen District Health Systems for effective management (Yeboah, 2003).

It was not until 1972 that the government at the time attempted to decentralize healthcare services to the districts with policy formulation still

being carry out at the central level. Several reforms that took place in 1977, 1997 and 2002 and these have brought about a completely decentralized healthcare delivery system in the country, right from the national level to the sub-district levels. Subsequent to these reforms, two main functions had been identified for the health sector in Ghana. The first is policy formulation, regulation and coordination of the actions of actors in the health sector and the second had to do with the implementation of policy via health service delivery. The MoH has the responsibility of carrying the function of formulation, regulation and coordination of the actions of actors in the health sector. The public and private health service providers are responsible for the implementation of policy via health service delivery. In the public sector, the main health service provider is the Ghana Health Service with a national secretariat and service provision points (facilities) at the regions, districts, sub-district and community levels. In the private service, providers are the mission providers who operate mainly in rural areas as private not-for-profit organizations and the private for-profit organizations (Abekah-Nkrumah, 2005; Abekah-Nkrumah *et al.*, 2009).

3.3 Structure and Governance of Ghana's Healthcare System

The healthcare system revolves around the MoH. Administratively, it has a hierarchical organizational structure from the central headquarters in Accra (the capital city) to the regions, districts, and sub-districts. Health services are delivered in primary, secondary, and tertiary health institutions. The primary healthcare system incorporates all institutions (clinics, health centres, and hospitals) and individuals whether private, public or traditional. All districts have also been subdivided into four to six sub-districts, and each sub-district covers a defined geographic area containing 20,000-30,000 people. The health centres are responsible for providing clinical, public health, and maternity services to the catchment population using a combination of clinic-based, regular outreach, and mass campaigns in close collaboration with communities, community institutions and leaders, and village-based health workers and health institutions (MoH, 2009).

The district hospitals serve as the first referral point in the primary healthcare system. They provide clinical (outpatient and inpatient) and maternity services and serve as backup for health centres in the district. The regional hospitals are the second referral level. They act as the technical focal point for specialized clinical and diagnostic care in broad specialized areas like medicine, general surgery, pediatrics, and obstetrics and gynaecology. The teaching hospitals form the apex of specialized care in the country. They are the leading training and research institutions, and offer undergraduate and postgraduate training for doctors and other health professionals (MoH, 2009). Health services in Ghana are provided by four main categories of healthcare delivery systems. These are the public, private-for-profit, private-not-for-profit, and traditional systems. The public sector, which is supported by the government, accounts for over 70 percent of the institutions.

The MoH is charged with the responsibility of regulating the entire health sector and its main function is policy formulation, coordination and regulation of the stakeholders in the health sector. In formulating such policies or guidelines for regulation, it collaborates with various ministries, departments and agencies (MDAs), as well as development partners and stakeholders in the health sector (Ackon, 2003; Abekah-Nkrumah, 2005). Policy implementation is carried out through the public, private and traditional sectors. At the public sector end, the Ghana Health Service, Teaching Hospitals Board and the quasi-government institution hospitals are the implementing agencies of the MoH.

The Ghana Health Service is responsible for the implementation of government's health policy and regulation of state-run health institutions (i.e., government hospitals, Polyclinics, and health centres). For the purpose of carrying out its functions, the Ghana Health Service has a secretariat that has been decentralized from the national level to the regions and the

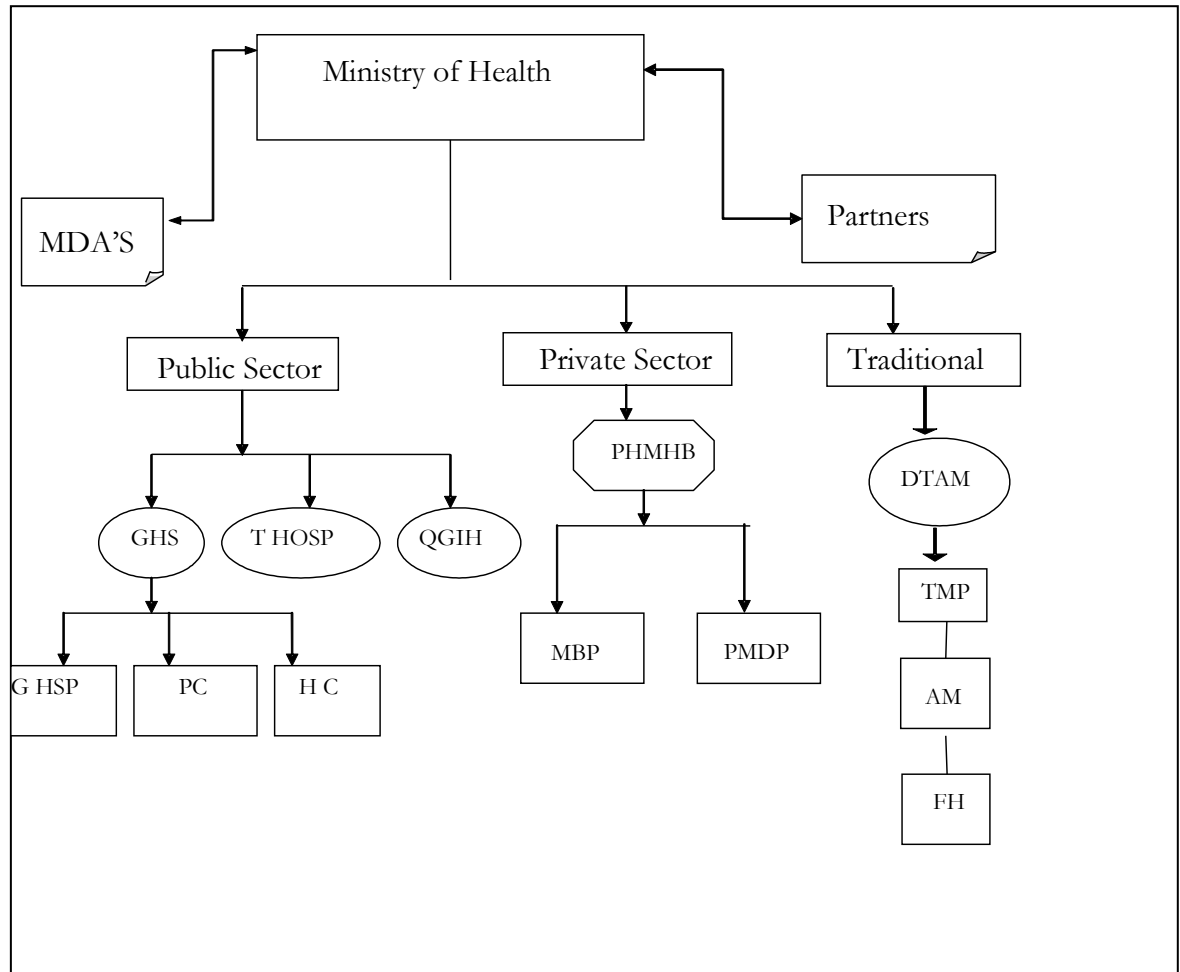
districts. At each level there is a team of management that administers the affairs of the service. The districts report to the regions and the regions report to the national level as stipulated in the Ghana Health Service and Teaching Hospitals Act (1996), Act 525. The Teaching Hospital Board (THB) is the institution responsible for the implementation of government's health policy and regulation at the teaching hospital level. The Teaching Hospital Boards established under the Hospital Administration Law, 1988 (P.N.D.C.L. 209), which are subject to Act 525, continued in existence. This means that teaching hospitals are still required even under Act 525 to have a hospital board. The last of the public sector agencies is the quasi-government institution hospitals. This is currently an association and not a statutory body backed by relevant legislation. It is responsible for the implementation and regulation of hospitals owned by quasi-government institutions (Ackon, 2003; Abekah-Nkrumah, 2005). With the exception of teaching hospitals, the other public hospitals are not required under Act 525 to have a board. Public hospitals with a board might be following an existing practice prior to the passing of Act 525 or might be responding to administrative directive from their regional health directorate to have a board in place. They might also be subscribing to best practice.

The private sector also plays a significant role in Ghana's health sector, representing about 40 percent of total healthcare delivery in the country. The Private Hospitals and Maternity Homes Board, established by Act 1958 (No. 9) as amended, is the regulatory body responsible for the private health sector. The main providers in the private sector are the mission-based providers; consisting of Christian and Moslem hospitals and the private medical and dental practitioners. Finally, a directorate in the MoH regulates activities of the traditional sector. However, the institutional and legal framework necessary to carry out such work is currently not in place. The main traditional healthcare providers in this sector are the traditional medical providers, alternative medicine and faith-based healers (Ackon, 2003; Abekah-Nkrumah, 2005). The private hospitals are also not required by any

Act to have a board. The formation of hospitals boards is at the discretion of the hospitals. In the case of the mission-based hospitals, most of the churches for instance have a dedicated board overseeing a group of their hospitals in a particular district.

Health management in Ghana is fairly decentralized. Within the Ghana Health Service, a nested approach involving District Health Management Teams, Regional Health Management Teams, and headquarters have been put in place. Complementing these arrangements are institutional/health facility management teams. Each of these management levels is a budget management centre with the responsibility for a defined programme of work supported by a defined operational budget. Presently, a sector-wide approach to health service delivery exists in Ghana. The principles underlying implementation of the sector-wide approach include an agreement between the Government of Ghana and health partners on a coordinated programme of work, an integrated approach to funding, and common implementation and evaluation arrangements. Under this arrangement, the MoH prepares an annual programme of work, which is funded from Government of Ghana funds, internally generated funds, and pooled donor funds. The MoH and partners meet twice a year to review and agree on the sector-wide performance targets (MoH, 2009). The structure of the health sector is illustrated in Figure 3.1.

Figure 3.1: Structure of Ghana's Health Sector



Key:

- MDA's – Ministries Departments and Agencies
- GHS – Ghana Health Service
- THOSP – Teaching Hospitals
- QGIH – Quasi Government Institution Hospitals
- PHMHB – Private Hospitals and Maternity Homes Board
- DTAM – Department of Traditional and Alternate Medicine
- GHSP – Government Hospitals
- PC – Poly Clinics

- HC – Health Centres
- MBP – Mission Based Providers
- PMDP – Private Medical and Dental Practitioners
- TMP – Traditional Medical Providers
- AM – Alternative Medicine
- FH – Faith Healers

Source: Five-Year Program of Work (2002-2006, p. 48)

3.4 Ghana's Healthcare Financing and Resource Utilization

Prior to independence, the financing of healthcare was the sole prerogative of the colonial government at the time (Dummett, 1993). After independence in 1957, Ghana provided free healthcare services to its population through public health facilities. There were no out-of-pocket payments in these facilities and care was financed solely from tax revenues. However, this was not sustainable in the light of the needs of other sectors of the economy, and the government had to find alternatives to this financing mechanism (Twumasi, 1975).

In the 1970's, nominal fees were introduced through legislations, but these proved insufficient to meet the needs of the health sector. The user fees were as a result of economic difficulties during the period (Twumasi, 1975). Between the 1970's and early 1980's, the global oil crisis from the sudden hike in oil prices on the international market severely affected the country. This immediately resulted in balance of payment difficulties, heavy debt burden and general economic disequilibrium. As a result, the World Bank and the International Monetary Fund (IMF) proposed structural changes to improving the economy, which suggested withdrawal of state subsidies. This led to declines in the health budget, putting the health sector under severe

economic pressure (World Bank, 1993). Government budget fell from 18.3 percent to 10.1 percent of Gross National Product (GNP) between 1972 and 1982, resulting in a fall in real expenditure in the education and health sectors of the economy. Equipment in health institutions fell into disrepair due to lack of spare parts and basic drugs were desperately in short supply and were often unavailable in rural clinics (Bawumia, 1998).

In 1985, the government at the time introduced a cost recovery programme known as the 'user-fees system'. Laws enabling the charging of fees dates back to 1969 with the introduction of the Hospital Fees Decree, 1969 National Liberation Council Decree (NLCD) 360; Hospital Fee Decree, 1969 (Amendment) Act, then, the 1970 (Act 325); then again the Hospital Fees Act, 1971 (Act 387). These charges were, however, token fees charged compared to the 1985 legislation, which raised the fees above token levels (Smithson *et al.*, 1997). There were, however, exemptions for antenatal and family planning and communicable diseases (Nanda, 2002). The introduction of user fees greatly reduced the utilization of health services because most people could not afford the user fees and the fees were also not matched with improvement in quality of services provided. In spite of the introduction of the user fees, government still bore a considerable proportion of the expenditure in healthcare (Arhin-Tenkorang, 2000).

In 1992, the government, in conformity with the Bamako Initiative of 1988 introduced the Revolving Drug Fund, which officially introduced the Full Cost Recovery Policy for drugs as a way of generating revenue to address the shortage of drugs. It was envisaged that the cost recovery process would contribute about 15 percent of the health sector resources. A review of the process in the First Five Year Programme of Work (1997-2001) of the MoH revealed that the contribution of the cost recovery process to the country's health sector financing was below 10 percent. The application of the revolving drug fund policy was popularly termed 'cash and carry system'. The cash and

carry system caused a decline in the utilization of healthcare services, especially for the very poor, who needed the services most, since this represented a financial barrier to access healthcare (Arhin-Tenkorang, 2000).

In order to improve access to healthcare services, a law (Act 650, 2003) establishing a national health insurance scheme was enacted in October 2003 known as the National Health Insurance Scheme (NHIS). This was with the ultimate vision of assuring equitable and universal access to healthcare for all residents of Ghana (MoH, 2004). The health insurance scheme is expected to provide funds to healthcare providers in bulk to aid in planning and to reduce the incidence of bad debt or charitable services, which tend to increase the expenditure pattern of healthcare facilities. This is ultimately expected to ensure efficient and effective delivery of healthcare service. The funding mechanism includes premiums paid by members to the insurance scheme they are registered for. Currently, 2.5 percent of all commercial invoices and pension contributions are paid into the health insurance fund. In year 2006, the health insurance fund represented about 31.6 percent of the total resource envelope of the health sector and in 2008, this accounted for 32.6 percent of total health sector financing (MoH, 2006, 2008). According to the Medium Term Expenditure Framework for 2009, the NHIS was estimated to contribute 41 percent of overall revenue for 2009. In relation to its financing sources, the NHIS is heavily reliant on tax funding for 70–75 percent of its revenue. The NHIS has been decentralized into District Mutual Health Insurance Schemes and every Ghanaian is supposed to be a member of a district scheme in his or her area. The district schemes are the ones that contract the services of healthcare providers. The major problem confronting the Scheme is financial sustainability; considering that with a growing utilization of members, only a third is contributing to the scheme. There is also the problem of delays in reimbursing the facilities for services rendered to subscribers (Witter and Garshong, 2009).

The various sources of financing public healthcare institutions in Ghana include government subvention, donor pooled funds and internally generated funds. The Government of Ghana funds are from budgetary allocations of the consolidated vote. This comes from budgetary allocation for healthcare institutions approved by the Ministry of Finance and Economic Planning. This funding could be viewed as government's contribution to the financing of public hospitals and the source of this funding for healthcare delivery is usually from taxes. It has been the predominant source of funds for the health sector and constitutes about 60 percent of total transfer to the MoH. The subvention from government is used for paying salaries for healthcare staff on government payroll. The government subvention also covers administrative cost and services, including stationery and other items for the smooth running of hospitals. General investments and Highly Indebted Poor Counties [1] (HIPC) funds considered as investment also form part of subvention to the healthcare facility. The contribution of government to investments in general, such as the rehabilitation of old buildings and the purchase of equipment, is generally minimal.

Donor pooled and earmarked funds are external aid funding for the health sector. The pooled funds are from various countries and organizations that are pooled into an account for use by the health sector. The earmarked funds are also contributions by donors that are given for specific projects in the health sector. Sometimes the donations come in the form of vaccines for immunizations. Total inflows from donors into the health sector constitute about 25 percent of the sectors budget (Drechsler, 2006). Donor pooled funds usually cover investment items and service delivery of the hospitals are generally the least reliable of all the other sources of funds (Akortsu and Abor, 2011).

The internally generated funds come in the form of user charges. The Hospital Fees Regulation L.I. 1313 of 1985 introduced this system into public

hospitals and the hospitals keep internally generated funds to supplement the annual budgetary allocation from the MoH (Ackon, 2003). These are revenues generated from drug fees and other patient fees raised by the hospitals. These funds could be from the payment of services by health insurance organizations that contracted hospitals and individuals who use the facility. Other activities that generate such funds are fees for the use of cafeteria services provided by health facilities, the use of parking space and other such activities. The internally generated funds are generally a very reliable source of funding the public hospitals. The internally generated funds are used on personal emoluments of contract workers, administrative expenses, services and investments. The use of internally generated funds for administrative expenses, investments and personal emoluments confirm the fact that government subvention, although may appear to be the highest financing source is actually inadequate in running the health facility (Akortsu and Abor, 2011). Internally generated funds represent about 24.85 percent of the total approved health budget (MoH, 2006).

3.5 Targeted Healthcare Programmes in Ghana

One key targeted healthcare programme in Ghana is in respect of the safe motherhood programme of the MoH and the Ghana Health Service. The basis for this programme lies in the fact that many women in the country die as a result of complications related to pregnancy and childbirth (NPC, 2006). Maternal health has not received the attention it deserves, and therefore, maternal mortality rate is still high, ranging from between 214 to 700 maternal deaths per 100,000 live births with some rural communities showing even higher rates (Ghana Health Service, 2005). The access to and use of quality maternal healthcare services are thus crucial for improved maternal-child survival. The effectiveness of a maternal healthcare programme also depends on how women at risk are willing to comply with necessary healthcare. It is argued that the use of maternal health services is a function of demographic, cultural, and socio-economic factors, such as age of women, birth order, size of household, education, ethnicity, place of

residence, religious background, marital status, employment, income level and accessibility (Addai, 2000). Therefore, the goal of the safe motherhood programme is to improve women's health in general and especially to reduce maternal morbidity and mortality, thereby contribute to reducing infant morbidity and mortality (Ghana Health Service, 2005). To achieve the above goal, the program seeks to among other things:

1. Make child bearing safe for all women
2. Contribute to improvement in infant health
3. Promote and maintain the physical, mental and social health of mother and baby by providing education on nutrition, family planning, and STI prevention including HIV/AIDS, the danger signs of pregnancy, rest/sleep and personal hygiene.
4. Help clients develop birth preparedness and complication readiness plans.
5. Detect and treat all complications arising in pregnancy, whether surgical, medical or obstetric.
6. Ensure the delivery of full term healthy baby with minimal stress or injury to mother and baby
7. Help prepare mothers to breastfeed successfully, experience normal puerperium and take good care of child physically, psychologically and socially and finally to
8. Prevent mother-to-child transmission of HIV/AIDS.

To ensure appropriate and expected return on interventions, the safe motherhood programme targets married couples and individuals, adolescents, pregnant women, including adolescents, women and adolescents in their puerperium and their babies, men as well as families and communities. To manage the programme effectively and ensure effective monitoring, it has been sub-divided into six major areas; antenatal care,

labour and delivery care, postnatal care, family planning, Prevention and management of unsafe abortion and finally health education (Ghana Health Service, 2005).

The main aim of the antenatal care programme is to establish contact with women in order to identify and manage current and potential risk and challenges. The providers are public and private healthcare facilities, as well as Traditional Birth Attendants (TBAs). The main tool used is the supervision of labour and deliveries to ensure proper management of the four stages of labour, as well as early identification, proper management and or referral of complications by using personnel such as such midwives, general medical practitioners, obstetricians and TBAs. The mix of postnatal services includes comprehensive screening for detection and treatment or referral of complications in mother and child, health education and counseling and finally family planning and motivation. Postnatal care is seen as one of the most important in the spectrum of maternal services since most maternal deaths occur during this period. The family planning programme is based on methods and practices to space births, limit family size and prevent unwanted pregnancies in addition to the prevention and management of reproductive tract infections (RTIs) such as STI/HIV/AIDS. The emphasis of the program is on adolescents and couples (Ghana Health Service, 2005).

Some progress appears to have been made in the area of reproductive and child health, especially maternal health services. The current rate of progress is expected to continue to improve, looking at programs put in place by the health authorities, such as increasing levels of acceptance by men to become part of family planning programs amongst others (Ghana Health Service, 2005; NPC, 2006). However, there are still challenges to deal with. These include high maternal mortality and abortion rates, poor access (financial and geographical) to safe motherhood services in the remote parts of the country, the high levels of poverty and low levels of education amongst women. These

are likely to adversely affect efforts at reducing maternal mortality and morbidity.

Table 3.1 shows a general trend in healthcare outcomes over the period, 2006 – 2010. In all, the indicators suggest a gradual improvements in the health outcomes. However, a lot more needs to be done if Ghana is to achieve the MDGs.

Table 3.1: Health Sector Wide Indicators, 2006 – 2010

	2006	2007	2008	2009	POW 20120 Goal	2010	Source
Goal 1: Ensure that children survive and grow to become healthy and reproductive adults that reproduce without risk or injuries.							
Infant Mortality Rate (IMR) per 1,000 live birth	71	-	50	-	n/a		
Under 5 Mortality Rate (U5MR) per 1,000	111	-	80	-	n/a		
Maternal Mortality Ratio (MMR) per 100,000 live birth	n/a	-	451	-	n/a		
Under 5 prevalence of low weight for age	18%	-	13.9%	-	n/a		
Total Fertility Rate	4.4	-	4	-	n/a		
Goal 2: Reduce the excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups.							
HIV prevalence among pregnant women 15 - 24 years	3.2	2.6	2.2	2.9	1.9	2.0	
Incidence of Guinea Worm			501	242	<100	8	CHIM
Goal 3: Reduce inequality in health service and health outcomes.							
Equity: Poverty (U5MR)	1:1018		1:1.72		n/a	-	
Equity: Geography, service (supervised deliveries)	1:2.05	1:2.143		1:1.49	1:1.90	1:1.79	CHIM
Equity: Geography, resources (nurse: population)	1:4.14	1:2.257	1:2.03	1:1.87	1:2.00	1:1.83	HR-MOH
Equity: NHIS, gender(female/male active ratio)	n/a	n/a				-	
Equity: NHIS,	n/a	-	1:1.13		n/a	-	

poverty (lowest wealth quintile/whole population active)							
Thematic Area 1: Healthy lifestyle and healthy environment.							
% household with sanitation facility	60.70%	-	-		n/a	-	
% household with access to improved sources of drinking water	78.10%	-	-		n/a	-	
Obesity in adult population (women aged 15 – 49 years)	25.30%	-	9.3%		n/a	-	
Thematic Area 1: Health, Reproduction and Nutrition							
% children 0-6 months exclusively breastfed	54%	-	-	-	n/a	-	CHIM
% deliveries attended by a trained health worker	44.5%	32.1%	42.2%	45.6%	50.3%	48.2%	CHIM
Family planning acceptors	25.4%	23.2%	33.8%	31.1%	n/a	23.5%	CHIM
% pregnant women attending at least 1 antenatal visit	88.1%	91.1%	97.8%	92.1%	70%	90.6%	CHIM
% U5s sleeping under ITN	41.7%	55.3%	40.5%	n/a	50.0%	n/a	CHIM
% children fully immunized (proxy Penta 3 coverage)	84.2%	87.8%	86.6%	89.3%	87.9%	84.9%	CHIM
HIV clients receiving ARV therapy	7,338	13,429	23,614	33,745	51,814	47,559	CHIM
Outpatient attendance per capita (OPD)	0.55	0.69	0.77	0.81	0.82	0.89	CHIM
Institutional Maternal Mortality Ratio (IMMR) per 100,000 live births	187	230		170	185	164	CHIM
TB treatment success rate	73.0%	79.0%	84.0%	85.6%	86.0%	86.4%	CHIM
Thematic Area 3: Capacity development							
% population within 8km of health infrastructure	n/a	-	-	-	n/a	-	
Doctor: population ratio	15,423	13,683	13,499	11,981	11,500	11,479	HR-
Nurse: population ratio	2,125	1,537	1,353	1,537	1,100	1,510	HR-
Thematic Area 4: Governance and Financing							
% total MTEF	16.2%	14.6%	14.9%	14.6%	11.5%	15.1%	MOH

% non-wage GOG recurrent budget allocated to district level and below	40.0%	49.0%	49.0%	62.0%	50.0%	46.8%	MOH
Per capita expenditure on health (USD/capita)	25.4	23.01	23.23%		26	28.64%	MOH
Budget execution rate (Item 3 as a proxy)	89.0%	110.0%	115.0%	80.4%	95%	94.0%	MOH
% of annual budget allocation to items 2 and 3 disbursed to BMC by end of June	n/a	n/a	23.0%	39.0%	40%	31%	MOH
% population with valid NHIS membership card (active members)	17.7%		44.7%	50.0%	60.2%	-	
Proportion of claims settled within 12 weeks	n/a	n/a	n/a	n/a	40%	-	
% IGF from NHIS	45.0%	n/a	66.5%	83.5%	70.0%	79.4%	MOH

Source: Ghana Health Sector Review, 2010

3.6 Health Infrastructure in Ghana

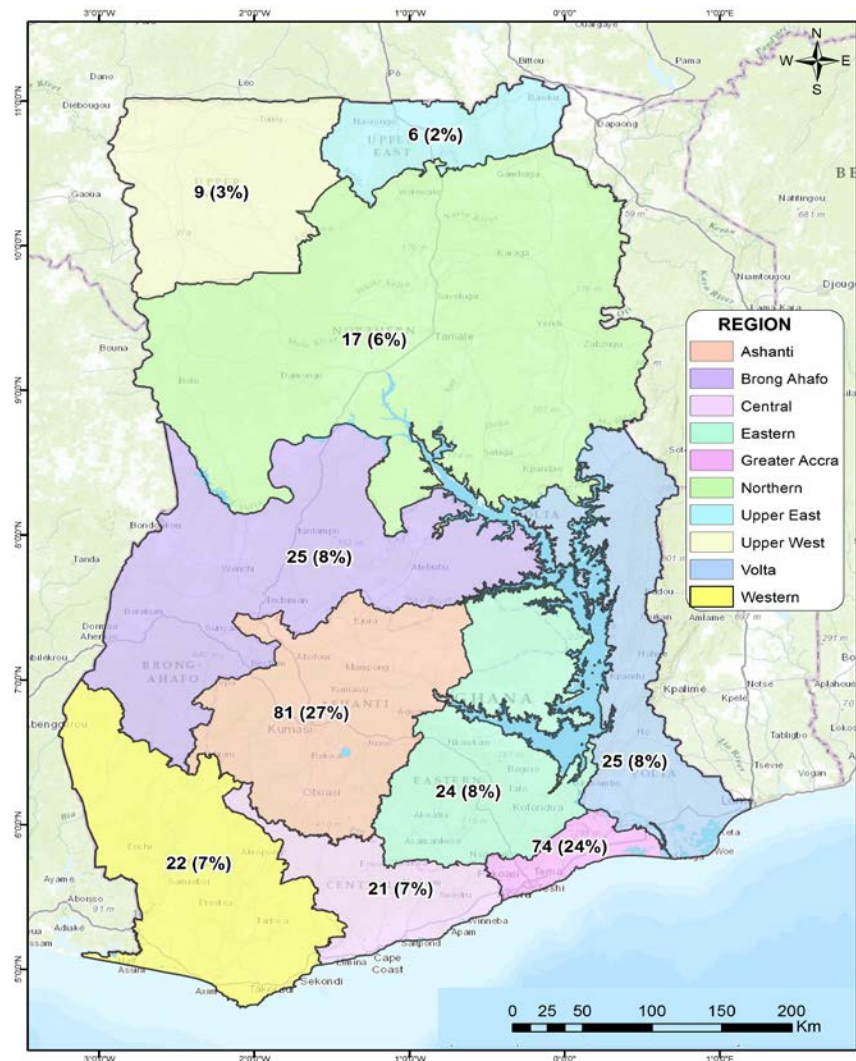
Health infrastructure is important in improving the health status of people in the country. In Ghana, there is wide disparity when it comes to the availability of health infrastructure in the country in terms of human resources, hospitals, primary healthcare, community healthcare, and blood banks. The individual health infrastructures in the country are discussed below.

Human resources for health is now widely recognized as the key element for achieving the MDGs and scaling up health interventions. The health workforce accounts for 9 percent of the total labor force and more than 65 percent of national healthcare budgets in Ghana. Experiences in Ghana reveal that shortage of human resource for health as well as misdistribution of the limited numbers poses great challenge not only to the health sector, but also to economic prosperity generally (Ghana Health Force Observatory, 2007). Health workforce is mostly concentrated in the Greater Accra and Ashanti

regions. For instance, these two regions account for about 49.6 percent of doctors on government payroll. It has being reported that Korle-bu Teaching Hospital (located in Greater Accra) alone has more doctors than the three northern regions. There are over 5,000 professional nurses in the country and many other community health nurses and health assistants. Also, there are over 350 pharmacists, and over 2500 midwives all over the country.

With respect to health facilities, there is uneven distribution of health facilities across the various regions of the country. Though there is at least one regional hospital in every region in addition to other hospitals, not all the districts have a hospital. This is particularly true in the case of the new districts. The country has 1,887 health facilities, including teaching hospitals and 3 psychiatric hospitals. Nine (9) regional hospitals, 86 district hospitals, 11 polyclinics, and 927 health centres under the Ghana Health Service represent about 55 percent of the total health facilities (MoH, 2009). Figure 3.2 shows the distribution of hospitals across the various regions in Ghana. It is obvious from the map that the distribution of the hospitals is uneven. Ashanti region has the highest percentage of hospitals (27%), followed by the Greater Accra (24%). Upper East (2%) and Upper West (3%) have the least percentage of hospitals. Clearly, the distribution of the hospitals is skewed in favour of two regions in the country, Ashanti and Greater Accra regions.

Figure 3.2: Distribution of Hospitals in Ghana



Source: constructed by author

Community-based Health Planning and Services (CHPS) has been adopted by the Ghana Health Service as a national strategy for promoting accessible, quality and equitable services for all Ghanaians, particularly those in rural areas. The CHPS model is based on the results of four years of field

experimentation and demonstration by the MoH, and the Navrongo Health Research Centre's Community Health and Family Planning project, with technical assistance from the Population Council and USAID. According to those experiments, less than 40 percent of rural population has access to primary healthcare.

In every region of the country, there is at least one regional blood bank. There is also a national blood bank in the country that supplies the other blood banks in event of shortage. However, blood given out to any blood bank is expected to be replaced later. The Korle-bu and Okomfo Anokye teaching hospitals have their own blood bank. There are other mission/private/quasi-government hospitals that run their own blood banks in the country.

3.7 Indigenous Healthcare System in Ghana

Indigenous or traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercise applied singularly or in combination to treat, diagnose and prevent illness or maintain well-being (World Health Organization, 2008). In most developing countries like Ghana, both the modern/orthodox and traditional forms of medicine are critical to the healthcare system. With an estimated population of over 22 million, the number of health professionals responsible for delivering orthodox healthcare in Ghana is woefully inadequate. Over 70 percent of the population lives in the rural areas. Yet, over 75 percent of Ghanaian orthodox medical and paramedical personnel are concentrated in urban areas that have the large majority of modern health facilities to the detriment of the teeming rural dwellers. Many rural Ghanaians, therefore, have not been exposed to the benefits of modern changes in orthodox healthcare system. Consequently, most of these rural communities have to resort to the traditional healthcare system.

The traditional health system can be described using four broad aspects. First of all, it is a holistic approach that focuses on the whole person's health rather than particular organs or disorders. Secondly, the body, spirit and environment (mainly spiritual and social) are all considered important to one's health. Thirdly, the traditional healers use rituals, divination (getting information through supernatural ways), faith healing, offerings, herbs and other naturally derived medicines. Fourthly, there are different types of traditional healers –*odinsinin* who are skilled in natural medicines, *okomfo* who heal through communication with ancestral spirits (spiritualists), traditional birth attendants and traditional surgeons. Traditional healthcare delivery provides a client-centred, personalized approach that is culturally appropriate and tailored to meet the specific needs of the patient. It embraces a wide range of practices, including herbalism and spiritualism, and practitioners such as diviners, priests and faith healers.

Since the late 1970's, a number of international resolutions have been passed to promote regulation of traditional medicines and implementation of specific measures to govern Traditional Health Practitioners (THPs). A typical example is the primary healthcare concept, which advocates the use of appropriate technologies and methods in each country. Since the early 1990's, the World Health Organization (WHO) has advocated for the inclusion of THPs in the national AIDS programmes. In 2003, the 56th World Health Assembly of the WHO resolved, under its global strategy, on alternative medicine that its member states must ensure that their healthcare systems promote and support provision of training and, if necessary, retraining of THPs, and a system for the qualification and/or accreditation or licensing of the practitioners.

A few years later, the Ghana government enacted an Act to integrate THPs into the mainstream of primary healthcare. This Act affirms the dignity and

respect of traditional medicine and offers a framework to ensure the efficacy, safety and quality of traditional healthcare services from registered and trained traditional practitioners. It also provides management and control over regulations, training and conduct of practitioners. A traditional health council has also been instituted to develop interest in traditional health practices by encouraging research, education and training. The Council must promote, regulate, and liaise between traditional health practitioners and other health sectors.

The traditional health system is running parallel with the Ghana health service playing complementary roles to each other. The MoH is charged with the responsibility of identifying, training, regulating, standardizing and monitoring their activities. In recent times, traditional health system has been put on limelight projecting its implementation to the healthcare system in Ghana. In view of this, a scale up training programme was necessary. THPs received training and mentoring in diverse areas such as: HIV/AIDS, Home-based care, tuberculosis and directly observed treatment short-course, prevention and transmission of certain diseases. It was assumed that capacity building of THPs in identified areas of training and mentoring, and linking them to the healthcare system would result in increased acceptability and awareness of their role in health delivery, improved capacity to support the management of certain diseases and improved quality of traditional healing and access to voluntary counseling testing (VCT) services.

The main challenges confronting the practice of indigenous medicine include inadequate resources, inadequate staff capacity, low level of literacy among majority of practitioners, and slow compliance of THPs to regulatory mechanisms

3.8 Health Sector Reform/Healthcare Policy in Ghana

Health sector reform is the sustained, purposeful change to improve the efficiency, equity and effectiveness of the health sector (Berman, 1995). Ghana's health system has since independence undergone three major reforms in 1957, 1977 and 1997. The first of these reforms, which occurred at independence, saw a massive development in infrastructure and human resources with the aim of addressing major health challenges confronting the nation at the time. Significant among these problems were environmental sanitation, malnutrition and high infant mortality rate, variety of diseases and shortage of medical personnel.

The second attempt at reforming the health sector took place in 1977, as a result of the perceived inadequacies of the 1957 reform to effectively address the existing increasing and complex health challenges. It was significantly modeled on the Primary Healthcare system, which emphasized community healthcare and community involvement in promoting health and healthcare. The health system witnessed another attempt at reform in 1997, the main components of which were stipulated in the medium term strategy that spanned from 1997 to 2001. This reform aimed at achieving significant reduction in the infant, child and maternal mortality rates effective control of risk factors that expose individuals to the major communicable disease, increased access to health services especially in the rural areas, establishment of health systems effectively reoriented towards the delivery of public health services, and strengthening and effective management of health systems.

The second five-year programme of work, which began in 2002 and was expected to end in 2006, detailed the current health sector strategy. The overall goal was to help address the health inequalities in the country. Evidence abound that this particular strategy was tailored in harmony with the immediate past one (strategy) to improve the quality of health delivery, increase access to health services, improve the efficiency of health service

delivery, foster partnerships to improve health, and improve financing to the health sector

Then came the third five-year programme of work (5YPOW), which gave consideration to lessons learnt from the 5YPOW I and II. This particular programme of work was strategically developed to respond effectively to the challenges met during the implementation of the previous ones. It contains the goals, mission and strategic objectives of the health sector, as has been stipulated in the first and second ones. This document provides the basis for the drawing of the annual work plan to ensure adequate response to priority interventions for human resource development and the ultimate reduction of poverty and the creation of wealth. Over the five-year period, the document is expected to offer the basis for guiding and coordinating the activities of players in the country's health sector (MoH, 2008a).

In an attempt to ensure clarity and less difficulty in the achievement of its set objective, the third 5YPOW is grounded on a number of principles. First, the creation of wealth through health and this is in acknowledgment of the fact that poor health is expensive to individuals, societies and nations, and thus any attempt to fight poverty, as well as create wealth should incorporate health issues. Second, making sure that the national health insurance works well. Admittedly, one of the significant innovations in Ghana's health system has been the introduction of the National Health Insurance Scheme. In spite of the enormous positive impacts of this scheme, however, there are still challenges confronting its implementation. For this reason, the 5YPOW has been developed in a way as to help overcome these challenges, significant among which is poor access, including both geographical and financial access. The document aims to facilitate the provision of incentive to healthcare providers, organizational arrangements and quality service management. Third, limiting inequalities and this basically aims at bridging the gap between the rich and the poor in accessing healthcare delivery.

Fourth, giving maximum attention to priorities and although there are a lot of challenges confronting the health system, in an attempt to address these problems, there is the need to prioritize. That is, identifying which of the problems to address first before the other.

The 5YPOW is fashioned as a departure from the past by setting out priorities that will emphasize concentration on each year's annual programme of work. There are four strategic objectives of the third 5YPOW and these include: promoting an individual lifestyle and behavioral model for improving health and vitality, by addressing risk factors and by strengthening multi-sectoral advocacy and actions; rapid scaling up within the existing capacity, high impact interaction and services targeting the poor, disadvantaged and vulnerable groups; investing in strengthening health system capacity to sustain high coverage; and promoting governance, partnership and sustainable financing.

3.9 Health Information Technology in Ghana

Health information technology is necessary for improving information management needed for achieving the health system's goals and objectives. Advancements in technology and the increasing value of integrated health data, as well as the management of that data also represent a vital thrust underpinning information management in the health sector. An efficient health system requires accurate and instantly accessible information and this is vital for improving care for patients, improving the performance of the healthcare system and the health status of Ghanaians. It is also about providing decision-makers with accurate information so that they can make informed decisions (MoH, 2006; MoH, 2008b). Health information is particularly important for resource allocation and public health action in countries such as Ghana, where resources are limited (MoH, 2007). The health sector information system in Ghana is confronted with a number of challenges, including: multiple and uncoordinated information systems.

These systems do not communicate with each other resulting in data redundancy, duplications and inconsistencies amongst the various information sources; no formal links to sources of information outside the health sector and overall performance of health information system is dependent on abilities of individual managers rather than corporate needs; weak policy and legal framework for the health information system and lack of national plan for health information; low level of human resources and capacity. Inadequate personnel with advanced skills in health information and Districts do not have formally designated health information officers; limited capacity for effective health information system planning, implementation, monitoring and evaluation; absence of an updated strategic plan to guide the overall development and implementation of a sector-wide health information leading to the slow progress in developing systems for managing health information in the sector; and lack of systematic investment in the development of data management capabilities within the health sector. Most investments continue to be programme focused and centred around the development of reporting systems based on specific indicators.

Some attempts have, however, been made to improve information management in the health sector. The first is improving the human resource available for data collection and analysis at the district and regional levels. Steps have been taken in this regard to set up and support the training of health information officers at the Kintampo Rural Health Training School. The second major strategy is improving central level capacity for collation and analysis to support decision-making. The focus has been on building the capacity at the Centre for Health Information Management to be able to produce the kind of analyzed data required by the sector. The third is strengthening of data collection and analysis at the district level. Steps were therefore taken to study and understand the health information needs and demands at the district level and to design systems that will improve data collection and reporting, enhance the use of data and facilitate self-assessment at the district level. A 'platform' for the collation of reports at the

district level was introduced through the District Health Management Information System. It was also to enhance the management of data generated and the reports required to be produced by the districts. It also looks at improving the scope of use of the information generated as a result for decision-making. Two key tools have been developed for the purpose: a 'Decision Support Manual' to guide the interpretation and presentation of the routinely collected data at the district level and, a District-Wide Computer Assisted Information Management System to facilitate the management of reports at the districts (MoH, 2008b).

3.10 Chapter Summary

This chapter examined the healthcare system in Ghana. It provided a review of the history of the healthcare system, the structure and governance of the healthcare system and healthcare financing and resource utilization. The chapter then discussed targeted health programmes, health infrastructure, indigenous healthcare system, health sector reforms, and health information technology.

The structure of the healthcare system in Ghana has gone through several changes and reforms, usually with every change in government, and this would have implications for the type of governance structures adopted by healthcare institutions. It is observed from the structure of the health system in Ghana that government decisions through the Ministry of Health has direct implications for the running of hospitals of all categories. This is because the MoH has the responsibility of carrying the function of formulation, regulation and coordination of the actions of actors in the health sector. In formulating such policies or guidelines for regulation, it collaborates with various ministries, departments and agencies (MDAs), as well as development partners and stakeholders in the health sector. The public and private health service providers via the health service delivery system implement these action policies.

There is, therefore, the need to have various governing boards that will oversee the implementation, monitoring and evaluation of the effectiveness and efficiency of these actions at the hospital level. This is supported by hospital governance studies, which indicate that one of the key elements needed in order to achieve excellence in hospitals is having a clear mission and an achievement-orientated culture in which to realize it, and these are the core responsibility of a hospital board. However, in Ghana, it is only teaching hospitals that are required under the Ghana Health Service and Teaching Hospitals Act 1996 (Act 525) to continue having a board, after the passing of this law by the then government in 1996. In the case of the other public hospitals, they are not required under Act 525 to have a board. Therefore, public hospitals with a board might be following an existing practice prior to the passing of Act 525 or might be responding to administrative directives from their regional health directorate to have a board in place. The Private Hospitals and Maternity Homes Board, established by Act 1958 (No. 9) as amended, is the regulatory body responsible for the private health sector. The main providers in the private sector are the mission-based providers; consisting of Christian and Moslem hospitals and the private medical and dental practitioners. However, the institutional and legal framework necessary to carry out such work is currently not in place. Thus, the private hospitals are also not required by any Act to have a board. The formation of a hospital boards is thus at the discretion of the respective private hospitals. In the case of the mission-based hospitals, some of the churches for instance have a dedicated board overseeing a group of their hospitals in a particular district. The content of the final and third SYPOW, which includes amongst other plans, promoting governance, partnership and sustainable financing in the health sector, coupled with many other issues confronting the health sector, and hospital in particular, such as the recent demonstration and agitation within hospital employees of Ghana's premier and largest hospital, for the dissolution of the governing board, as well as the firing of the CEO of the hospital, has necessitated a study to examine not just the characteristics of the hospital boards across all categories, but also to ascertain what impact these governing boards have on the performance of hospitals in Ghana.

The next chapter discusses the hypotheses development and provides a framework that links the existing literature and theoretical stances to hospital board characteristics and ownership structure to aid in the empirical investigation.

Chapter 4

Governance Theories and Hypotheses Development

4.1 Introduction

This chapter discusses the theories and the emanating hypotheses development as well as provides a framework for analyzing the effects of hospital governance and ownership structure on performance. The chapter begins by discussing the various governance theories and constructing a conceptual framework, which shows how the relevant theoretical considerations explain hospital governance. Considering the complexity of the issues surrounding the healthcare sector, it is appropriate to use a multiple theoretical approach in examining the governance, as well as ownership structures and their impact on the performance of hospitals (Beasley *et al.*, 2009). Thus, the theoretical basis of this study on healthcare governance can conveniently be covered under the managerialism theory, stakeholder theory, and the resource dependency theory.

The conceptual framework shows how these theories inform hospital board characteristics and subsequently on performance. The chapter then explains how the hypotheses are developed to guide the empirical investigations. The hypotheses are specifically based on how the presence of hospital board, hospital board characteristics (i.e., board size, board composition, medical staff participation board leadership structure board diversity, and frequency of meetings), ownership structure, and the control factors influence the performance of hospitals.

4.2 Governance Theories

A number of governance theories exist that explain the governance systems and structures of organizations. There have been issues of an integrative theoretical approach in corporate governance studies over the years because there is the lack of an overarching theoretical perspective in viewing the role of governing boards and performance of organizations (Hendry and Kiel, 2004). In a study to analyze the mainstream academic thoughts on the roles of governing boards, Hung (1998) indicates that there is no single competent and integrative theory or model to explain the role played by governing boards (Hung, 1998). Hung (1998) explains that the roles of governing boards and how they perform is consistent with and at the same time reflects some of the main arguments of six different schools of thoughts also referred to as governance theories. These include agency theory, stewardship theory, institutional theory, managerialism theory, stakeholder theory, and resource dependency theory (Hung, 1998). This is because board involvement is such a complex phenomenon that no single theoretical perspective can adequately capture the entire processes involved. These governance theories are discussed in the following section in turn and particular emphasis is placed on those theories that are applicable in explaining the governance structures of hospitals in a complimentary rather than contradictory manner.

4.2.1 Agency Theory

It has been a long recognized phenomenon that modern firms suffer from the separation of ownership and control. They are run by professional managers (agents), who are expected to seek the interests of the owners or shareholders (principals) (Jensen and Meckling, 1976; Lan and Heracleous, 2010; Solomon, 2011). The agency relationship is said to be a contract under which one or more persons (principal) engage another person (agent) to perform some service on their behalf, and it involves delegating some decision-making authority to the agent. The agency theory addresses the relevance of having separate individuals responsible for the protection of shareholder interest (Jensen and Meckling, 1976; Fama, 1980; Fama and Jensen, 1983). This is supported by Gay (2002), and Filatotchev and Wright (2011), who argue that the agency theory is best suited for larger organizations, comparatively, with an extended ownership base. Similarly, Shaoul *et al.* (2012) suggest that the agency theory approach puts so much attention on the monitoring tasks that various corporate governance mechanisms may perform in publicly listed companies, but does not focus much on corporate governance in smaller companies. The agency theory is said to postulate that a conflict of interest exists between members of an organization in which owners are not involved in the day-to-day running of the organisation as opposed to managers who are responsible to the daily running of the organization (Roe, 1994). Thus, there is always the need for owners to reduce agency costs and control the opportunism of managers. This calls for good corporate governance, which is deemed to provide control, while promoting economic enterprise and corporate performance (Keasey *et al.*, 2005). Gay (2002), however, argues that an agent's interest in an organization will solely be with the intention of meeting organizational goals rather than himself. He added that this avoids the problems associated with conflict of interest. However, this may not always be the case and it has long been recognized that there may be a possible divergence of motivational interests between the two parties. The interests of professional managers or agents may be different from those of the owners or principals, thus, creating the agency problem. While owners or shareholders may be interested in maximizing the value of the firm, management on the other hand may be

involved in managerial shirking, perquisite and non-optimal investments, which are detrimental to shareholder value maximization (Jensen and Meckling, 1976; Brickley, and Zimmerman, 2010; Harford and Maxwell, 2012).

An asymmetry of information can also exist as the managers have continual access to information, whereas the shareholders may only receive annual reports. It is this asymmetry that makes it difficult for shareholders to monitor the activities of managers. In agent-principal contracts, these agency problems persist especially in instances where the financiers (principal/owners) are not qualified or informed enough to decide what to do when the unexpected happens, the very reason they hired the manager in the first place. Consequently, the manager ends up with substantial residual control rights and therefore discretion to allocate funds as he chooses (Shleifer and Vishny, 1997). Agency theory suggests that managers' control of information regarding their own performance and organizational activities can lead to the manipulation of information to serve the managers' own personal interests to the detriment of owners' interests (Baysinger and Butler, 1985; Armstrong *et.al.* 2010). In view of this, Warhurst (2004) considered the roles and responsibilities of business in today's society, and wonders what the future role of the organizations will be and in doing so, provides some prime examples of firms that have achieved both success and failure with respect to the agency theory.

The agency problem could be addressed by aligning the interests of the managers with that of the owners. The process of aligning these two sets of interests comes with cost known as the agency cost. The agency costs include the control and the monitoring of activities of the board of directors. The desire to limit agency costs has resulted in firms behaviors (agents) that are consistent with owners' expectations (principal) resulting in a superior level of performance (Fama, 1980; Fama and Jensen, 1983). An effective

governance system involves developing and implementing governance mechanisms and processes. For instance, a good CEO-board relationship, proper accountability/responsibility policies and an effective board structure may ensure that the interests between the principal and agent are fully aligned (see Taylor, 2000; Christopher, 2010).

The agency relationship as applied in a hospital situation may differ from that in the corporate setting, considering that there are different stakeholders involved, including patients, hospital, medical staff, and community care groups, amongst others. However, problems can and invariably do arise whereby the agent may not always act in the best interests of the principal (Murphy and O'Donohoe, 2006). In an attempt to minimize the potential for opportunistic decision-making by the hospital medical staff, it is suggested that outside physicians help to monitor the information given by their colleagues so as to decrease the medical staff's potential to influence the board into making decisions intended to serve their own personal interests at the expense of other stakeholders and the hospital as well as give a more objective perspective on prevailing issues within the medical field. The involvement of outside physicians serves as a reference point for monitoring the medical staff's board recommendations, thereby lowering the chances of opportunism by medical staff board members. Agency theorists have advocated increased outside board participation to protect shareholders' equity and financial interests. Therefore, hospitals with medical staff and outside physician board participation will have better financial performance than boards with medical insider board participation and no outside physicians (Molinari *et al.*, 1995).

For the purpose of this study, agency theory is not used because there are actually no real owners when it comes to the health sector. Thus, the concept of governance is more of a shared responsibility between the board and senior management of the hospital, rather than a principal-agent relationship

or superior-subordinate relationship. The health sector is more concerned about the ultimate goal of improving the health of its clients/customers rather than maximizing profit of shareholders. Hence, the focus here is basically on stakeholders and not the traditional shareholders proposed by the agency theory.

4.2.2 Stewardship Theory

Stewardship theory suggests that managers are only motivated to act in their shareholders' best interest and that managerial opportunism is not important and does not even exist since the manager's main aim is to do a good job and be a good steward of the assets of the organization/corporate body (Davis *et al.*, 1997; Donaldson and Davis, 1991). This governance theory suggests that managers are motivated by a need to achieve, provide high-level commitment and gain intrinsic satisfaction by performing challenging work and exercising responsibility and authority in order to gain recognition from peers and bosses (Davis *et al.*, 1997; Donaldson and Davis, 1991). Therefore, the main objective of management is to improve on organizational performance (Donaldson and Davis, 1991). Contrary to the agency theory, stewardship theory replaces the lack of trust to which the agency theory refers with the respect for authority and inclination to ethical behaviour.

Stewardship theory places great importance on the role of management in protecting the interest of the shareholders. The effective management of the firm requires having skilled managers in place and also adopting appropriate governance processes. Such skilled managers are expected to maintain a certain level of professionalism and they may belong to professional bodies that have their own professional and ethical guidelines and codes of conduct that are relevant in achieving the effective governance of the organization. This environment of professionalism, when considered together with the presence of appropriate mandatory governance frameworks at the national level, provides an element of control in the organizational environment that

influences firm behavior consistent with owners' expectations (Christopher, 2010). The sociological, ethical and cultural values of the country in which these organizations are situated are also useful in determining the element of trust that can be placed with the management of organizations. These environmental influencing factors vary with countries and organizations and would in turn determine the type of governance monitoring and control mechanisms to be adopted. It is argued that in countries where there are sophisticated levels of governance regulations and strong professional and ethical guidelines, the costs of control mechanisms tend to be less giving room for flexibility to introduce more intrinsic and empowering processes as opposed to having extrinsic rewards and control processes (Christopher, 2010).

This theory indicates that a manager in favour of organizational interests outweighs those that are self-serving and that given a choice between the two, their behaviour will not deviate from the best interests of their organization. It is argued that even if the interests are misaligned between the two parties, the manager will still place a higher value on achieving organizational goals than personal gain (Donaldson and Davis, 1991; Davis *et al.*, 1997; Muth and Donaldson, 1998). Gay (2002) argues that considering that there is no conflict of interest between managers and owners, the main concern of both parties should be on identifying and creating an organizational structure that permits effective coordination to be achieved. Davis *et al.* (1997) further support this view by explaining that the performance of the steward is made effective by the structural situation in which they operate.

Stewardship theory therefore suggests that having managerial insiders or executive directors on the board has the tendency of strengthening board effectiveness. This is because management as stewards tends to have better knowledge and appreciation of issues impacting on the organization's

operations. Consequently, a board structure with more executive directors may lead to better decision-making and enhanced performance (Muth and Donaldson, 1998; Donaldson and Davis, 1991). The stewardship theory also recognizes the importance of giving the CEO free hand to operate in such a situation. Also, allowing the CEO to chair the board (i.e., CEO duality) may be more beneficial than having a different person chair the board. This is because, with the board system where the CEO also acts as chairman, the CEO would have greater flexibility to pursue the organization's objectives without hindrances from the board (Muth and Donaldson, 1998; Donaldson and Davis, 1991).

Considering the various scandals and reports of maleficence and cases of negligence by hospitals in recent times, stewardship theory does not seem to explain the governance practices in healthcare. Existing literature does not support the assertion of having majority insiders or executive directors on governing boards (Culica and Prezio, 2009; Ntim and Soobaroyen, 2013). In as much as managers can be trusted to seek the interest of the organisation according to the stewardship theory, the myriad of challenges facing the healthcare sector demands having in place a strong, independent, and well-functioning board to tackle and find solutions to these issues, and this cannot be left in the hands of insiders or executive directors. (See Yermack, 1996; John and Senbet, 1998). Therefore this study does not look at healthcare governance through the stewardship theory's point of view.

4.2.3 Institutional Theory

Institutional theory seeks to find explanation to how structures such as rules, norms, and routines become established in society and spread over time and even become authoritative guidelines for social behavior. Much of modern institutional theory arose from the work of Berger and Luckman (1967), who argue that social reality is a human construction created through interaction. The process by which actions are repeated and given similar meaning by self

and others is defined as institutionalization. Meyer and Rowan (1977) argue that modern societies have many institutionalized rules, which provide a framework for the creation and elaboration of formal organizations.

Institutional theory emphasizes on the idea that organizations are more than a means to produce goods and services – they are also social and cultural systems. It, therefore, suggests that organizations, and organizational actors, do not only seek to compete for resources, but they ultimately seek legitimacy (Suchman, 1995). It stands to reason that many of the environmental forces on organizations are not based on efficiency or effectiveness, but on social and cultural pressures to conform to a given structural form (Scott, 2001). According to Scott (1987), the concept of ‘institution’ generally refers to relatively enduring systems of social beliefs and socially organized practices associated with varying functional areas of societal systems such as religion, work, politics, laws, and regulations.

Scott (2001) shows three different levels of analysis used by institutional theory. At the first level, there are societal (and global) institutions, where models and menus are both formally proposed and informally enacted. These provide the institutional context: what is deemed possible, acceptable, and legitimate. Such institutions shape, constrain and facilitate structures and actions at lower levels. The second level looks at governance structures, which consists of the first of the three organizational fields (i.e., organizations operating in the same domain), and then of organizations themselves. The organizational level of analysis is also important as organizations vary by function, size, structure, culture, and capacity for change and they all influence, and are influenced by their organizational fields and institutional environments. At the third level, there are the actors in institutional settings who may be individuals or groups (Hartley *et al*, 2002) of which each level affects, and is affected by the forces of diffusion and imposition of institutional norms, while inventing new ways of operating and

negotiating the establishment of institutional norms (Scott, 2001). Thus, the reasoning behind institutional theory is that all social actors are seeking legitimacy, and/or reinventing legitimacy norms, within the institutional environment (North, 1990).

Davis (2005) argues from a sociological viewpoint that the most relevant and promising corporate governance research is the one that seeks to understand the institutional context in which it occurs. For instance, Deeg and Perez (2000) noted that the institutional dynamics within the European Union is contributing to the convergence of corporate governance practices there. Similarly, Groenwegen (2004) suggests that institutional economics is shifting its focus from firms and individuals to institutional environments to better explain corporate governance behaviour and results. According to Aguilera *et al.* (2006), giving some recognition to the idea that firms operate from within a given society and political tradition, which invariably influences decision-making within the firm, leads to the conceptualization of corporate governance as relationships within the firm and between the firm and its environment. It is argued that multiple institutions interact to influence the perceived legitimacy of corporate governance practices within a nation (Aguilera *et al.*, 2006). This is supported by the call by the OECD (2006) advocating for pluralism, adaptability and flexibility in corporate governance to suit peculiar requirements of individual countries. This indeed lends credence to cultural relativism, which argues that the standards of conduct vary with the norms and values of the host country; thence, there is no single moral standard, only local moral practice (Dellaportas *et al.*, 2005). Corporate governance practices afford various nations the necessary reputation and acceptance in the global economy, thus, neo-institutional theory is concerned with social legitimization processes and outcomes.

According to the institutional-linkage perspective, the primary role of the governing board is to link the hospital to its external environment (Pfeffer,

1973). It views the establishment of external environmental linkages as necessary for the procurement of inputs that organizations require to survive. Pfeffer (1972) observed that the size, composition, and function of hospital governing boards were related to the organizations' external resource needs. Prior research suggests that the structure of a hospital's governing board depends both on the institution's concern with the effective management of external linkages and its internal efficiency goals (Pfeffer, 1973; Kaufman *et al.*, 1979).

However this current study tackles the issue of external linkages using external directors and their connections and expertise as suggested by the resource dependency theory. Institutional theory is not used in this study because, to the best of the researcher's knowledge, there are no studies in healthcare governance in Ghana to draw comparisons on. Drawing from the definition of institutional theory as "Policy-making that emphasizes the formal and legal aspects of government structures"(Kraft public policy, 2007), there are no governance codes or legal framework for corporate governance in Ghana to contextualize this study, thus, this study is not hinged on institutional theory.

4.2.4 Managerialism Theory

The rather divergent views of who should or should not be on a governing board has received so much attention leading to the formulation of two important perspectives that offer varying explanations regarding the role of insiders on a governing board as explained by the managerial and agency theories. The managerialist perspective believes that having top-level management being part of the governing board enhances board decision-making and effectiveness. This perspective argues that informational advantages necessary to keep boards informed and capable of making sound decisions is provided when there is insider board participation (Molinari *et al.*, 1995). Molinari *et al.* (1995) continue to argue that boards need the

knowledge and information of top-level insiders who are involved in the day-to-day running of the firm to guide board members in operational decision-making and governance activities. Thus, insiders' knowledge and experience will afford the board the ability to monitor and govern the firm more effectively (Baysinger and Hoskisson, 1990).

Hospital boards typically include the CEO as well as medical staff members. The CEO on the board is expected to provide administrative information concerning the hospital, while the medical staff members keep the board well informed about the hospital's service and delivery issues (Molinari *et al.*, 1995). Other theorists like Eisenberg (1976), however, disagree with this position and indicate that insider board participation poses informational asymmetries that can lead to opportunistic board decision-making (Moe, 1984). The potential for opportunistic behavior through insider board participation is explained by the agency theory in the sense that insider board participation results in conflict of interest between management and shareholders, thereby seriously impeding the core responsibility of the governing board to protect the interest and wealth of shareholders (Fama and Jensen, 1983; Molinari *et al.*, 1995).

Medical staff representation on the board may include inside and outside physicians. Inside physician board members are physicians who are medical staff members of the particular hospital, whereas outside physician board members are physicians who are not staff members of the particular hospital. Molinari *et al.* (1995) suggest that medical staff members' knowledge regarding the clinical aspects of the hospital, as well as their ability to influence the board's decision-making through their voting privileges, is likely to lead to clinically and fiscally sound board decisions. Therefore, hospitals with medical staff participation on the board are expected to be more effective than those without medical staff participation. Also, in the case of hospital boards with medical staff participation, boards with voting medical

staff participation are more effective than those without voting medical staff representation. Thus, an effective hospital board is expected to include medical staff participation.

4.2.5 Stakeholder Theory

The broader determining factors affecting the governance of both private and public sector organizations are said to be indirectly attributable to the changing environment in which organizations operate. It is suggested that an important part of this changing environment involves an increased level of social obligations and third party interest in organizations, which extend the obligations from a single shareholder to multiple stakeholders. Freeman (1984) proposed stakeholder theory for the strategic management of organizations in the late twentieth century. Later from this period, this theory gained so much importance, with key works by Clarkson (1995), Donaldson and Preston (1995), Mitchell *et al.* (1997), Rowley (1997) and Frooman (1999) giving rise to greater theoretical depth and development. Thus, the theory evolved over the years and has been adopted by many organizations as a management tool (see Mainardes, *et al.* 2011). Other studies reiterate the need for organizations to go beyond the traditional pool of shareholders and consider new external stakeholders in legitimizing new forms of managerial understanding and action (Jonker and Foster, 2002). Until recently, hospital governance was mainly about managing structure and infrastructure, departments and divisions, but looking into the future, the main focus will be on the care requirements of the patient and the needs of other stakeholders (Eeckloo, *et al.*, 2004).

It is important that organizations, in satisfying all stakeholders of an organization, recognize the interest of these stakeholders and address them through appropriate strategies (Christopher, 2010). Stakeholder theory is in line with the evolution of corporate governance, whereby the concept was broadened to include not just shareholders, but all stakeholders of the

organization. This theory operates on the premise that managers will treat the interests of all stakeholders as if they have intrinsic value to the firm. It is also assumed that no one set of interests will dominate over another (Murphy and O'Donohoe, 2006; Jamali, 2008).

Some authors have provided insights to the various stakeholders and the increased pressures on corporations to respond to stakeholders. The organization's stakeholders may include workers, suppliers, clients, owners, and society who tend to have an interest in the operation of the organization (see Simmons 2004). According to Waddock *et al.* (2002), the pressure to reform stakeholder related practices was expected because of changing social trends and institutional expectations. Waddock *et al.* (2002) categorized these stakeholders as primary and secondary. The primary stakeholders include employees who are particular about where to work and customers who are also mindful of purchasing from responsible and socially conscious companies. Important secondary stakeholders include non-government organizations (NGOs), activists, communities and governments. The pressures from such secondary stakeholders were suggested as arising out of a growing concern for human rights standards, labour standards and environmental concerns. Berry and Rondinelli (1998) also suggest that stakeholder interests from governments, customers, employees and competitors are necessary to arrive at socially responsible decisions. Cobb *et al.* (2005) noted that there was a strong relationship between corporate governance and corporate social responsibility. It is argued these levels of stakeholder interests for corporate social responsibility predominantly existed in developed countries where such stakeholder rights were supported by strong government regulations and stringent legal liabilities for non-compliance (Christopher, 2010).

Stakeholder theory suggests that the composition of the board should consider representatives of all interested parties in order to ensure consensus

among stakeholders. The board is a mechanism for addressing conflicts and creating the necessary cohesion. The representation of all stakeholder groups on boards is, therefore, necessary for effective corporate governance (Donaldson and Preston, 1995). Luoma and Goodstein (1999) found that corporations were under increased pressure to include stakeholders such as suppliers, customers, employees and members of the public on their board of directors. They suggest that this pressure was in response to the need for corporations to deal more effectively with public and government scrutiny. They also suggest that the pressure was as a result of the adoption of statutes that gave the board the right to consider the interest of non-shareholder interests as well as the growing size and complexity of today's modern corporation. Donaldson and Preston (1995) as cited in Gay (2002) argue that there are three key aspects to the stakeholder theory: descriptive, instrumental and normative. The descriptive aspect aims to illustrate that the theoretical underpinnings of the theory correspond to reality. The next is the instrumental aspect which tries to show a link between the stakeholder theory and organizational performance. Finally, the normative aspect is concerned with the moral groundings of the stakeholder theory.

The stakeholder theory provides the basis for managers to understand the various needs of the extended stakeholder base and reconcile it with the various purposes of the organization. This enables them to maximize stakeholder value. Stakeholder theory addresses and recognizes that organizations have a myriad of stakeholders and then seeks to integrate their needs through the creation of multiple objectives. There are, however, differing definitions and views on who stakeholders really are, and also exactly which stakeholders' interests are most important and deserve the urgent attention of managers or board (see Mitchell *et.al*, 1997). It is argued that this theory is particularly important for developing and implementing adequate governance mechanisms and processes relative to the broader environmental influences and interdependencies of organizations with various internal and external stakeholders (Christopher, 2010).

Vincent-Jones *et al.* (2009) suggested that public participation initiatives in healthcare are considered part of a new trend in democratic societies towards an increased role for citizens and service-users in public services governance. Representation of community stakeholders on boards is essential and given the changes in the market, strategic thinking may be a critical activity. Therefore, board members are likely to support strategic activities that are compatible with their backgrounds and the interests of the populations they represent. In many communities, hospital boards are the only and most influential venue for local community leaders to affect healthcare decision-making (Alexander *et al.*, 2001). Hospital board members must therefore be seen as community advocates.

4.2.6 Resource Dependency Theory

The resource dependency theory assumes that organizations have some active roles to play in responding to external or environmental influences by focusing specifically on the availability of the necessary expertise and know-how within the organization to appropriately respond to these influences and sometimes agitations from the environment within which the organization operates (Fennell and Alexander, 1987; Hillman and Dalziel, 2003). The resource dependency theory posits that the ability of organizations to operate under an environment of complexity associated with its wider interdependencies is directly related to the quality and effectiveness of the directors who make up the board or its 'board capital' (Pfeffer, 1972; Pfeffer and Salancik, 1978; Boyd, 1990; Hillman *et al.* 2000). The board's human capital resources are accrued from the collective experience and expertise of board members, which includes insiders with knowledge of company strategy and operations. It also includes business experts with knowledge of corporate strategy, support specialist with knowledge of legal and regulatory affairs, community influential with knowledge, and relationships with external

stakeholders, including the government and local communities (Hillman *et al.*, 2000). It is, therefore, argued that firms are better off with large boards, as each new board member brings both expertise and access to resources. Having more board members would, therefore, provide the firm with greater expertise and access to resources. These resources could include access to markets, access to new and better technologies, and access to raw materials among other things (Beckman and Haunschild, 2002).

Bear *et al.* (2010) indicated in their study among other theories that the resource dependence theory provides a broad theoretical underpinnings for how board diversity and composition influence ratings for CSR and how, in turn, CSR influences corporate reputation. The resource dependence theory is said to offer the rationale for the board's function of providing critical resources to the firm including legitimacy, advice, and counsel (Hillman and Dalziel, 2003). In the same study, Hillman and Dalziel (2003) add that the ability of the board to perform their monitoring function will depend on having the appropriate mix of experience and capabilities to evaluate management and assess business strategies. These board resources offer the corporation support in understanding and responding to its environment (Boyd, 1990).

It is argued that firms are better off with large boards. Each new board member brings both expertise and access to resources. Having more board members would, therefore, provide the firm with greater expertise and access to resources. These resources could include access to markets, access to new and better technologies, and access to raw materials among other things. Large boards are more likely to contain directors with greater diversity in education and industry experience. This diversity allows the board members to provide management with high quality advice (Zahra and Pearce, 1989). According to Christopher (2010), directors must be equipped with the skills, knowledge and expertise to be able to build effective external relationships

and secure adequate resources to address the interest of these multiple stakeholders and wider environmental impacts under current operating condition. Prior studies indicate a positive correlation between board capital and firm performance (Pfeffer, 1972; Boyd, 1990; Dalton *et al.*, 1999). Others (see Daily *et al.*, 2003; Johnson *et al.*, 1996; Singh *et al.*, 1986; Hillman *et al.*, 2000) show that directors who bring value or resources to an organization are able to improve the effective operation of an organization, and therefore, enhance organizational performance and prospects for survival. Pfeffer and Salancik (1978) and Zahra and Pearce (1989) saw the service role of directors as enhancing the company reputation, establishing contacts with the external environment and serving as council to executives.

The resource dependence approach, developed by Pfeffer (1972), and Pfeffer and Salancik (1978), emphasizes that external directors enhance the ability of a firm to protect itself against the external environment, reduce uncertainty, and/or co-opt resources that increase the firm's ability to raise funds or increase its status and recognition. It is also argued that a board composed of influential members from the organization's external environment performs a boundary-spanning function that absorbs uncertainty, reduces operational dependencies, exchanges information, represents the organization to external stakeholders, and enhances overall performance (Middleton, 1987). Firms attempt to reduce the uncertainty of outside influences to ensure the availability of resources necessary for their survival and development. The board is, hence, seen as one of a number of instruments that may facilitate access to resources critical for company success. There are four primary types of broadly defined resources provided by boards of directors. These are: (1) advice, counsel, and know-how; (2) legitimacy and reputation; (3) channels for communicating information between external organizations and the firm; and (4) preferential access to commitments or support from important actors outside the firm (Pfeffer and Salancik, 1978).

In the case of hospitals, the resource dependency theory may also explain the relevance of having medical staff on the hospital board. The hospital board typically includes medical staff members who are expected to keep the board informed about the hospital's service and delivery issues (Medical Leadership Forum, 1992). Considering the increasingly complex environment in which organizations operate and an increasingly competitive environment, there seem to be the need for skilled directors to steer organization in the right direction. The resource dependency theory also has obvious implications for the size, diversity, and composition of boards of directors and implications for the selection and profile of senior managers and the consequent governance processes in the furtherance of effective governance (Christopher, 2010). Thus, the impact of such a high quality board of directors is an improvement in the entire efficiency of the organization, thus minimizing cost (Williamson, 1984).

In view of the complexity of the issues confronting the healthcare sector, healthcare governance can best be understood and adequately investigated when looked at under the lenses of multi-theoretical stances.

4.3 Conceptual Framework

Following the discussion of the extant literature, this study pulls together the issues raised in a multi-theoretical framework as illustrated in Figure 4.1 to guide the empirical investigation. The constructed framework shows the relevant theoretical stances in explaining the governance of organizations, especially hospitals. Managerialism theory, stakeholder theory, and resource dependency theory tend to provide better explanation to the effects of hospital governance and ownership structure on performance and therefore, this study focuses on these three theoretical perspectives. The following is a discussion of the main tenets of each of these selected theories.

Managerialism theory argues for the need to have top-level management as part of the board, since that enhances board decision-making and effectiveness. This theory argues that because management is involved in the daily operation of the organization, they are capable of providing adequate and useful information to guide the board in its work. Hospital boards should typically include the CEO and inside medical staff members who are expected to provide administrative information concerning the hospital and also keep the board well informed about issues regarding the hospital's service delivery (Molinari *et al.*, 1995). Stakeholder theory suggests a good representation of all the stakeholders of organization on the board to ensure its effective functioning and the composition of the board should consider representatives of all interested parties, in order to ensure consensus among stakeholders. The theory indicates that representation of all stakeholder groups on boards is, therefore, necessary for effective governance of the organization. Hospitals are likely to have board with representations from several stakeholder groups (Eeckloo *et al.*, 2004; Christopher, 2010).

Resource dependency theory also suggests the relevance of board members in terms of the skill, knowledge and expertise they bring to bear in order to build effective external relationships and secure adequate resources for the operation of the organization and to address the interest of the multiple stakeholders. One way to attain this is by having outside board members. The theory suggests the need for a wider board because each board member brings expertise and access to resources. Also, larger boards tend to have directors with greater diversity in experience and management could benefit from such diversity in the form of quality advice. Hospitals tend to have board members from diverse background and expertise. Proponents of the resource dependence theory argue that external directors enhance the ability of an organization to protect itself against the external environment, reduce uncertainty, or co-opt resources that increase the organization's ability to raise funds or increase its status and recognition (see Pfeffer, 1972; Pfeffer and Salancik, 1978; Middleton, 1987).

The extant literature also indicates that the performance of hospitals is explained by their governing board characteristics (i.e., board size, board composition, board participation by medical staff, board leadership structure, board diversity, and frequency of board meetings), their ownership structure, and standard control factors (i.e., age, size, location). These board characteristics flow from the relevant theoretical stances. Board size is related to the stakeholder theory and resource dependency theory, which suggest the need for large board size to enhance performance. However, recent thinking is leaning towards small boards because they are said to be more efficient than larger ones. Smaller hospital boards tend to focus more on their role within the system and recent empirical studies support the view that higher performing hospitals have smaller board size (Gu *et al.*, 2010; Büchner, 2012).

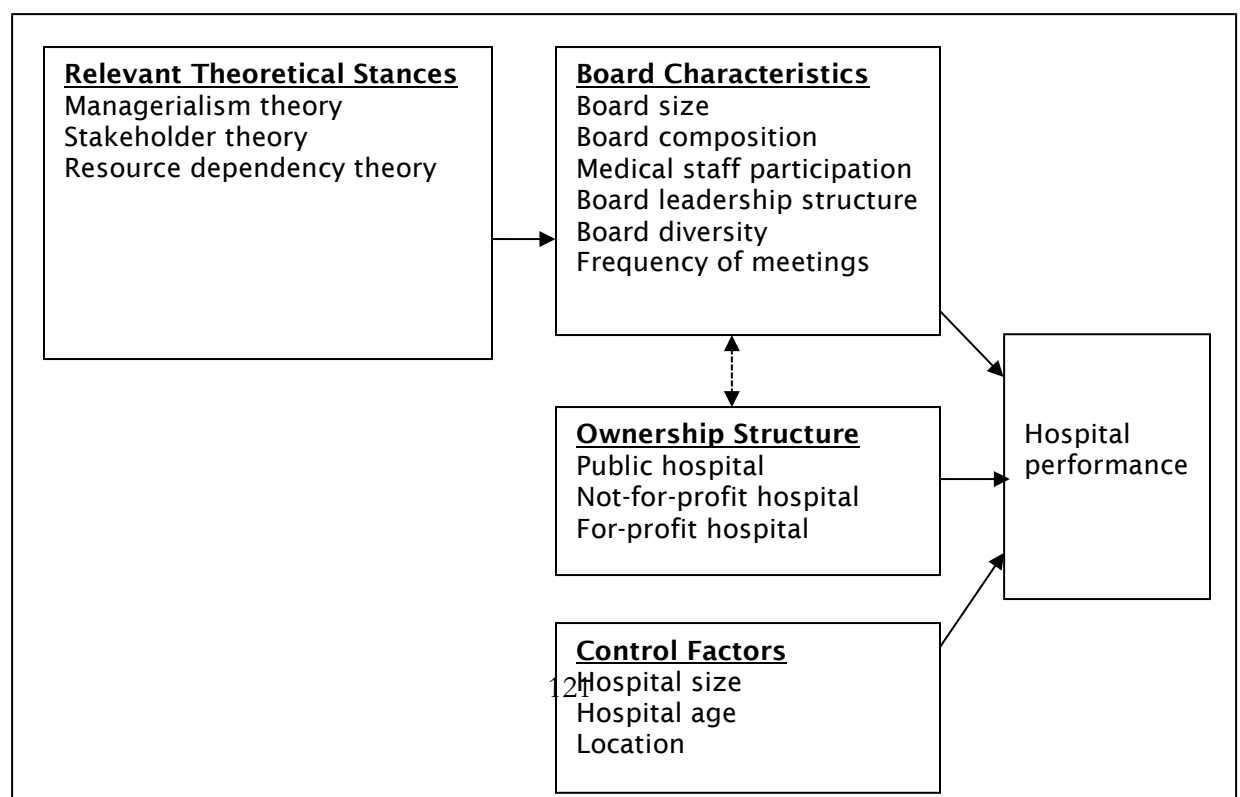
Board composition is explained by the managerialism theory, and resource dependency theory. Managerialism proposes that inside directors are in a better position than outside directors to motivate managers in order to enhance performance. Inside management tend to have better insights about the operation of the hospital and therefore are in a better position to drive performance. The resource dependence theory supports this, by arguing that external directors enhance the ability of an organization to protect itself against the external environment, reduce uncertainty, or attract more resources and thereby increases its performance. Board participation by medical staff is linked to both the managerialism and resource dependency theory. Hospitals are said to benefit from involving inside or outside physicians as this leads to enhanced performance. Apart from the operational knowledge they bring to bear, medical staff can refer their private practice patients to the hospital, thereby serving as patient referral links. Also, outside physician board members help to keep hospital boards informed regarding developments in patient care and practices.

The literature suggests that a board leadership structure where the CEO also acts as chairperson may lead to conflict of interest among the leadership. Therefore, a board where the CEO's role is separated from that of the board chairperson is preferred. Stakeholder theory argues that CEO duality hinders the overall stakeholder orientation of board members. Therefore, separating the role of the CEO and board chair may lead to improvement in the board's monitoring and control, and therefore enhance performance. Board diversity may also flow from the resource dependency theory based on the experiences and perspectives women bring to bear in boardroom discussions. Diversity on the hospital board is important in order to increase effectiveness and competitiveness as suggested that having a diverse board with female representation result in improved performance. Diversity in terms of gender could also indicate the hospital's way of reflecting its consumers/patients and the community it serves and this can be explained by the stakeholder theory. Hospital boards are said to recruit the most talented, dedicated, and accomplished people, and increasingly those people tend to be women with different perspectives, experiences, social network relationships, and problem-solving approaches. Frequency of board meetings is also identified as an important board characteristic since it ensures that the board receives relevant information on the hospital to enable it to make useful decisions that will enhance performance. Frequency of board meetings can be explained by the resource dependency theory, in the sense that, by having relevant information on regular basis, board members are better informed to contribute positively to the operations of the hospital and also assist in providing relevant resources to the hospital.

It is crucial therefore, to note that although individual theories have generally been useful in explaining some motivations for corporate governance practices and structures, they have been limited in their individual ability to fully explain the various motivations influencing different governance structures (see Christopher, 2010; Chen and Roberts, 2010; Ntim and Soobaroyen, 2012). This study examines how the hospital board

characteristics affect performance, and given that the various hospitals board characteristics are explained by managerialism theory, stakeholder theory, and resource dependency theory, it is appropriate to adopt a multi-theoretical approach. From the discussion on how the different theoretical stances underpin the relevance of the various hospital board characteristics, it is shown that no one individual theory adequately explains the hospital governance characteristics. Considering the limitations with each of these theoretical stances, adopting a multi-theoretical framework is useful as illustrated in prior studies (see Christopher, 2010; Chen and Roberts, 2010; Ntim and Soobaroyen, 2012). Using a multi-theoretical framework is even more relevant for understanding the governance structures of hospitals, considering the complexities of issues in healthcare governance. Therefore, this study adopts a combined or multi-theoretical framework as it provides a stronger basis for explaining the effects of healthcare governance and ownership structure on the performance of hospitals within the Ghanaian context.

Figure 4.1: Multi-Theoretical Framework for Healthcare Governance, Ownership and Performance



Source: constructed by author

In terms of hospital ownership structure, it is expected (as shown in Figure 4.1) that the different ownership forms may exhibit variations in performance given the differences in the hospitals' objectives and mission. It is also expected that the various ownership forms can interact with hospital board characteristic in order to influence performance of the hospitals. With respect to the control variables, it is expected that smaller and older hospitals may perform better than their larger and younger counterparts. Also, hospitals located in the urban centres are more likely to perform better than those located outside the urban communities. The literature points to the fact that, the performance of hospital could be influenced by the adoption of good hospital governance structures. It may also depend on the hospitals' ownership structure and other control factors.

4.4 Hypotheses Formulation

This chapter provides a framework for analyzing the effects of hospital governing boards, ownership structure, and control factors on the performance of hospitals. The extant literature suggests that the performance of hospitals is influenced by the presence of hospital board. Hospital performance is also explained by hospital board characteristics, hospital ownership structure, and other control variables. In the light of the above discussions, a number of specific hypotheses are formulated to test the effects of the presence of hospital board, board characteristics, ownership structure, and control factors on the performance of hospitals.

4.4.1 Presence of Hospital Board

The presence of hospital board is very important in affecting the performance of hospitals. Hospital governance is said to be the process of steering the overall functioning and effective performance of a hospital by defining its mission, setting objectives and having them realized at the operational level (Flynn, 2002; Eeckloo *et al.*, 2004). Hospital boards serve as an important component of healthcare governance and they play a crucial role in the healthcare delivery system. The hospital board is accountable for the overall performance of the hospital and also contributes in shaping the health facility they represent. Their functions include fundraising, establishing operating procedures, enlisting the support of others, budgeting and fiscal control, and balancing the organization with differing viewpoints (Fenn, 1971). They act as policy makers, focusing on establishing mission and a strategic direction for the hospital; others assume the role of boundary spanners, focusing on building and maintaining relations with key external constituencies and fundraising; while still others devote much of their time and attention to overseeing the performance of the hospital and its management team (Widmer, 1993).

The hospital board also plays an important role in providing service quality. According to Lister (2006), the board has a key role in establishing policies and guidelines that help to drive the quality transformation process. The board ensures that the clinical and organizational initiatives in place to enhance quality and safety are ongoing processes and involve long-term effort to improve services and healthcare outcomes (Braithwaite, 2008) and move the quality agenda forward (Becker 2006; Pomey *et al.*, 2008). Sandrick (2007) suggests that, the board should serve as the driving force behind all quality and safety efforts in the organization. Based on the discussion on the importance of hospital board in influencing performance, it is hypothesized that:

H_{1a}: The presence of hospital board is related to higher performance.

H_{1b} : *The presence of hospital board is related to lower performance.*

4.4.2 Board Size

Board size is the number of board members on the hospital board. The size of the hospital board is said to affect the performance of the hospital. Some researchers (see de Andrés-Alonso *et al.*, 2009) believe that larger boards are capable of delivering better performance. This is believed to be accounted for by the increased range of expertise larger boards present in reaching decisions. Also, larger boards make it difficult for powerful CEOs to have their way. Zahra and Pearce (1989) for instance argue that board size is said to be associated with a wide range of expertise on the board and the breadth of participation in decision-making. This position is based on the resource dependency theory which seems to suggest the availability of skill, knowledge and expertise they bring to bear in order to build effective external relationships and secure adequate resources for the operation of the organization found within larger boards (Christopher, 2010). The stakeholders theory also points to need to consider all interested parties in the constituting the board to ensure representativeness (Donaldson and Preston, 1995).

It is, however, argued that larger boards are detrimental to performance. Lipton and Lorsch (1992) for instance suggest that large boards tend to reduce effectiveness, thereby allowing powerful CEOs to exert some level of control. In examining whether the size and occupational configuration of hospital governing boards were related to the institutions' efficiency and quality of care, Kaufman *et al.* (1979) found that larger boards were associated with higher costs. In the view of Jensen (1993), maintaining small boards can help improve their performance and that larger boards are less likely to function effectively. The argument is that larger boards are said to increase coordination costs and free-rider problems. Smaller boards are therefore preferred. Baysinger and Butler (1985) and Kosnik (1990) explain

that accountability by directors is increased with smaller boards. In examining the governance structures of healthcare organizations as reported by healthcare leaders, Delbecq and Gill (1988) found that large boards are not appropriate for the purpose of developing timely and strategic policies. Bader (1991) found that boards are able to function better when they have a workable board size and that the health system works best with lean governing boards having the average of seven to ten members. Gu *et al.* (2010) found that higher performing hospitals tended to have smaller boards. In her study of German hospitals, Büchner (2012) observed that board size should not exceed a critical threshold, because a large board might delay decisions, thus adversely affect performance. A small board size ensures that the board members focus more on their role within the hospital system, thus, it is hypothesized that:

H_{2a}: Larger Board size is associated with lower hospital performance.

H_{2b}: Larger Board size is associated with higher hospital performance.

4.4.3 Board Composition

Board composition is the percentage of outsiders on the hospital board. The issue is whether to rely on more outside (or more inside directors). The argument in support of having inside directors is that, they are familiar with activities of the organization and serve as monitors to top management. Jermias (2007) suggests that board independence has a negative effect on innovative efforts and performance. His finding agrees with the theory of managerialism, which posits that inside directors are able to motivate managers better than outside directors to undertake profitable projects because they have superior access to firms' specific information. Others such as Delbecq and Gill (1988) and Molinari *et al.* (1993) argue that having a high proportion of directors with business-related occupations enables the board to receive up-to-date operational information and financial and strategic expertise.

Other studies (see Jensen, 1993; Yermack, 1996), however, seem to suggest that, outside directors are rather active in influencing performance. Having a high proportion of non-executive directors is likely to increase the independence of the board and this provides a better forum for decision-making. It is also believed that board-monitoring quality will be stronger with more external or non-executive directors. Fama and Jensen (1983) suggest that board members especially outside directors have the incentive to develop reputations as experts in corporate decision-making, and this aspiration commits them into making quality decisions. Generally, the board is said to be more independent when it has a higher percentage of outside directors.

Some researchers have pointed to the important role of outside directors in monitoring and advising, both of which have the tendency of enhancing performance (Byrd and Hickman, 1992; Brickley *et al.*, 1994). Baysinger and Hoskisson (1990), and Gautam and Goodstein (1996) explain that outside directors are necessary to adequately monitor top management's performance. Dalton *et al.*, (1999) argue that, the independence of directors is an essential requirement for board effectiveness. Others such as Conger *et al.* (2001) and Ibrahim *et al.* (2007) show that, inside directors' work for the CEO and therefore, are reluctant to oppose and challenge strategic proposals of the CEO. This has the tendency of adversely affecting performance. On the other hand, increasing the number of outside directors on the board, result in enhanced board effectiveness and better performance of the organization they govern. Board composition enhances board monitoring and effectiveness, which could lead to improved performance. Therefore, it is hypothesized that:

H_{3a}: A board composed of a higher proportion of outsiders is related to higher performance.

H_{3b} : *A board composed of a higher proportion of outsiders is related to lower performance.*

4.4.4 Board Participation by Medical Staff

The participation by medical staff on the hospital board is also important in influencing performance. From the theoretical viewpoints of managerialism and resource dependency, hospitals benefit from involving inside or outside physicians in their governance structures. Apart from technical/ operational knowledge of the hospital, medical staff can also serve as patient referral links. Equally so, outside physician board members inform board members about patient care issues and practices. Both theories provide reasonable explanations underlying the enhanced hospital performance of boards with inside or outside physician participation (Molinari *et al.*, 1995). It is argued that participation of medical staff on the board is important in reducing potential conflict between the goals of the system and those of the medical groups and this may align the interests of the organization and affiliated physicians. Also, having medical staff being represented on the board enables members gain necessary information about the internal efficiency of the hospital (Young *et al.*, 1992; Alexander *et al.*, 1995). Medical personnel are usually interested in delivering quality healthcare and therefore their presence on the hospital board should enhance quality healthcare (Gardner, 1992; Gautam and Goodstein, 1996). Ibrahim *et al.* (2007) also argue that board members with healthcare background are more interested in the immediate need to deliver quality services. Shortell and LoGerfo (1981) found that medical staff board participation improves hospital quality outcomes such as surgical mortality rates.

Prior studies have shown that hospitals with medical staff participation on the hospital board tend to exhibit better performance (see Molinari *et al.*, 1993; Molinari *et al.*, 1995; Goes and Zhan, 1995; Prybil, 2006; Gu *et al.*, 2010).

Goes and Zhan (1995) also observed an improvement in hospital performance when physicians are members of the board of directors of the hospital. In a study of hospitals in California by Molinari *et al.* (1993), they found that medical staff board participation has a significantly greater influence on hospital performance. They also indicated that medical personnel on the board were given voting privileges that had greater influence on the performance of the hospital as compared to non-voting medical participation. In their other study, Molinari *et al.* (1995) found that participation of physicians on the hospital board has a significantly positive effect on hospital operating margin. They explain that physician involvement in hospital governance results in positive benefits to the hospital. Prybil (2006) also found that high performing hospitals had a greater proportion of medical staff voting members. Gu *et al.* (2010) confirmed in their study that hospitals that have greater percentage of physicians on the hospital board tend to show higher performance. However, others hold a contrary view on the relevance of involving physicians on hospital boards. This practice is criticized on the basis that there could be a potential conflict of interest for physician board members. In recent times, when hospitals develop more closely aligned economic relationships with some or all of the staff, the traditional, representational approach of selecting physician board members are coming into irreconcilable conflict (www.greatboards.org). Therefore, it is hypothesized that:

*H_{4a}: A board consisting of a higher proportion of medical staff
is associated with higher hospital performance.*

*H_{4b}: A board consisting of a higher proportion of medical staff
is associated with lower hospital performance.*

4.4.5 Board Leadership Structure

Board leadership structure also influences hospital performance. The board leadership structure or CEO duality is looked at in terms of the position of the CEO on the hospital board. The hospital board typology may be such that the CEO also serves as the chairman of the board or it may be such that two different persons occupy the positions of CEO and board chair. McDonagh *et al.* (2006) explain that the CEO plays a unique role, as he represents both management and governance, which makes the issue of leading the board even more critical. They suggest that the CEO's important role helps in attaining good board performance. Shivdasani and Yermack (1999) suggest that the presence of the CEO on key committees is likely to increase board monitoring. Orlikoff (2005) argues that the CEO has a greater responsibility on his shoulders in ensuring a cordial relationship with the board considering the challenges healthcare boards face currently. Orlikoff describes the board as a very complicated one in the sense that the CEO plays a dual role: both leading and reporting to the board. The board is composed of many unique individuals; some boards interact as partners and leaders, while others as followers. This variation and complexity requires skilled leadership in order to bring about the board's effectiveness. This is supported by the managerialism theory, which recognizes the role of the CEO in the daily running of the hospital and the need to be part of the hospital board. This is important for the board to receive regular updates on operational and administrative issues to be able to take well-informed decisions.

The question, therefore, is whether the CEO should equally serve as the board chair or the positions of CEO and chairperson are decoupled. The extant literature recommends a board leadership structure where two different people perform the roles of the CEO and board chairman and this has the tendency of enhancing board effectiveness, while CEO board duality adversely affects performance. The stakeholder theory supports the view that, for the interest of all various stakeholder of the hospital to be properly addressed, there must be separate people occupying the position of the chair of the board, and the position of the CEO (Donaldson and Preston, 1995). The

separation of the two roles is also considered as good governance practice (Taylor, 2000; Christopher, 2010). However, this position is not supported by some studies like Rechner and Dalton (1991), who found that firms with CEO duality have stronger financial performance relative to other firms supporting the position is what the stewardship theory postulates. Therefore, it is hypothesized that:

H_{5a} : *Board leadership structure adversely affects hospital performance.*

H_{5b} : *Board leadership structure improves hospital performance.*

4.4.6 Board Diversity

Board diversity has been identified as an important determinant of performance with a number of studies suggesting that it can improve governance, performance and disclosure (Carter *et al.*, 2003; Barako and Brown, 2008). Board diversity is broadly defined to include the various attributes that may be represented among directors in the boardroom in relation to board decision-making (see Van der Walt and Ingley, 2003). They grouped these attributes as those that are directly observable (age, gender, ethnicity, and nationality) and those that are less visible (religion, education and occupation) (see Mahadeo *et al.*, 2012).

In this study, board diversity is defined as the proportion of women on a hospital's board. Available literature suggests that firms would benefit by engaging women on their boards of directors (Burke 1994; Burke, 1997). Pearce and Zahra (1991) for instance noted that a representation of diverse interests, including the number of female and minority members, was an important characteristic of an effective board. According to Bilimoria (2000), having women on boards is desirable business practice because it is likely to

improve the reputation on the firm, the strategic direction (by better understanding women's issues that may impact on such direction) and also contribute positively to the firm's female employees. Siciliano (1996) reports that, boards with increased gender diversity are more likely to enjoy high levels of social agency mission achievement. Burke (1997) found a significantly positive relationship between the number of females on boards and revenue and profit margins. Singh *et al.* (2001) also found that boards with female directors could be associated with higher revenue and profitability. This position is supported by another study by Carter *et al.* (2003) who found a positive relationship between board diversity and firm value.

The importance of having women on hospital boards has gained so much recognition in recent times. Most hospital boards normally would like to employ the most talented, dedicated, and accomplished people, and increasingly these people are found to be women and people of colour with different perspectives, experiences, social network relationships, and problem-solving approaches. This increases the diversity of their boards and, hence, hospital governance (and for that matter, hospital management), which many recognize as not simply a moral or social issue, but also a question of effectiveness and competitiveness (Galindo, 2006). Elstad and Ladegard (2010) argue that the higher the proportion of females on the board, the greater the level of perceived influence, perceived social interaction outside the boardroom, and to some degree, perceived information sharing. Governance experts caution against representational governance; so that if a woman is selected to be a member of a board it should be based on her qualifications and competence like all other board members, and not be based on her gender (www.greatboards.org). It should therefore be expected that boards with diverse gender background will improve board independence and enhance managerial monitoring and subsequently improve performance. Thus, the hypotheses are that:

H_{6a} : *Board diversity on the basis of the proportion of female representation is associated with higher hospital performance.*

H_{6b} : *Board diversity on the basis of the proportion of female representation is associated with lower hospital performance.*

4.4.7 Frequency of Board Meetings

The frequency of board meetings has been identified as an important determinant of performance. Board meetings are useful for the board to receive important information that helps it evaluate the performance of the firm through these meetings. A board's authority is exhibited in the number of times it meets (Eckloo *et al.*, 2004). This means a board cannot be called a board with the mandate to make decisions and take action, when it is not meeting. In differentiating between good and great boards, it was concluded that exceptional boards make meetings matter (Board Source, 2005). It stands to reason that frequent board meetings are important to ensure the board's effectiveness.

Previous studies have found a positive relationship between number of board meetings and performance. For instance, Lipton and Lorsch (1992) found that most directors face the problem of lack of time to carry out their duties, and that board meeting time is an important resource in improving the effectiveness of a board. This position is supported by Vafeas (1999) who also suggests that frequent meeting is an important dimension of an effective board as operating performance of firms improves following years of increased board meetings. Culica and Prezio (2009), however, found that boards that met less than six times a year had higher marginal profit on average over three years than hospitals whose boards met more than 12 times every year. This means meeting between 7-12 times was associated with lower financial performance than having six or less meetings, but still

significantly higher than the hospitals whose boards met more than once per month. Thus, holding a board meeting almost every month or more often was not a good method to increase performance. This finding could be explained by the reason that having meetings spaced out allowed for more time to get information in advance and prepare for meetings to improve organizational performance. The issue is whether the frequency of board meeting improves performance. It is therefore, hypothesized that:

H_{7a}: The frequency of board meetings is associated with higher hospital performance.

H_{7b}: The frequency of board meetings is associated with lower hospital performance.

4.4.8 Hospital Ownership Structure

The strategic focus of the hospital will have implications for performance. For-profits organizations have well-defined control rights, and they have strong incentive to invest in innovations, but they may over-emphasize cost control at the expense of non-contractible quality (Hart, 1995). For-profit organizations are presumably the most market oriented providers and would have higher incentives to introduce new services and technologies that attract more consumers (Banaszak-Holl *et al.*, 1996). Government-owned providers lack clear control rights to implement changes on the other hand, and this constraint softens incentives for innovations. Not-for-profit firms have an objective function of maximizing quality, quantity and/or prestige (Newhouse 1970), as well as maximizing net revenue (Lakdawalla and Philipson, 1998), helping to fulfill demand for local public goods (Weisbrod, 1988) or meet unmet need in the community (Frank and Salkever, 1991); or maximizing the well-being of specific important constituencies, such as the medical staff (Pauly and Redisch, 1973) or consumers (Ben-Ner and Gui, 1993).

Private hospitals have greater strategic flexibility, higher environmental sensitivity and higher demand for promoting market status (Goes and Park 1997). Private hospitals do not have financial support from the government; hence, they have higher residual claimants to provide incentives for profit and further development (Kimberly and Evanisko, 1981; Young *et al.*, 2001). Public hospitals on the other hand have the financial support of the government and have to take numerous policy-related responsibilities into consideration. Therefore, they tend to adopt a conservative and stable policy (Milgrom and Roberts, 1992). Price (1992) suggests that a high level of bureaucracy and lack of rapid reaction to market conditions lowers public hospitals' innovation in healthcare.

Rajshkha *et al.* (1991) suggest that private hospitals are wholly responsible for organizational performance in a competitive environment; hence; they adopt or extend new medical technology proactively. Molinari *et al.* (1995) found that, for-profit chains had higher margins only for 1985. The steep recession for California hospitals during the latter 1980's are negatively impacting margins for all ownership hospital types. Barros (2003) compared two hospitals and found that private hospital performed better than the public hospital. Weng *et al.* (2011) also found that private hospitals perform better than public hospitals. In this study, hospital ownership is defined in terms of not-for-profit hospitals (mission-based) hospitals, for-profit (private hospitals), and public hospitals. It is hypothesized that:

H_{8a} : *Not-for-profit (mission) and for-profit (private) hospitals perform better than public hospitals.*

H_{8b} : *Not-for-profit (mission) and for-profit (private) hospitals exhibit lower performance than public hospitals.*

4.4.9 Interaction Effects of Hospital Board Characteristics and Ownership

Interaction effect looks at the effect of a combination of related features (independent variables). It is the combined effect of two treatment variables coupled with the individual main effects (Hair *et al.*, 2009). This means that the impact of the independent variables on the dependent variable is moderated by a third variable (the product term of the independent variables) (see Aiken and West, 1991; Jaccard and Turrisi, 2003). It is clear from the extant literature that board characteristics and ownership structure are important in influencing the performance of hospitals. Though prior studies considered board characteristics and ownership structure as separate independent factors affecting performance, intuitively, it is expected that interacting these variables may have more significant effect on performance. The effects of board characteristics on hospital performance may be different under various ownership forms. In this study, board characteristics include board size, board composition, board participation by medical staff, board leadership structure, board diversity, and frequency of board meetings. Ownership structure in this study is a categorical variable, which consists of public hospitals, mission-based (not-for-profit) hospitals and private (for-profit) hospitals where public hospitals is considered the reference point. Therefore, using public hospitals as the reference point, it is hypothesized that:

H_{9a} : *The interactions of mission-based and private hospitals with board characteristics yield better hospital performance than public hospitals.*

H_{9b} : *The interactions of mission-based and private hospitals with board characteristics yield lower hospital performance than public*

hospitals.

4.5 Chapter Summary

This chapter discussed the various governance theories with the justification for not basing this study on some of these theories. The conceptual framework, which shows how the relevant theoretical considerations, including managerialism theory, stakeholder theory, and resource dependency theory explain hospital governance was also discussed. The managerialism theory argues for the need to have top-level management as part of the board since that enhances board decision-making and effectiveness. This theory argues that because management is involved in the daily operation of the organization, they are capable of providing adequate and useful information to guide the board in its work. Hospital boards should typically include the CEO and inside medical staff members who are expected to provide administrative information concerning the hospital and also keep the board well informed about issues regarding the hospital's service delivery. The stakeholder theory suggests a good representation of all the stakeholders of organization on the board to ensure its effective functioning and the composition of the board should consider representatives of all interested parties in order to ensure consensus among stakeholders. The theory indicates that representation of all stakeholder groups on boards is, therefore, necessary for effective governance of the organization. Hospitals are likely to have board with representations from several stakeholder groups. The resource dependency theory also suggests the relevance of board members in terms of the skill, knowledge and expertise they bring to bear in order to build effective external relationships and secure adequate resources for the operation of the organization and to address the interest of the multiple stakeholders. The theory suggests the need for a wider board because each board member brings expertise and access to resources. Also, larger boards tend to have directors with greater diversity in experience and management could benefit from such diversity in the form of quality advice.

Hospitals tend to have board members from diverse background and expertise.

The conceptual framework shows how these theories inform hospital board characteristics and subsequently on performance. The chapter also explain how the hypotheses and alternative hypotheses are developed to guide the empirical investigations. The hypotheses are specifically based on how the presence of hospital board, hospital board characteristics (i.e., board size, board composition, medical staff participation board leadership structure board diversity, and frequency of meetings), and ownership structure, influence the performance of hospitals. It is however to be noted that the reverse of the equation could also happen. In this case the governance structure and ownership forms are determined by how well or worse a hospital performs. Thus, there is an element of endogeneity in all the hypotheses formulated. However this does not pose a problem in this study because the issue of endogeneity is particularly relevant in the context of time series analysis of causal processes (Greene, 2002). This study examines the association of hospital performance with governance characteristics and ownership structure in the midst of some control variables, and not necessarily causal effect between these variables.

The main objective of this study is, therefore, to examine the effects of healthcare governing boards and ownership structure on the performance of hospitals from the perspective of a developing country like Ghana, which have been excluded in prior empirical studies. The next chapter describes the methodology adopted in this study.

Chapter 5

Methodology

5.1 Introduction

Chapter five discusses and describes the methodology used in this study. This study employs a quantitative research design in its data collection and analysis. The method of data analysis used in this study involves the use of multiple regression models in investigating the effects of healthcare

governance and ownership on the performance of hospitals in Ghana. This chapter includes the philosophical paradigm and justification for adopting quantitative research. The chapter explains the type of study conducted, the population and data source for the study, the data used in the study, and the sampling procedure. It also discusses issues of validity and reliability of the data, and the method used in analyzing the data. The ethical issues are also discussed in this chapter.

5.2 Philosophical Paradigm and Justification.

Philosophical paradigm deals with the belief or worldview about the way data on a phenomenon should be gathered and analyzed (Levin 1988). This study is based on the positivistic paradigm (also known as, experimentalist or traditionalist), which assumes that the world is external and independent of the researcher. Positivism is a philosophy of science based on the view that in the social as well as natural sciences, data derived from sensory experience, and logical and mathematical treatments of such data, are together the exclusive source of all authoritative knowledge (Burrell and Morgan, 1988).

Positivists are of the view that reality is stable and can actually be looked at and described from an objective and detached point without necessarily interfering with the phenomena being studied (Levin, 1988). This often involves manipulation of reality with variations in only a single independent variable so as to identify regularities in, and to form relationships between, some of the constituent elements of the social world. The approach of positivism to the social world in social research is basically about combining deductive logic with empirical and mainly quantitative methods in order to seek generally applying regularities. Positivism focuses on measurement and depends on facts to discover social phenomena and relationships. Hypotheses testing and measurements are elements of this method of research (Payne and Payne, 2004). Interpretivism on the other hand shares the view that social science cannot be adequately studied using methods and tools in the natural

sciences. This is because a research procedure should reflect the distinctiveness of humans against the natural order (Bryman, 2012).

The study into healthcare governance, ownership structure, and performance of hospitals in Ghana was fundamentally motivated by the extant literature on general issues of corporate governance and its relationship with performance of firms and corporations. This subsequently resulted in the concept of corporate governance being incorporated into the healthcare sector due to rising concerns in the management and performance of healthcare institutions. The existence of several theories on corporate and healthcare governance was also a push factor for formulating hypotheses (based on the theories) that were tested in the conduct of this study (positivist), rather than conducting the study based on personal experiences or observations of the actors to determine reality and build theories (interpretive), as described by Lofland and Lofland (1995), and Bryman (2012). This study sought to explain behavior in the healthcare sector (i.e., performance), which is a major positivist approach, and not necessarily to understand the behavior (hospital performance) as propagated by interpretivists.

This study lends itself to the nomothetic approach to social science research, which focuses on the systematic protocols and techniques. It focuses on the process of testing hypotheses and is based on the construction of scientific tests and the use of quantitative techniques for analyzing data. The nomothetic methodology also comprises of tools such as surveys, questionnaires, personality tests and standardized research instruments (Burrell and Morgan, 1988). The justification for adopting a quantitative method in this study stems from the fact that it provides a framework for addressing the relationships among variables involved in the study. The use of quantitative research design is useful for dealing with a cause and effect relationship. The assumption is that there is a 'reality' out there worth investigating, and would involve searching for regularities and relationships

between its composing elements. This study is equally based on the assumption that there are some factors within the hospital that contribute to the performance of the hospital (Burrell and Morgan, 1988).

This study employs the use of the survey strategy and questionnaires for gathering and analysing the data to address its objectives. This is due to the large sample size of this study and is built on the basic positivist assumption that hypothesised regularities can be verified by an adequate experimental research program or falsified. Also, using a survey strategy gives the researcher more control over the research process and when sampling is used, it is possible to generate findings that are representative of the whole population (Saunders *et al.*, 2007). The philosophical approach adopted in this study was useful in dealing with the effects of hospital governance and ownership structure on hospital performance.

5.3 Population and Data Source

A population consists of all members of the group about which one would want to draw a conclusion. It refers to the individuals or items that share one or more characteristic from which data is been gathered and analyzed (Cooper and Schindler, 2010). In this study, our population includes all hospitals in Ghana. The data source is the list of all health facilities obtained from the Ministry of Health and at the time of this study, this comprised of three hundred and four (304) hospitals, one thousand, one hundred and twenty four (1,124) clinics, eleven (11) polyclinics, nine hundred and twenty seven (927) health centres, two hundred and fifty four (254) maternity homes, and eighty four (84) community health compounds in Ghana. The three hundred and four (304) hospitals were made up of one hundred and twenty two (122) public hospitals (with four being teaching hospitals), fifty-six (56) mission-based hospitals, and one hundred and twenty six (126) private hospitals. This study focused on the hospitals given that they have well-organized structures and better record keeping systems. The list of hospitals

obtained from the Ministry of Health was used to draw the sample for the study.

5.4 Sampling and Data Collection Process

The sampling process includes selecting a representative part of the population for the purpose of determining parameters or characteristics of the whole population (Cooper and Schindler, 2010). The sampling frame for this study included some hospitals in Ghana. The study started with the adoption of stratified sampling, which divided the population into a number of strata based on common attributes. The main advantage of using this approach is that, by dividing the population into a series of relevant strata the researcher is able to ensure that the sample is more likely to be representative and each of the strata is proportionally represented within the sample (Saunders *et al.*, 2007).

In this study, the hospitals were classified into three strata (i.e., public hospitals, not-for-profit or mission-based hospitals, and for-profit or private hospitals). Out of the total population of hospitals, questionnaires were sent to a little more than half of each stratum. The reason was to ensure that at least 50% of each stratum and for that matter the entire population was included in the sample. Specifically, the questionnaires were sent to eighty (80) public hospitals, forty (40) mission-based hospitals, and eighty (80) private hospitals. Out of the two hundred (200) hospitals contacted, responses were received from one hundred and thirty two (132) hospitals made up of 65 public, 31 mission-based, and 36 private hospitals. This was, however, after several follow-ups and resending of the questionnaires to other hospitals either because management in these hospitals were willing to complete the questionnaire or because of proximity in terms of distance (regions), and also, the use of research assistants to reach many more hospitals, in order to deal with the prevailing non response and increasing of the sample size. This situation arose because of the fact that the survey was

completed by top management and executives of the hospitals, who were either busy and did not have time to respond to the questions, or simply did not want to disclose information regarding their governance practices and structure. The 132 hospitals represent 66% response rate. The resulting response rate was quite high for a survey of this type considering that empirical studies involving surveys have been known to generate far lesser percentage response rates. The high response rate could also be explained by the involvement of research assistants. The hospitals used in this study included those with hospital board structures and those without hospital board structures. The rationale for including hospitals with a board structure and those without a board structure is to enable the researcher ascertain whether or not the presence of hospital board structures has any effect on hospital performance. Data on the healthcare governance was obtained from top management of the hospitals.

The composition of the overall sample of hospitals for which responses were received is indicated in Table 5.1. Public hospitals represent 49.2% of the sample of hospitals for which responses were received. Not-for-profit or mission-based hospitals account for 23.5% of the sample, while for-profit or private hospitals represent 27.3% of the sample of hospitals for which responses were received for this study.

Table 5.1: Composition of the Sample of Hospitals

Hospital Type	Frequency	Percent	Cumulative
Public hospitals	65	49.2	49.2
Not-for-profit hospitals	31	23.5	72.7

For-profit hospitals	36	27.3	100
Total	132	100	

With respect to the health service quality data, the sample was based on thirty (30) randomly selected patients from each of the hospitals that were finally selected for the study. There is a rule of thumb of the choice of $n = 30$ for a boundary between small and large samples and for the purpose of estimating a mean, 30 observations is enough (see Hogg and Tanis, 2011). Since the purpose of the health service quality data is for estimating the average SERVQUAL score, using a sample size of 30 is appropriate. Both in-patients and outpatients were sampled. The patients were provided with information and consent form and were assured of the confidentiality of the information collected.

This study relied on both primary and secondary data. Primary data was obtained through questionnaire administration. This was followed up with personal, as well as telephone interviews. Both closed and open-ended questionnaires were used to allow for in-depth questioning and for respondents to be able to express themselves. Secondary data was also obtained from existing hospital records, strategic documents, and board minutes.

5.5 Validity and Reliability

Validity deals with two issues and these are first, the extent to which the data collection methods accurately measure what they were intended to measure and second, the extent to which research findings are really about what they profess to be about (Saunders *et al.*, 2007). Statistical instruments were used

with the ultimate purpose being to ensure that questionnaire items have content validity and that the data collection methods accurately measure what they were intended to (Hinkin, 1995). To this end, the researcher made use of multiple and different sources of evidence. The researcher did solicit participants' views of the credibility of the data collected and the findings and interpretations from the study. The researcher relied on some of the respondents who were useful in reviewing the findings and reports to ensure validity of the data and findings. Responses to the questionnaire were also crosschecked with hospital records to ensure that the information received was actually what existed in these hospitals.

Reliability on the other hand addresses, the extent to which the data collection methods will yield consistent findings, and similar observations will be made or conclusions reached by other researchers, or whether there is transparency in how sense was made from the raw data. Reliability requires consistency in data and findings and it involves demonstrating that the data collection process and data produced can be repeated with the same results (Saunders *et al.*, 2007). In this study, the data was collected with a survey tool. The original questionnaire was pre-tested among both officers considered expert in the area of knowledge of healthcare governance and managers representative of likely respondents (see Darroch, 2003). The responses were then coded and captured in STATA software version 11 for the analysis. This gives an outline of exactly how 'sense' was made out of the raw data for easy replication. Further statistical tools were used to ensure rigour of the study with regards to its validity and reliability. These are discussed in the subsequent sections.

5.6 Method of Data Analysis

Considering the quantitative method approach adopted in this study, the method of data analysis includes multiple regression approach. The study employs multiple regression models in investigating the effects of healthcare

governance and ownership on performance of hospitals. Three main regression models were estimated. In the first model, the study focused on both hospitals with a hospital governing board and those without a board. The idea is to ascertain whether or not the existence or presence of hospital board, ownership structure and control factors affect performance of the hospitals. A dummy variable (*HospBoardPresence*) was introduced to define whether or not a particular hospital has a board in place. The first model is, therefore, stated succinctly as:

$$Perf = \alpha + \beta_1(HospBoardPresence) + \delta_2(OWN) + \omega_3(Control) + \varepsilon \dots\dots\dots 1$$

In the second model, the study limited the sample to only hospitals with board structures. Specifically, 91 of the hospitals had a governing board so these were used in determining how hospital board characteristics, ownership structure, and control factors affect hospital performance. Hospital board characteristics include board size, board composition, board participation by medical staff, board leadership structure, board diversity, and frequency of board meetings. This model is also stated as follows:

$$Perf = \alpha + \beta_1(HBC) + \delta_2(OWN) + \omega_3(Control) + \varepsilon \dots\dots\dots 2$$

A third model is also estimated in order to examine the interaction effects of hospital board characteristics and ownership structure on performance. This also involves the 91 hospitals with boards and these hospital board characteristics are interacted with the ownership variable. The model is given as follows:

$$Perf = \alpha + \beta_1(HBC) + \delta_2(OWN) + \theta_3(HBC \times OWN) + \omega_4(Control) + \varepsilon \dots\dots\dots 3$$

5.6.1 Dependent Variable: Measures of Hospital Performance

Previous studies examining the effect of hospital governance on performance in developed countries have tended to focus on financial performance given that these hospitals are motivated by profit (see Boeker and Goodstein, 1991; Molinari *et al.*, 1993; Molinari *et al.*, 1995; McDonagh, 2006; Culica and Prezio, 2009). However, in the case of developing countries like Ghana, it is important to consider performance from the operational and service perspectives because most hospitals are mostly public and mission-based hospitals with no profit motive.

In this current study, *Perf* in the model is the dependent variable and it represents hospital performance. This is measured using four performance indicators and these are: occupancy, discharge, efficiency, and health service quality. These measures of performance are defined as follows:

1. *Occupancy* is defined as the ratio of average daily census to statistical beds.
2. *Discharge* is the ratio of inpatients discharged to total number of inpatients.
3. *Efficiency* is defined as the ratio of total expenses to statistical beds.
4. *Health service quality* is measured using the SERVQUAL scale.

Occupancy, Discharge and Efficiency look at performance from the health providers' point of view. Health service quality considers performance from the perspective of patients and this is measured using the Parasuraman's SERVQUAL scale adopted by Carman (1990), Cronin and Taylor (1992) and Çaha (2007) for the healthcare sector. SERVQUAL serves as the dependent

variable in this study and is a vector of SERVQUAL scores. The SERVQUAL scale has 22 statements and consists of the following five dimensions: Tangibility (physical facilities, equipment and appearance of personnel), Assurance (courtesy and knowledge of staff and their ability to inspire trust and confidence), Responsiveness (willingness to help customers and provide prompt services), Reliability (ability to perform the expected service dependably and accurately), and Empathy (caring, individualized attention provided to customers). This study focused on only perception scores rather than the gap between perception and expectation given that in developing countries, like Ghana, most patients may not have an idea about ideal standards or expectations of service quality.

Patients indicated the degree or extent of service quality of each item using a seven-point scale, with 1 denoting ‘Strongly Disagree’ and 7 representing ‘Strongly Agree’. This format has been recommended for healthcare surveys (Elbeck, 1987; Steiber, 1989). For each SERVQUAL dimension, the actual degree of a service quality dimension can be represented by averaging of the measurement item ratings for that particular dimension. For example, questions 1 – 4 (4 questions) represent *Tangibility*. Questions 5 – 9 (5 questions) represent *Reliability*. Questions 10 – 13 (4 questions) represent *Responsiveness*. Questions 14-17 (4 questions) represent *Assurance* and questions 18-22 (5 questions) represent *Empathy*. The response numbers for these items are totaled and divided by the number of questions. The result is the score for each service quality dimension. A vector for the five SERVQUAL dimensions is used as a profile of healthcare quality for the hospital. An average score for all five dimensions is the overall SERVQUAL score and is given as:

$$S_0 = \sum_{i=1}^5 S_i$$

S_0 : the overall SERVQUAL score.

S_i : score for i dimension of service quality.

5.6.2 Independent Variables: Healthcare Governance and Ownership Structure

In model 1, *HospBoardPresence* is defined as a dummy variable, taking the value of 1 where the hospital has a board in place and 0 where the hospital has no board.

HBC in model 2 is the hospital board characteristics, which include board size, board composition, board participation by medical staff, board leadership structure, board diversity, and frequency of board meetings. This study focuses specifically on hospital board characteristics and these are defined as follows:

1. *Board size* is defined as the number of board members.
2. *Board composition* is defined as the proportion of non-executive directors on the board.
3. *Board participation by medical staff* is the proportion of medical staff on the board.
4. *Board leadership structure* is a dummy = 1 if the CEO is the board chair and 0 if otherwise.
5. *Board diversity* is defined as the proportion of females on the board.

6. *Frequency of board meetings* is the log of number of board meetings in the year.

OWN in the models represents hospital ownership structure and it is defined as a categorical variable = 1 if public hospital, 2 if not-for-profit or mission hospital and 3 if for-profit or private hospital.

In model 3, $HBC \times OWN$ represents the interaction term. The interaction term is derived by multiplying each of the hospital board characteristics with the ownership variables to ascertain their combined effects on hospital performance.

α is the constant in the equation, and $\mathcal{E}$ represents the error term.

5.6.3 Control Variables

In the models, *Control* is included as a vector of the control variables. Apart from hospital governance and ownership structures, there are other factors or variables that explain the performance of hospitals. These factors are included in the model as control variables. In other words, the control variables are factors that might affect the performance of hospitals and previous studies have included these control variables (see Alexander, 1988; Weiner and Alexander, 1993; Molinari *et al.*, 1995; Alexander and Lee, 2006). These control variables include, size of the hospital, age of the hospital, and location of the hospital. They therefore included to ensure the robustness of the model and to minimize specification bias. The control variables are defined as follows:

1. *Hospital size* of the hospital is defined in terms of the log of number of hospital beds.
2. *Hospital age* of the hospital is defined as the number of years in existence.
3. *Location* is a dummy and it is defined as 1 if the hospital is located in the national capital (Accra) and 0 if it is located outside the national capital.

The extant literature suggests that older and smaller hospitals may perform better than their younger and larger counterparts. Also, hospitals located in the urban centers tend to perform better than those in the rural communities. It is expected that, in the case of Ghana, hospitals located in national capital, Accra are better resourced and experience more competition and, thus, perform better than those located outside the national capital.

5.6.4 Estimation Issues

This study adopts multiple regression method in investigating the effects of healthcare governance and ownership on the performance of hospitals. The study uses average figures for the variables between the period, 2005 and 2010 in the analysis. The general form of the regression model employed in this study follows that used in previous empirical studies (Molinari *et al.*, 1995; Alexander and Lee, 2006) with some modifications where necessary. This general form of the model given as follows:

$$Y = \alpha + \beta X + \varepsilon$$

Where Y represents the dependent variable in the estimation model, X includes the set of explanatory variables in the estimation model, β

represents the coefficients, α is taken as the constant in the equation, and ε is the error term. In this study, the explanatory variables include the hospital governance, ownership structure and control factors.

This regression model is based on the Ordinary Least Squares (OLS), a method for estimating the unknown parameters in a linear regression model. This method minimizes the sum of squared vertical distances between the observed responses in the dataset and the responses predicted by the linear approximation. The OLS estimator is consistent when the regressors are exogenous and there is no perfect multi-collinearity, and optimal in the class of linear unbiased estimators when the errors are homoscedastic and serially uncorrelated (Greene, 2002). There is the likelihood of other unobserved factors determining the performance of hospitals other than governance characteristics, ownership structure and control variables. However, this is not so much of a problem to affects the findings of this study. This is because observable data used was not randomly selected and therefore a causal effect is not established, but rather a correlational association using a non-experimental design (Acemoglu *et al*, 2001)

The estimation generates the *t-statistic*, the *R-squared*, *P-values*, and the *F-statistic*. These are explained as follows:

The *t-statistic* tests whether the coefficients are equal to zero. If the errors ε approximately follow a normal distribution, t follows a Student-t distribution. Under weaker conditions, t is asymptotically normal. Large values of t indicate that the null hypothesis can be rejected and that the corresponding coefficient is not zero. The *P-value* expresses the results of the hypothesis test as a significance level. *P-values* of less than 0.10 are considered significant (Greene, 2002).

The *R-squared* is the coefficient of determination indicating goodness-of-fit of the regression. It tells us what proportion of the variance in Y is explained by the regressors X in the model. The R-square is equal to one if fit is perfect, and is equal to zero if the regressors x have no explanatory power whatsoever (Greene, 2002).

The *F-statistic* tries to test the hypothesis that all coefficients (except the intercept) are equal to zero. The *F-statistic* has $F(p-1, n-p)$ distribution under the null hypothesis and normality assumption, and its *p-value* indicates probability that the hypothesis is indeed true (Greene, 2002).

With this regression model explained above, it is possible to adequately estimate the effects of hospital governance, ownership structure and control factors on the performance of hospitals in Ghana. The regression results are reported in Table 7.1 and 7.2 in chapter seven.

5.7 Ethical Considerations

Ethical issues in research relate to gaining access, collecting data, data processing, data storage and writing up the research findings in a moral and responsible manner (Saunders *et al.*, 2007). In this study, consent letters were obtained from the Ghana Health Service and the Association of Private Medical and Dental Practitioners in order to gain access to data from the public, mission-based and private hospitals in Ghana. Patients were also provided with information and consent forms and were assured of the confidentiality of the information collected. Sufficient information regarding the purpose of the study, duration of the study, procedure, discomforts, and benefits associated with the study were provided to enable participants make informed decisions about participation. The respondents were informed of

the fact that the research is purely for academic purposes and that information provided would be treated with strict confidentiality. They were assured that individual respondent's details would not be disclosed and the study would also not be inimical to them.

5.8 Chapter Summary

Chapter five discussed and described the methodology employed in this study. This chapter includes the philosophical paradigm and justification for adopting quantitative research. The chapter explains the type of study conducted, the population and data source for the study, the data used in the study, and the sampling procedure. It also discusses issues of validity and reliability of the data, and the method used in analyzing the data. The ethical issues are also discussed in this chapter.

This study is based on the positivistic paradigm, which assumes that the world is external and independent of the researcher. Positivists are of the view that reality is stable and can actually be looked at and described from an objective and detached point without necessarily interfering with the phenomena being studied (Levin, 1988; Burrell and Morgan, 1988). The study employs a quantitative research design in its data collection and analysis. The justification for adopting a quantitative method in this study stems from the fact that existing theories make it easier to formulate assumptions/hypotheses that can be tested using statistical tools. Quantitative methods also provide a framework for addressing the relationships among variables involved in the study. The use of quantitative research design is useful for dealing with a cause and effect relationship.

The method of analysis used in this study involves the use of multiple regression models in investigating the effects of healthcare governance and

ownership on the performance of hospitals in Ghana. The next two chapters present and discuss the results of the study.

Chapter 6

Discussion of Results on the Characteristics of Hospital Boards

6.1 Introduction

The first objective of this study is to examine the characteristics of hospital boards in Ghana. This chapter presents the analysis and discusses the empirical results on the characteristics of hospital boards in Ghana. The chapter also examines and compares the characteristics of the hospital boards of public, mission-based and private hospitals. The findings on the characteristics of hospital board are discussed in line with the best practices in healthcare board governance. The analysis on the characteristics of hospital boards is based on descriptive statistics. First, the chapter presents the descriptive summary statistics of the dependent and independent variables used in the study. The descriptive statistics show the mean, minimum and maximum values of the dependent variables (occupancy, discharge, efficiency, and health service quality), and independent variables (hospital board dummy, board size, board composition, medical staff on board, board leadership structure, board diversity, frequency of board meetings, size, age, and location).

The results indicate that about 69% of the surveyed hospitals have governing boards. Half of the public hospitals have a hospital board in place. All the mission-based hospitals sampled have a board, and about 80% of the private hospitals have a hospital board in place. Public, mission-based, and private hospitals with a board in place tend to exhibit different board characteristic in terms of board size, board composition, medical staff representation on board, board leadership structure, board diversity, and frequency of board meetings.

This chapter also includes a correlation matrix results in order to ascertain the degree of multi-collinearity among the variables used in the study. The results of the correlation analysis suggest that multi-collinearity does not pose a problem in the empirical models.

6.2 Descriptive Statistics

This section looks at the descriptive statistics for all the hospitals sampled for this study, a comparison of the mean values across hospital forms, and best practice of hospital board governance. Table 6.1 presents the descriptive statistics for all the hospitals. Table 6.2 provides a comparison of the mean values across hospital forms, and Table 6.3 shows best practice of hospital board governance.

6.2.1 Descriptive Summary Statistics – All Hospitals

Table 6.1 presents the descriptive summary statistics of variables used in the study for all the hospitals. It shows the mean values for the overall sample. The mean occupancy ratio is 0.53 suggesting that on the average 53% of the hospital beds are occupied daily. The minimum and maximum occupancy are given as 0.01 and 5.30, respectively. The mean discharge is 0.94, indicating that on the average the hospitals discharge 94% of inpatients. The minimum and maximum are also shown as 0.18 and 1.65, respectively. Given the large values of the efficiency, the values were logged with a mean efficiency of 9.42. The minimum and maximum efficiency are also shown as 3.91 and maximum 19.93, respectively.

The overall mean score of health service quality is 4.79. This indicates that the service quality ratings of Ghanaian hospitals are just above the mid-point of the scales, given that the scale is, 1 – 7. It is observed that patients do not perceive they are receiving excellent healthcare service quality. The quality of

service is just above average. This is contrary to the findings by Turkson (2009) in 2003 and 2004 that generally the quality of healthcare delivery was perceived to be high for most of the indicators used. Following from the findings of this current study, however, Ghanaian hospitals may have to step up their service quality standards to ensure patients are receiving the best healthcare services. The minimum and maximum values of service quality are 2.74 and 6.83, respectively.

In examining the characteristics of hospital boards, the results show that 69% of the hospitals sampled have hospital board structures in place. The remaining 31% of the hospitals do not have a hospital board. Clearly, the majority of hospitals in Ghana have a governing board. With respect to those with a hospital board, the mean board size is 6 with maximum board size of 25. The mean value of 6 falls short of what is recommended by Bader (1991), who suggests that, in health systems with several boards, the system works best with lean governing boards having the average of seven to ten members. The mean board composition is 0.51, indicating that outside board members represent 51% of the total board membership. This means the boards are made up of majority of outside members. The mean medical staff representation on board is 0.38, meaning that medical staff represents 38% of the board. The mean board leadership structure of 0.45 indicates that 45% of the hospitals have the CEO also serving as the chairman of the hospital board. This also means that, on the average, 55% of the hospitals have separated the roles of the CEO and the board chair. Board diversity is 0.37 signaling that fact that females represent 37% of the hospital board members. In terms of frequency of board meetings, the mean is 5 with minimum and maximum of 1 and 48, respectively. This means that, on the average, board meetings are held five times in a year. The mean hospital size is 102.70, indicating an average number of hospital beds of approximately 103 with a minimum of 3 and a maximum of 1,800. The average age of the hospitals is approximately 38 years. The minimum and maximum ages are 1 and 129. Location with a mean of 0.63 suggests that 63% of the hospitals in the sample

are located in the national capital (Accra), while the remaining 46.90% are based in other parts of the country or outside Accra.

In order to address the problem of non-normality of the data a log transformation of some of the variables (occupancy, efficiency, frequency of board meetings, and hospital size) is applied.

Table 6.1: Descriptive Summary Statistics – All Hospitals

<i>Variable</i>	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
Occupancy	0.53	0.511	0.01	5.30	4.23	5.08
Discharge	0.94	0.12	0.18	1.65	-2.75	-2.75
Efficiency	9.42	2.46	3.91	19.93	1.48	6.69
Health service quality	4.79	0.89	2.74	6.83	-0.22	2.73
Presence of hospital board	0.69	0.46	0	1	-0.82	1.67
Board size	6.20	5.58	0	25	1.09	3.78
Board composition	0.51	0.28	0	1	-0.42	2.19
Medical staff on board	0.38	0.28	0	1	0.80	2.70
Board leadership structure	0.45	0.50	0	1	0.21	1.05
Board diversity	0.37	0.24	0	1	0.67	3.27
Frequency of board meetings	5.38	6.53	1	48	4.44	4.28
Hospital size	102.70	191.25	3	1800	-0.23	2.17

Hospital age	38.24	24.96	1	129	0.72	3.16
Location	0.55	0.50	0	1	-0.20	1.04

Occupancy is defined as the ratio of average daily census to statistical beds. Discharge is the ratio of inpatients discharged to total number of inpatients. Efficiency is defined as the ratio of total expenses to statistical beds. Health service quality is measured using the SERVQUAL scale. Hospital board is a dummy variable and is defined as 1 where the hospital has a board in place and 0 where the hospital has no board. Board size is defined as the number of board members. Board composition is defined as the proportion of outside board members on the board. Board participation by medical staff is the proportion of medical staff on the board. Board leadership structure is a dummy = 1 if the CEO is the board chair and 0 if otherwise. Board diversity is defined as the proportion of females on the board. Frequency of board meetings is the number of board meetings in the year. Hospital size is defined as the number of hospital beds. Hospital age is defined as the number of years the hospital has been in existence. Location is a dummy variable = 1 if the hospital is located in the national capital and 0 if it is located outside the national capital.

6.2.2 Mean Values across Forms of Hospitals

Table 6.2 presents the mean values of the dependent and independent variables across the three forms of hospitals. A multiple-sample test of means is carried out to ascertain whether or not the mean values across the sample groups (hospital types) are the same. The results as shown on Table 6.2 indicate that with the exception of efficiency, the mean values of all the variables are statistically and significantly different across the hospital types. The three dependent variable, occupancy, discharge, and health service quality differ significantly across the various hospital types. The hospital board characteristics and control variables – board size board composition, medical staff on board, board leadership structure, board diversity frequency of board meetings, hospital size, hospital age, and location also differ significantly across the forms of hospitals.

The public hospitals have the highest occupancy rate of 62%, followed by not-for-profit or mission-based hospitals (54%). For-profit or private hospitals have the lowest occupancy with a mean value of 43%. The for-profit hospitals exhibit the highest discharge with a mean value of 0.99. Not-for-profit hospitals follow in terms of discharge with a mean value of 0.96. Public hospitals record the lowest discharge (0.93). Mission-based hospitals and private hospitals tend to perform better than public hospitals in terms of occupancy and discharge. The highest discharge is associated with the lowest occupancy and this can be seen in the case of for-profit or private hospitals. The public hospitals, which have the lowest discharge, exhibit the highest occupancy. Efficiency is defined as the ratio of total expenses to statistical beds and therefore the lower the ratio, the higher the level of efficiency. The results reveal that not-for-profit or mission-based hospitals are the most efficient followed by for-profit or private hospitals and lastly public hospitals.

In terms of patients' perception of health service quality, the results show that there are significantly different mean values of service quality across the three forms of hospitals. For-profit or private hospitals record the highest score with a mean value of 5.02, followed by not-for-profit or mission-based hospitals with a mean score of 4.92. Public hospitals record the lowest level of health service quality with a mean score of 4.64. The mean scores for both mission-based and private hospitals are above the overall mean, suggesting that mission and private hospitals are perceived to provide better health service quality than the average hospital. Public hospitals however show a lower mean score in terms of health service quality compared to the overall mean score.

Public hospitals tend to be the largest with a mean bed size of approximately 164. For-profit hospitals are the smallest with a mean bed size of approximately 35. Not-for-profit hospitals also have a mean bed size of

approximately 68. Public hospitals are the oldest with a mean age of approximately 49 years, followed by not-for-profit hospitals, which indicate a mean age of approximately 29 years. For-profit hospitals are the youngest with a mean age of approximately 25 years. In terms of location, the results indicate that, about 82% of not-for-profit or mission-based hospitals sampled are located in the national capital, Accra with less than 18% located outside Accra, while 69% of the private hospitals sampled are located in the national capital. About 35% of the public hospitals sampled in this study are also located in the national capital, Accra.

Table 6.2: Mean Values across Forms of Hospitals

<i>Variable</i>	Public Hospitals	Not-for- Profit Hospitals	For-Profit Hospitals	All Hospitals	Multivariate Test of Means
Occupancy	0.62	0.54	0.43	0.53	13.38***
Discharge	0.93	0.96	0.99	0.94	24.60***
Efficiency	9.53	9.09	9.33	9.42	4.59
Health service quality	4.64	4.92	5.02	4.79	25.03***
Presence of hospital board	0.5	1	0.8	0.69	76.96***
Board size	7.26	7	4.53	6.20	37.99***
Board composition	0.38	0.62	0.54	0.51	54.62***
Medical staff on board	0.39	0.29	0.43	0.38	20.62***
Board leadership structure	0.36	0.36	0.61	0.45	23.50***

Board diversity	0.29	0.39	0.41	0.37	23.02***
Frequency of board meetings	7.08	3.28	5.38	5.38	67.88***
Hospital size	164.20	68.13	34.60	102.70	267.66***
Hospital age	49.40	29.01	25.07	38.24	182.89***
Location	0.35	0.82	0.69	0.55	155.27***

Note: ***Significant at 1 percent level. Occupancy is defined as the ratio of average daily census to statistical beds. Discharge is the ratio of inpatients discharged to total number of inpatients. Efficiency is defined as the ratio of total expenses to statistical beds. Health service quality is measured using the SERVQUAL scale. Hospital board is a dummy variable and is defined as 1 where the hospital has a board in place and 0 where the hospital has no board. Board size is defined as the number of board members. Board composition is defined as the proportion of outside board members on the board. Board participation by medical staff is the proportion of medical staff on the board. Board leadership structure is a dummy = 1 if the CEO is the board chair and 0 if otherwise. Board diversity is defined as the proportion of females on the board. Frequency of board meetings is the number of board meetings in the year. Hospital size is defined as the number of hospital beds. Hospital age is defined as the number of years the hospital has been in existence. Location is a dummy variable = 1 if the hospital is located in the national capital and 0 if it is located outside the national capital.

In examining and comparing the characteristics of hospital boards across the forms of hospitals, the results indicate that in terms of the presence of hospital board, half (50%) of the public hospitals have a hospital board in place as shown on Table 6.2. This may be attributed to the fact that, according to the Hospital Administration Law, 1988 (P.N.D.C.L. 209), Act 525, only teaching hospitals are required to have hospital board. Interestingly, there are only four teaching hospitals out of the total of 304 hospitals in Ghana. The other public hospitals in Ghana are not required to have a board. The need to constitute a board in a public hospital is an internal decision and

therefore, most hospitals appear not to have strong incentives to constitute a board. All the not-for-profit or mission-based hospitals sampled have a board. The mission-based hospitals tend to have dedicated boards overseeing group of hospitals within particular districts of the country. About 80% of the for-profit or private hospitals have a hospital board in place. Considering the profit orientation of private hospitals, they may see the need to have a governing board to provide direction for the hospital especially when most of these hospitals tend to be owner-managed.

Out of the number of hospitals with a board, public and not-for-profit hospitals have a board size of approximately 7. For-profit or private hospitals have a board size of approximately 5. Public and not-for-profit hospitals have board size that falls within the range recommended in literature as indicated on Table 6.3. Bader (1991) suggests that, in health systems with several boards, the system works best with lean governing boards having the average of seven to ten members.

Mission-based hospitals have the highest proportion of non-executive directors represented on the board (62%), followed by private hospitals with a mean of 54%. Public hospitals have the lowest proportion of outside directors (38%). Both mission-based and private hospitals have more than half outside or independent directors on their hospital board. This is consistent with best practice, which suggests that, the board should be composed of majority non-executive board members. However, public hospitals do not comply with best practice in terms of the proportion of outside directors on their board. They have less than 50% of outside directors represented on their hospital board.

Private hospitals have the highest percentage of medical staff on the board (43%), with public hospitals following with 39% medical staff representation on the board. Not-for-profit or mission hospitals report the lowest percentage of medical staff on their board with a mean 29%. In terms of board participation of medical staff, the results indicate that all the hospital forms

have medical staff represented on their board. This finding complies with best practice, as shown on Table 6.3.

With respect to board leadership structure, the results indicate that 36% of the public hospitals have one person combining the roles of CEO and chairperson of the hospital board. Also, 36% of the mission hospitals have the CEO also doubling as the board chair. In Ghana, majority of mission-based and public hospitals maintain a board typology, where the CEO's position is separate from that of the board chair. Such a board structure complies with best practice. In the case of for-profit or private hospitals, majority (61%) of them have their CEO also serving as the board chair. Majority of private hospitals in Ghana having the CEO also serving as the board chair may be attributed to the fact that most of these private hospitals are owner-managed and the owner-manager may also want to serve as the chair-person of the hospital board in order to maintain control. The board leadership structure of most private hospitals does not comply with best practice.

With regards to board diversity, the results as indicated on Table 6.2 signal that for-profit hospitals have the highest female representation on the board with a mean of 41%, followed by not-for-profit hospitals with a mean of 39% percent female representation. Public hospitals maintain the lowest female representation on the board, recording a mean of 29%. Interestingly, all the hospital forms have female representation on their board, but in all the hospital types, board diversity or percentage of females on the hospital board is less than 50%.

The board of directors for public hospitals has the highest frequency of board meetings. On the average, they meet about 7 times in a year. For-profit or private hospitals also meet on the average 5 times in a year. Not-for-profit or mission-based hospitals have lowest frequency of board meetings. Not-for-profit hospitals meet about 3 times in a year. The extant literature suggests a minimum of four meetings in a year. Apart from mission-based hospitals, the

other two forms of hospital generally hold the required number of meetings as recommended.

Table 6.3: Best Practices in Healthcare Board Governance

Board Characteristics	Best Practice	Public Hospitals	Not-for-profit Hospitals	For-profit Hospitals	All
Board size	Between 7 and 10 board members.	✓	✓	×	×
Board composition	Board should be composed of majority non-executive directors.	×	✓	✓	✓
Board participation by medical staff	The board should have medical staff representation.	✓	✓	✓	✓
Board leadership structure	The role of CEO should be separated from that of board chair.	× ^a	× ^a	× ^b	× ^a
Board diversity	There should be female representation on the board	✓	✓	✓	✓
Frequency of board meetings	The board should hold a minimum of four meetings in a	✓	×	✓	✓

year.

✓ means does comply.

× means does not comply.

×^a Less than 50% of the hospitals have CEO also acting as board chair.

×^b Over 50% of the hospitals have CEO also acting as board chair.

6.3 Correlation Analysis

A correlation analysis is performed in order to evaluate the extent of multicollinearity among the independent variables. Correlation analysis shows the strength and direction of association between two variables. It is useful for creating a summary measure that reflects the covariation between two variables. The correlation analysis is based on both the Pearson and Spearman correlation coefficients. Pearson correlation is appropriate for measuring the variables on an interval or ratio scale, while the Spearman correlation is useful when the variables are measured on an ordinal scale (Everitt, 2002). Considering that board size, board composition, board participation by medical staff, board diversity, frequency of board meetings, hospital size, and hospital age are measured on an interval or ratio scale, the correlations among these variables are based on Pearson correlation coefficients, while the correlations among the other variables (i.e., hospital board, board leadership structure, hospital ownership structure, and location) are based on Spearman correlation because the variables are measured on an ordinal scale. These are either defined as dummy or categorical variables. Table 6.4 presents the correlation matrix constructed by showing the association between the variables.

The correlation results show that board size has significantly negative correlations with medical staff on board, board leadership structure, gender diversity, ownership structure, and location, but has significantly positive

associations with hospital size and hospital age. Board composition is significantly and negatively correlated with medical staff on board, board leadership structure, frequency of board meetings, hospital size and hospital age, but has a significantly positive correlation with ownership structure. Medical staff representation on boards shows statistically significant and positive correlations with board leadership structure, board diversity, frequency of board meetings, and location. Board leadership structure indicates statistically significant and positive correlations with board diversity, frequency of board meetings, ownership structure, and location, but it signals a significantly negative correlation with hospital size. Board diversity has statistically significant and positive correlations with ownership structure, hospital age, and location. Frequency of meetings is negatively correlated with ownership structure but is positively correlated with hospital size and hospital age. Ownership structure is significantly and negatively correlated hospital size and hospital age, but it is positively correlated with location. There is a significantly positive correlation between hospital size and hospital age but there is negative correlation between hospital size and location. The correlation results also show statistically significant and negative relationship between hospital age and location.

In all, the degree of the correlation coefficients suggests that multicollinearity do not pose a potential problem in the regression models. Therefore, the entire hospital board characteristic, ownership structure and the control variables can be captured in the same model. The hospital board dummy is also captured in a separate model investigating the presence of hospital board and ownership structure on hospital performance.

Table 6.4: Correlation Matrix

	Hospital board	Board size	Board composition	Medical staff on board	Board leadership structure	Board diversity	Frequency of board meetings	Ownership structure	Hospital size (log)	Hospital age	Location
Hospital board	1.000										
Board size	0.571***	1.000									
Board composition	0.000***	-0.028	1.000								
Medical staff on board	0.000***	-0.230***	-0.363***	1.000							
Board leadership structure	0.000***	-0.267***	-0.309***	0.460***	1.000						
Board diversity	0.000***	-0.231***	-0.017	0.254***	0.450***	1.0000					
Frequency of board meetings	0.000***	-0.043	-0.345***	0.233***	0.191***	0.017	1.000				
Ownership	0.300***	-0.181***	0.222***	-0.014	0.211***	0.176***	-0.094**	1.000			

structure											
Hospital size	-0.010	0.229***	-0.101**	-0.074	-0.178***	-0.044	0.141 *	-0.279***	1.0000		
Hospital age	-0.202***	0.312***	-0.270***	-0.043	0.004	0.133***	0.113**	-0.410***	0.346***	1.0000	
Location	0.316***	-0.120***	-0.003	0.217***	0.119**	0.125***	0.068	0.302***	-0.156***	-0.246***	1.000

Note: ***, ** and * mean significant at 1, 5 and 10 percent level of significance respectively. Hospital board is a dummy variable and is defined as 1 where the hospital has a board in place and 0 where the hospital has no board. Board size is defined as the number of board members. Board composition is defined as the proportion of non-executive directors on the board. Board participation by medical staff is the proportion of medical staff on the board. Board leadership structure is a dummy = 1 if the CEO is the board chair and 0 if otherwise. Board diversity is defined as the proportion of females on the board. Frequency of board meetings is the number of board meetings in the year. Hospital ownership structure is defined as a categorical variable = 1 if public hospital, 2 if not-for-profit hospital and 3 if for-profit hospital. Hospital size is defined as the number of hospital beds. Hospital age is defined as the number of years the hospital has been in existence. Location is a dummy variable = 1 if the hospital is located in the national capital and 0 if it is located outside the national capital.

6.4 Implications from Descriptive Statistics

The first objective of this study is to examine the characteristics of hospital boards in Ghana. The findings of this study revealed that majority (68.92%) of the hospitals sampled have hospital board structures in place. This signals the importance Ghanaian hospitals place on having a governing board. Hospital boards are said to constitute an important element of healthcare governance and they play a very significant role in the healthcare delivery system. With respect to the public hospital, half of them have a hospital board in place. The other public hospitals do not have a board since this is not a requirement. Therefore, the need to constitute a board in a public hospital is mainly an internal decision. The legal framework within Ghana does not mandate all hospitals except the four (4) teaching hospitals to have a governing board. All the mission-based hospitals were found to have a board. The mission-based hospitals have dedicated boards overseeing group of hospitals within particular districts of the country. In the case of private hospitals, their profit motivation may compel them to have a governing board in order provide direction for the hospital, given that most of these hospitals tend to be owner-managed. This may explain why the majority (80%) of the private hospitals have board in place. The findings have shown the importance mission-based and private hospitals place on the role of hospital boards. This is in tandem with what Bader (1993) and Alexander *et al.* (2009) suggest that the hospital board is a central factor in healthcare governance as they hold the legal responsibility for establishing objectives, and reviewing management's performance to ensure that the health facility is well run. They establish that the board has the ultimate accountability in terms of how the hospital functions.

In examining hospitals with a board, the results of this study indicate that the board size of hospitals in Ghana is on the average 6. This number, however, falls short of the general literature prescription. Bader (1991) suggests that in health systems with several boards, the system works best with lean governing boards having the average of seven to ten members. The

ownership type of the hospital has implications for the form of governance system adopted by the hospital. The board size (5) of private hospitals also falls below the suggestion by Bader (1991). The resource dependency theory is not adhered to where the board size is not large enough to contain members with diverse background of skills, resources and expertise to make the right decisions that will enhance the performance of the organization. Boards of private hospitals operate as corporate boards, where board members are usually paid or compensated, and considering the profit making orientation of private hospitals, measures are put in place to cut down on cost. Therefore, they usually engage smaller-size board. Such boards tend to be focused as a function of the narrower constituencies to which the organization is responsible (Ewell, 1987). Public and mission-based hospitals, however, have a board size of (7) that falls within the range recommended in literature. They mainly operate as philanthropic boards and in the view of Pfeffer (1972), are often large in size, representing a wide range of interest.

The findings reveal that outside board members constitute a little over half of the total board membership consistent with the position of Yermack (1996) and John and Senbet (1998) that a high representation of outside board members increases the independence of the board. Dalton *et al.* (1999) also argue that the independence of directors is an essential requirement for board effectiveness. These outside directors would ensure that stakeholders' interests are protected as suggested by the stakeholder theory. With respect to board composition across the hospital forms, both mission-based and private hospitals have more than half outside or independent board members represented on their hospital board, consistent with best practice. In the case of public hospitals, however, there is non-compliance with best practice considering that outsider board members constitute less than half of the hospital board.

Medical staff representation on the hospital board is said to be an important characteristic of hospital boards. It is argued that medical staff members provide relevant information to board members and keep the board well informed about the hospital's service and delivery issues. The findings of this study show that the hospitals boards have some (38.37%) representation by medical staff. This shows the importance Ghanaian hospitals place on the role of medical staff on hospital board. Though, all the three hospitals have medical staff represented on their board, private hospitals have the highest percentage of medical staff on the board, followed by public hospitals and mission-based hospitals. Managerialism and resource dependency theories both make a case for the benefits that hospitals stand to derive from having medical staff especially physicians on their hospital board. This was evidenced in this study as private hospital have the highest number of medical staff on their boards, showed the highest service quality score as well as discharge rate. This could be attributed to the contribution of medical officers to board discussions on policies aimed at improving on service delivery, thereby ensuring better service quality in these hospitals.

The board leadership structure of 44.67% suggests that less than half of the total number of hospitals in Ghana have the CEO also serving as the chairman of the hospital board, meaning the remaining 55.33% of the hospitals have separated the roles of the CEO and the board chair. The general prescription is to have a board structure where the roles of the CEO and the board chair are decoupled. However, in this study many of the hospitals practice the CEO duality system with the CEO and board chair positions occupied by the same person. The majority (64%) of both mission-based and public hospitals adopt a board typology, where the CEO's position is separate from that of the board chair, and is consistent with the literature prescription. Mission-based and public hospitals have owners that are different from the managers and therefore, CEOs tend to act as the agents to protect the interest of the actual owners according to the agency theory. In the case of private hospitals, since most of them are owner-managed, they tend to adopt a board leadership

structure where the person combines the roles of CEO and board chair. In this study majority (60.87%) of private hospitals have their CEO also serving as the board chair and this model is in conflict with best practice. From the stakeholder perspective, having the CEO also serving as the board chair seriously impedes the overall stakeholder orientation of board members. Therefore, separating the functions of the CEO and board chair is important in enhancing the board's monitoring and control ability, and to improve director's information processing capacities (Sanders and Carpenter, 1998) and thereby reduce agency cost.

It is suggested that having females on the board is desirable business practice because it improves the reputation and strategic direction (Bilimoria, 2000). Siciliano (1996) explains that, boards with increased gender diversity are more likely to enjoy high levels of social agency mission achievement. Elstad and Ladegard (2010) suggest that the higher the ratio of women, the greater the level of perceived influence, perceived social interaction outside the boardroom, and to some degree, perceived information sharing. In this study, hospitals in Ghana are found to have (36.79%) female representation of their board. This is even higher than the 1999 survey conducted by the Governance Institute, La Jolla, California, which showed that only 23% of healthcare board members were female (Adams, 2005). In Ghana, though all the hospital forms have female representation on the board, the proportion of females differs across the various hospitals forms. The findings of this study indicate that, private hospitals have the highest female representation on the board 40.78%, followed by mission-based hospitals (39.36%), and then public hospitals (29.44%). This finding is in tandem with existing literature indicating that, in situations where the CEO doubles as the chair of the board, more females are appointed on such boards to push through the agenda of the CEO with ease.

The findings of this study also reveal that, on the average, hospitals in Ghana hold board meetings five times in a year. This is in compliance with the general prescription of four meetings annually. The board meetings are important in engaging the board to regularly review processes and procedures to ensure the effectiveness of its internal control system. Board meetings provide the opportunity for the board to also assess the performance of the hospital. Public and private hospitals generally hold the prescribed number of board meetings annually. Public hospitals have the highest number of board meetings of 7 times annually, followed by private hospitals, which hold board meetings 5 times in the year, and then lastly mission-based hospitals, which hold board meetings 3 times annually. Clearly, the number of board meetings held by mission-based hospitals on annual basis, fall short of the general prescription of 4 times. This could be attributed to the problems with having a large board size (as mission hospitals have large boards). Meetings of large board are difficult to convene and the costs of logistics for having board meetings increase with large boards.

6.5 Chapter Summary

This chapter presented the analysis and discussion on the results on the characteristics of hospital board governance in Ghana. The descriptive statistics for all the hospitals sampled indicated that 53% of the hospital beds are occupied daily and on the average the hospitals discharge 94% of inpatients. The mean log efficiency is 9.42. The overall mean score of health service quality is 4.79 suggesting that the health service quality ratings of Ghanaian hospitals are above the mid-point of the scales, given that the scale is, 1 – 7. The descriptive statistics also showed the mean values of the dependent variables across the three sample groups. The results show a strongly significantly different performance across the three ownership types (at 1% significant level). Public hospitals have the highest occupancy of 62%, followed by mission hospitals (54%), and private hospitals (43%). For-profit hospitals exhibit the highest discharge (0.99) followed by mission hospitals

(0.96), and public hospitals (0.93). Mission-based hospitals and private hospitals appear to perform better than public hospitals in terms of occupancy and discharge. Mission-based hospitals are the most efficient in terms of the management of expenses, followed by private hospitals and lastly public hospitals. However, in terms of patients' perception of health service quality, private hospitals record the highest score (5.02), followed by mission-based hospitals (4.92) and lastly, public hospitals (4.64). The mean scores of both mission-based and private hospitals are above the overall mean, suggesting that mission and private hospitals are perceived to provide better health service quality than the average hospital.

With respect to the characteristics of hospital board governance, the results showed that 69% of all the hospitals sampled have hospital board structures in place. With respect to hospitals with a board, the mean board size is 6 and external or non-executive board members represent 51% of the total board membership, while medical staff represents 38% of the board. About 45% of the hospitals have the CEO also serving as the chairman of the hospital board on the average. About 37% of the hospital boards have female representation and on the average, board meetings are held 5 times in the year.

In terms of the of hospital board governance across the forms of hospitals, the results indicated that half (50%) of the public hospitals have a hospital board in place. All the not-for-profit or mission-based hospitals sampled have a board. The mission-based hospitals tend to have dedicated boards overseeing group of hospitals within particular districts of the country. About 80% of the for-profit or private hospitals have a hospital board in place. Out of the number of hospitals with a board, public and not-for-profit hospitals have a board size of approximately 7. For-profit hospitals have a board size of approximately 5. Public and not-for-profit hospitals have board size that fall within the range recommended in literature. Mission-based hospitals have the highest proportion of non-executive directors represented on the board

(62%), followed by private hospitals with a mean of 54%. Public hospitals have the lowest proportion of outside directors (38%). Private hospitals have the highest percentage of medical staff on the board (43%), with public hospitals following with 39% medical staff representation on the board. Not-for-profit or mission hospitals report the lowest percentage of medical staff on their board with a mean 29%. The results indicate that 36% of the public hospitals have one person combining the roles of CEO and chairperson of the hospital board, while 36% of the mission hospitals have the CEO also doubling as the board chair. For-profit hospitals have the highest female representation on the board with a mean of 41%, followed by not-for-profit hospitals with a mean of 39% female representation. Public hospitals maintain the lowest female representation on the board, recording a mean of 29%. Apart from not-for-profit hospitals, the other two forms of hospital generally hold the required number of meetings as recommended. The boards of public hospitals meet about six times in a year, while private hospital and mission-based hospitals meet annually about 5 times and 3 times, respectively.

This chapter also included a correlation analysis in order to evaluate the extent of multi-collinearity among the independent variables. Overall, the degrees of the correlation coefficients for the independent variables suggest that multi-collinearity do not pose a potential problem in the regression models. This informed the model estimations and the regression results are discussed in chapter seven.

Chapter 7

Discussion of Results on the Effects of Healthcare Governance and Ownership Structure on Performance

7.1 Introduction

The chapter has four main objectives. First, the chapter seeks to ascertain whether or not the presence of hospital board affects hospital performance. Second, it aims to evaluate the effect of healthcare board characteristics on hospital performance. Third, it hopes to examine the effect of hospital ownership structure on hospital performance. Finally, the chapter seeks to investigate the interaction effects of hospital board characteristics and ownership structure on performance. The study employed multiple regression models in addressing the effects of healthcare governance and ownership structure on hospital performance. This chapter presents the analysis and discusses the regression results.

The regression results are in three parts. One part looks at the effects of the presence of hospital board and ownership structure on the performance of hospitals. In this first part, the dependent variables, which are the performance indicators, include occupancy, discharge, efficiency and health service quality. The independent variables are the presence of hospital board (dummy), ownership structure, and control factors (hospital size, hospital age

and location). The second part examines the effects of hospital board characteristics and ownership structure, and control factors on the performance of hospitals. The performance indicators also include occupancy, discharge, efficiency and health service quality. The independent variables are the hospital board characteristics (board size, board composition, medical staff on board, board leadership structure, board diversity, and frequency of board meetings), ownership structure (public hospitals, not-for profit, and for-profit), and the control factors (hospital size, hospital age and location). In the third part, the hospital board characteristics are interacted with the ownership forms to ascertain the effects on performance.

The variance inflation factor (VIF), which is a more formal method to determine the presence of multicollinearity among the independent variables, is also used. The VIF is used to measure how much variances of estimated regression coefficients are inflated when compared to having uncorrelated predictors. The VIF is computed as the reciprocal of tolerance: $1 / (1 - R^2)$. Generally, a $\max_i \{VIF_i\} > 10$ suggests that multicollinearity is unduly affecting the least squares estimates of the regression coefficients (Hair *et al.*, 2009; Kutner, 2004). The results of this study as shown in all the regression tables indicate that the VIF for the independent variables are less than 10. This suggests that multicollinearity is not a problem and therefore, all the hospital board characteristics, ownership structure and the control variables can be included in the same regression model. This study sought to establish the correlation amongst dependent (hospital performance) and independent (governance characteristics, ownership type and control) variables. Correlation does not equal causation, because the observational data used in establishing such an association is usually not randomly assigned (Haber and Menaldo, 2011).

7.2 The Presence of Hospital Board, Ownership Structure and Performance

This section presents and discusses the regression results. Table 7.1 presents the regression results on the effects of the presence of hospital board and ownership structure on performance. The results indicate that the presence of hospital board has statistically and strongly significant negative effect on occupancy (at 5% significant level) but weakly significant positive effect on discharge rate (at 10% significant level) and strongly significant positive effect on health service quality (at 1% significant level). This means hospitals that have a governing board in place have lower occupancy and higher discharge compared to those without a board. The results also suggest that hospitals with governing boards are perceived to deliver better health service quality compared to hospitals without a governing board. This could be attributed to the fact that governing boards perform their supervisory and regulatory roles properly thereby ensuring that the hospitals deliver good quality care. Hospital boards are necessary in taking decisions that would improve the quality of services provided by the hospitals. The result on the effect of the presence of hospital board on health service quality is consistent with the first hypothesis (H_1) and it also supports the position of Lister (2006), who suggests that the board has a key role in establishing policies and guidelines that help to drive the quality transformation process. The finding also supports the position of Kroch *et al.* (2006) who argue that hospital boards have the ultimate responsibility of ensuring improvement in the quality of healthcare provided by the hospital. The findings here support recognize the important role hospitals boards play in ensuring better performance and quality health service delivery. According to Flynn (2002) and Eeckloo *et al.* (2004), healthcare governance as the process of steering the overall functioning and effective performance of a hospital by defining [its] mission, setting objectives and...[having them realized] at the operational level.

In terms of hospital ownership structure, the results show that compared to public hospitals both not-for-profit (mission-based) and for-profit (private)

hospitals exhibit lower occupancy (at 1% significant level), and higher discharge (at 5% significant level). Not-for-profit hospitals perform better in terms of efficiency than public hospitals (at 5% significant level). Also, for-profit (private) hospitals demonstrate higher patients' perception of service quality (at 5% significant level) compared to public hospitals. It can be argued that, both mission-based and private hospitals perform better in terms of occupancy and discharge because they tend to provide prompt and appropriate treatment. This could also be explained by the assertion that managers of these hospitals unlike their public counterpart are able to implement initiatives and innovations to improve efficiency and service quality (Hart, 1995). Patients in mission-based and private hospitals may therefore recover quickly and may be discharged faster. Considering the huge number of patients in the case of public hospitals, treatment and proper care tend to be delayed resulting in higher occupancy and lower discharge. The higher occupancy rate and lower discharge rate in the public hospitals may also be a result of receiving of referral cases from the mission-based and private hospitals.

The results of this study also suggest that mission-based and private hospitals are capable of providing better quality of healthcare to their patients compared to their public counterparts. One possible reason is the fact that these hospitals do not have too many patients and as such may be in a better position to provide individualized care to the few patients. Public hospitals, however, have to deal with very high number of patients because of the relatively low service charges. Therefore, they may not be able to treat patients as unique individuals as required compared to their mission and private counterparts. Another reason for the good performance in private hospitals could result from the fact that, employees are well compensated and remunerated in private hospitals compared to public hospitals, and thereby influencing employee morale and this motivates them to perform better. The findings with respect to ownership structure generally support the hypothesis that not-for-profit (mission) and for-profit (private) hospitals

perform better than public hospitals. In the case of private hospitals, the results suggest that patients have a high perception of service quality consistent with hypothesis (H_{8a}). Private hospitals demonstrate significantly higher level of health service quality compared to public hospitals. This may be due to the smaller number of patients they have to deal with. Public hospitals on the other hand, tend to deal with very large number of patients and this may affect their quality of health service delivery. In this study, it was found that, greater number (80%) of private hospitals have a governing board in place, whereas the 50% of the public hospitals have a board in place. Therefore, private hospitals' strategic decisions on quality assurance (clinical governance) may be said to be more effective than measures put in place by public hospitals to ensure good quality of health service. The provision of better health service delivery by the private hospitals may also explain the lower occupancy rate and higher discharge rate. Mission-based hospitals are also found to be efficient in terms of managing cost. They provide services at relatively lower cost compared to public hospitals. The results with respect to the effect of ownership structure are consistent with existing literature that private hospital are usually market oriented and tend to be more keen on introducing new services and technologies that attract more clients, thus provide better healthcare services (Rajshkha *et al.*, 1991; Banaszak-Holl *et al.*, 1996). The findings of this study also support the position of Barros (2003) and Weng *et al.* (2011) that private hospitals perform better than public hospitals.

Table 7.1: Effects of Hospital Board and Ownership Structure on Performance

<i>Variable</i>	Occupancy	Discharge	Efficiency	Service Quality	VIF
Hospital board	-0.3309	0.0280	0.5755	0.3268	1.29
	(-2.53)**	(1.84)*	(1.48)	(3.00)***	

Ownership structure:

Not-for-profit hospitals	-0.1769 (-2.98)***	0.0429 (2.57)**	-0.8910 (-2.11)**	0.1602 (1.20)	1.43
For-profit hospitals	-0.3156 (-5.81)***	0.078 (2.37)**	-0.3660 (-0.85)	0.2992 (2.47)**	1.74
Hospital size	0.0004 (4.01)***	-0.0124 (-1.93)*	0.0027 (1.50)	-0.1503 (-2.71)***	1.52
Hospital age	-0.0008 (-0.87)	0.0004 (1.24)	-0.0146 (-2.12)**	0.0073 (2.95)***	1.31
Location	0.0743 (1.72)*	0.0254 (1.92)*	0.4737 (1.34)	-0.3663 (-3.76)***	1.20
Constant	0.5875 (8.14)***	0.9806 (29.55)***	9.3964 (18.19)***	4.9238 (21.89)***	
R-squared	0.1364	0.0769	0.0419	0.0803	
F-stat	10.27	4.76	1.85	5.72	
Prob> F	0.0000	0.0001	0.0896	0.0000	
Obs	132	132	132	132	

Notes: All regressions include a constant. t-values are in parentheses. ***, ** and * mean significant at 1, 5 and 10 percent level of significance respectively. Hospital board is a dummy variable and is defined as 1 where the hospital has a board in place and 0 where the hospital has no board. Hospital ownership structure is defined as a categorical variable = 1 if public hospital (reference point), 2 if not-for-profit hospital and 3 if for-profit hospital. Hospital size is defined as the log of number of hospital beds. Hospital age is defined as the number of years the hospital has been in

existence. Location is a dummy variable = 1 if the hospital is located in the national capital and 0 if it is located outside the national capital.

In terms of the control variables, the results of this study reveal that hospital size has a strongly significant positive effect on occupancy (at 1% significant level) but has a weakly significant negative effect on discharge rate (at 10% significant level) and strongly negative effect on health service quality (at 1% significant level). The positive relationship between hospital size and occupancy rate indicates that larger hospitals exhibit higher occupancy rate. In terms of discharge rate, the results suggest that larger hospitals have lower discharge rate. It stands to reason that larger hospitals may perform poorly as shown in the higher occupancy rate and lower discharge rate. In other words, smaller hospitals on the other hand could be said to be better performing in terms of occupancy rate, discharge rate and health service quality. The provision of better health service quality by smaller hospitals and the associated higher discharge rate may be due to the relatively smaller number of patients they have to deal with. Therefore, they may be in the position to provide individualized care resulting in higher discharge and better performance. The results on the effect of hospital size on performance are in tandem with the position of Alexander and Lee (2006) that smaller hospitals tend to have smaller boards, which are said to be more effective and efficient in their decision-making and strategic planning and this eventually leads to better performance of these hospitals.

Hospital age is found to have a statistically and strongly significant negative effect on efficiency (at 5% significant level) and a strongly significant positive influence on health service quality (at 1% significant level). This means older hospitals exhibit lower expenses to statistical beds ratio (i.e., higher efficiency). The better performance with respect to efficiency on the part of older hospitals could be attributed to the fact that older hospitals may be experienced and well resourced. Therefore, based on the learning curve they

may be capable of operating at lower costs or they may be more efficient than their younger counterparts. The positive relationship between age and service quality show that older hospitals provide better health service quality. The provision of better health service delivery among older hospitals may be attributed to the fact that older hospitals tend to have better health facilities and experienced physicians and health workers who are able to render health services taking into consideration all the dimensions of quality service. It could also be inferred that older hospitals are able to translate the high level of efficiency to better service delivery to their patients. This finding confirms the results of Kimberly and Evanisko (1981) that, age is significantly associated with the level of hospital technological innovation and this has the tendency of increasing performance.

With respect to location, the results of this study indicate that location has statistically and weakly significant positive effects on occupancy rate (at 10% significant level) and discharge rate (at 10% significant level), but shows a statistically and strongly significant negative effect on perception of health service quality (at 1% significant level). The positive effects of location on occupancy rate and discharge rate suggest that, hospitals located in the national capital (Accra) are associated with higher occupancy rate and higher discharge rate. The high occupancy rate may be due to the huge number of patients in hospitals located in Accra. Considering the high population in Accra, most hospitals in Accra tend to experience high attendance and full occupancy rate of the available beds. Also, given the high number of patients hospitals located in Accra have to grapple with, they may have to discharge these patients faster in order to give room to newly admitted patients. It also stands to reason that bigger hospitals are located in Accra and these tend to be characterized by high occupancy rate. In the same vein, most private hospitals are located with the national capital and these hospitals are characterized by higher discharge rate. The negative relationship between location and service quality indicates that hospitals located outside the national capital (Accra) are perceived by patients to render better quality of

care compared to hospitals located in Accra. This may be due to the relatively small size of the population of patients outside the capital compared to the population of patients in the capital city. A lower patient-medical staff ratio facilitates individualized care, thus, the delivery of better quality healthcare.

7.3 Hospital Board Characteristics, Ownership Structure and Performance

This section discusses the results on the effects of hospital board characteristics and ownership structure on the performance of hospitals. The results as shown on Table 7.2 indicate that board size has a weakly significant negative relationship with service quality (at 10% significant level), but has a strongly significant positive effect on occupancy (at 5% significant level). The negative effect of board size on service quality and positive effect on occupancy rate suggests that larger boards are weakly associated with lower service quality and this may be due to the difficulty in reaching a consensus at board meetings in order to provide better quality of care. This may eventually lead to higher occupancy at the hospital. On the other hand, hospitals with smaller boards tend to take decisions to improve or provide better quality of health service. This might be due to the fact that smaller boards have the ability to easily reach a consensus during strategic planning and critical decision-making process. This is necessary in ensuring that the hospital renders good quality of care to its patients. Hence, the smaller the board size, the higher patients' perception about the hospital's provision of better health service. With respect to the effect of board size on occupancy, the results suggest that smaller boards bring about lower occupancy. Since smaller boards are associated with better service delivery, this also translates into lower length of time patients will be on admission, thus lower occupancy. The findings in terms of board size support hypothesis (H_{2a}) and are consistent with the position of Lipton and Lorsch (1992) who argue that large

boards tend to reduce effectiveness thereby making it easier for the CEO to control. On the other hand, smaller boards are generally said to be more effective than larger boards. The findings are also in tandem with the findings of previous empirical works (see Bader, 1991; Gu *et al.*, 2010). For instance, Bader (1991) intimated that small number of governing boards within a health system would ensure that boards focus more on their role within the system. Gu *et al.* (2010) also found that higher performing hospitals tended to have smaller boards.

The regression results reveal a statistically and weakly significant positive relationship between board composition and discharge rate (significant at 10% level), but a strongly significant negative relationship between board composition and efficiency (at 1% significant level). This indicates that hospitals with greater proportion of outside board members exhibit higher discharge and lower expenses to statistical beds ratio. The extant literature suggests that the independence of the board is enhanced with greater percentage of outside or external members. It is expected that independent boards can bring their experience to bear on the operations of the hospital in guiding hospital management to be cost efficient as shown in the findings of this study. Therefore, hospital boards with greater percentage of outside board members tend to have effective internal control systems that translate into cost efficiency. The high level of efficiency brought to bear by outside board members may translate into better healthcare for patients and therefore lead to high discharge rate. The findings with respect to the effect of board composition are in tandem with the hypothesis (H_{3a}) that board composition is related to higher performance. Also, the results generally agree with the findings of Byrd and Hickman (1992) and Brickley *et al.* (1994).

Medical staff representation on the board shows a strongly significant negative effect on occupancy rate (at 1% significant level) but signals a strongly significant positive effect on efficiency (at 1% significant level). The

results show that, greater representation of medical staff on the hospital board bring about lower occupancy. In other words, hospital boards with a high proportion of medical staff tend to entertain low occupancy rate. The results also suggest that greater percentage of medical staff on the hospital board is associated with higher expenses to statistical beds ratio. This means that hospitals with greater representation of medical staff on the board appear to operate at higher cost in their provision of healthcare services. This finding partially supports the alternate hypothesis (H_{4b}) that medical staff representation lowers hospital performance.

Board leadership structure reveals weakly significant negative relationships with discharge rate (at 10% significant level), strongly significant negative relationship with efficiency (at 1% significant level), and strongly significant negative relationship with service quality (at 1% significant level). This means that, hospital boards, which have the CEO also serving as the board chairperson, have lower discharge rate, lower expense ratio and lower health service quality. It is observed that, in terms of efficiency, hospitals with CEO duality perform better as shown in having lower ratio of expenses to statistical beds. This finding appears to supports the alternate hypothesis (H_{5b}). However, with respect to discharge rate and health service quality, the findings of this study seem to give preference for a board typology, in which the positions of the CEO and board chair are decoupled. This indicates that, hospitals, which have the roles of the CEO and the board chair performed by two different individuals, tend to exhibit higher level of discharge rate and are also perceived to provide better health service quality. In other words, decoupling the roles of CEO and board chair leads to better performance in terms of discharge rate and health service quality. The existing literature suggests that, where the CEO also acts as board chairman, leadership faces conflict of interest, thus giving preference for the system where the CEO's role is separated from that of the board chairperson (Brickley *et al.*, 1997). Therefore, it is expected that separating the roles of the CEO and that of the board chair strengthen the effectiveness of the hospital board to be able to

deliver better quality of healthcare. This position is consistent with the hypothesis (H_{5a}). The findings on board leadership structure on discharge rate and health service quality are consistent with the stakeholder theory which suggests that duality seriously impedes the overall stakeholder orientation of board members, therefore, separating the functions of the CEO and board chair may be viewed as enhancing the board's monitoring and control ability, and improve director's information processing capacities (Sanders and Carpenter, 1998).

Board diversity is defined as the proportion of females represented on the hospital board. The findings of this study reveal that board diversity has strongly significant positive relationships with discharge rate (at 5% significant level) and service quality (at 1% significant level). These results suggest that hospitals with higher female representation on their board experience higher discharge rate and better health service quality, consistent with (H_{6a}). Hospital boards with female representation tend to ensure the delivery of better quality of care, resulting in higher level of discharge. This could be explained by the fact that women are more intuitive and may bring up interesting dimensions to board discussions, and thereby improving the overall decision-making in ensuring better quality of care.

The findings of this study also show that frequency of board meetings strongly and significantly lead to better performance using occupancy, discharge and service quality indicators. Frequency of board meetings is found to negatively affect occupancy (at 1% significant level), but positively influence discharge (at 5% significant level) and health service quality (at 1% significant level). The results with respect to the frequency of board meetings indicate that hospital boards that meet frequently are able to improve their service quality delivery resulting in lower occupancy and higher discharge. This could be explained by the fact that regular board meetings affords the hospital board the opportunity to review and compare the hospital's present

medical practices with current and emerging practices. Such regular reviews are important in making the necessary changes to improve the delivery of healthcare. The finding on the effect of frequency of board meetings on perception of health service quality is consistent with hypothesis (H_{7d}). Holding frequent board meetings enables board members to be better informed in order to contribute to meeting the resource needs of the hospital so as to improve on the performance of the hospital.

Consistent with the results on the effect of the presence of hospital board on performance as shown on Table 7.1, mission-based and private hospitals exhibit lower occupancy rate compared to public hospitals. Again, compared to public hospitals, private hospitals show higher discharge rate. The regression results as shown on Table 7.2 indicate that mission-based hospitals also tend to provide better health service quality and this may explain the lower occupancy rate they exhibit. Private hospitals are also found to be cost efficient compared to public hospitals.

The control variables generally show signs consistent with the findings on the effects of the presence of hospital board and ownership structure on the performance of hospitals. In addition, the results as indicated in Table 7.2 reveal that hospital age is strongly associated with lower occupancy and higher discharge. It was observed from the results of the first model, as shown in Table 7.1, that older hospitals are more experienced and are capable of providing better health service quality. Therefore, it is expected that the delivery of better health service quality will result in lower occupancy rate and higher discharge rate.

Table 7.2: Effects of Board Characteristics and Ownership Structure on Performance

<i>Variable</i>	Occupancy	Discharge	Efficiency	Service Quality	VIF
Board size	0.0150 (2.19)**	0.0005 (0.53)	0.0179 (0.31)	-0.0231 (-1.96)*	2.03
Board composition	-0.2286 (-0.88)	0.0315 (1.91)*	-2.6085 (-2.77)***	0.1927 (0.94)	1.50
Medical staff on board	-1.0471 (-3.83)***	0.0082 (0.45)	3.5320 (3.43)***	-0.1837 (-0.87)	1.70
Board leadership structure	0.2005 (1.19)	-0.0213 (-1.73)*	-3.6635 (-5.31)***	-0.4531 (-3.64)***	2.10
Board diversity	0.1367 (0.36)	0.0546 (2.17)**	-0.9685 (-0.45)	0.5442 (2.07)***	1.52
Frequency of board meetings	-0.3519 (-3.43)***	0.0153 (2.00)**	0.3507 (0.83)	0.4555 (6.11)***	1.32
Ownership structure:					
Not-for-profit hospitals	-0.4885 (-2.63)***	0.014 (0.15)	0.9695 (1.62)	0.2883 (2.29)**	1.84
For-profit hospitals	-0.9941 (-4.69)***	0.0278 (2.21)**	-3.1794 (-2.80)***	0.1227 (0.88)	2.66
Hospital size	0.5456 (7.97)***	-0.0098 (-2.47)**	0.1446 (0.39)	-0.2030 (-3.32)***	2.04
Hospital age	-0.010	0.0004	-0.0093	0.0007	2.01

	(-2.87)***	(1.98)**	(-0.73)	(0.26)	
Location	0.0779	0.0156	-0.5426	-0.5673	1.46
	(0.55)	(1.68)*	(-0.80)	(-5.36)***	
Constant	0.9747	1.0129	9.6597	5.3022	
	(2.14)**	(30.03)***	(4.33)***	(15.51)***	
R-squared	0.2707	0.2702	0.2807	0.2737	
F-stat	8.27	6.60	4.51	8.70	
Prob> F	0.0000	0.0000	0.0000	0.0000	
Obs	91	91	91	91	

Notes: All regressions include a constant. t-values are in parentheses. ***, ** and * mean significant at 1, 5 and 10 percent level of significance respectively. Board size is defined as the number of board members. Board composition is defined as the proportion of outside board members on the board. Board participation by medical staff is the proportion of medical staff on the board. Board leadership structure is a dummy = 1 if the CEO is the board chair and 0 if otherwise. Board diversity is defined as the proportion of females on the board. Frequency of board meetings is the number of board meetings in the year. Hospital ownership structure is defined as a categorical variable = 1 if public hospital (reference point), 2 if not-for-profit hospital and 3 if for-profit hospital. Hospital size is defined as the number of hospital beds. Hospital age is defined as the number of years the hospital has been in existence. Location is a dummy variable = 1 if the hospital is located in the national capital and 0 if it is located outside the national capital.

7.4 Interaction Effects of Board Characteristics and Ownership Structure on Performance

This section discusses the results on the interaction effects of board characteristics and ownership structure on the performance of hospitals. The results on the interaction between board characteristics and ownership

structure on hospital performance as indicated on Table 7.3 reveal interesting findings. Mission-based hospitals with larger board size exhibit strongly significant associations with lower occupancy rate, higher discharge rate, improved level of efficiency, and better service quality than public hospitals with smaller boards. Private hospitals with larger boards also exhibit strongly significant relationship with better service quality than public hospitals with smaller boards. In addition, they show strongly significant lower occupancy rate than their public counterparts with smaller boards. The interaction of private hospitals and board size is however insignificant in explaining the level of efficiency.

The interaction of board composition and ownership reveal that both mission-based and private hospitals with greater percentage of outside directors' record strongly significant higher discharge rate, are more efficient and demonstrate better service quality than public hospitals that have greater proportion of inside board members. In the case of mission-based hospitals, the results show that those with higher proportion of external board membership record lower occupancy rate than public hospitals with many inside board members. Board composition was however not significant in determining the efficiency of private hospitals.

It is observed that mission-based hospitals with greater representation of medical staff on their hospital boards are strongly significant in demonstrating lower occupancy rate, higher discharge rate, better efficiency, and provide good quality health service than public hospitals that have fewer medical staff on their board. In terms of private hospitals, the results reveal that, those with greater percentage of medical staff representation on the hospital board exhibit strongly significant associations with all performance measures. For instance, private hospitals provide better health service quality than public hospitals with fewer medical staff representation on the board. However, the private hospitals with high medical staff board participation have higher occupancy rate, lower discharge rate and are less efficient than public hospitals with lower medical staff board participation.

The results indicate that boards of mission-based hospitals that have the CEO as the board chair are strongly significant in explaining performance. They show higher occupancy rate, are less efficient and compromises the quality of services provided, compared with boards of public hospitals that have separate people playing the roles of board chair and CEO. Boards of private hospitals with same person serving as CEO and board chair have significantly strong association with higher occupancy rate and provide poor service quality compared to their public hospital board counterparts with the CEO being different from the board chair.

More female representation on the boards of mission-based hospitals are strongly significant in determining lower occupancy rate, higher discharge rate, and better quality of services, compared to public hospitals with less female representation on their board. Private hospitals with more female representation only significant in the provision of better quality of services than public hospitals with less female representation on their board.

Frequent board meetings in both private and mission based hospitals has been observed to have significantly strong associations with lower occupancy, higher discharge and better service quality, compared to public hospitals with less frequency of board meetings. Additionally, frequent board meetings in mission-based hospitals demonstrate improved efficiency better than boards of public hospitals with less frequency of board meetings.

Table 7.3: Interaction Effects of Board Characteristics and Ownership Structure on Performance

<i>Variable</i>	Occupancy	Discharge	Efficiency	Service	VIF
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				Quality	
Board size	0.0169	0.0021	-0.3020	-0.0367	2.03
	(0.81)	(1.55)	(-3.14)***	(-3.23)**	
Board composition	0.0597	0.1448	-13.1696	-0.5551	1.50
	(0.12)	(4.16)***	(-5.67)***	(-1.61)	
Medical staff on board	-2.1221	0.0864	-4.9005	-1.8683	1.70
	(-3.78)***	(3.45)***	(-2.59)**	(-5.65)***	
Board leadership structure	0.1930	-0.0304	-4.5682	-0.6315	2.10
	(0.60)	(-1.72)*	(-2.94)***	(-3.23)***	
Board diversity	1.4663	0.1012	-1.2529	0.7199	1.52
	(1.67)	(2.85)***	(-0.39)	(1.72)*	
Frequency of board meetings	-0.5239	0.0779	5.3469	0.7315	1.32
	(-1.73)*	(5.52)***	(4.62)***	(4.48)***	
Ownership structure:					
Not-for-profit hospitals	-6.1448	0.1464	-23.2309	4.0985	1.84
	(-5.15)***	(3.14)***	(-3.72)***	(6.90)***	
For-profit hospitals	-0.4383	0.0638	-5.6808	1.6643	2.66
	(-1.77)*	(0.78)	(-1.72)***	(3.12)***	
Board size*Not-for-profit	-0.6874	0.0099	-1.1105	0.1980	
	(-6.72)***	(2.94)***	(-3.22)***	(5.77)***	
Board size*For-profit	-0.7748	0.0261	-0.2056	0.0906	
	(-2.33)**	(1.69)*	(-0.48)	(2.67)***	
Board comp*Not-for-profit	-5.3294	0.1424	-22.5492	1.0530	
	(-4.05)***	(3.87)***	(-7.20)***	(2.02)**	
Board comp*For-profit	-0.6561	0.5671	-15.29	0.9849	

	(-1.06)	(1.70)*	(-3.92)***	(1.90)*	
Medical board*Not-for-profit	-16.0359	0.2796	-64.8558	5.1855	
	(-6.96)***	(2.79)**	(-4.64)***	(5.13)***	
Medical board*For-profit	0.8149	-0.7095	11.0599	2.8801	
	(3.48)***	(-1.68)*	(3.36)***	(7.02)***	
Board leadership structure*Not-for-profit	11.6768	0.088	23.8022	-1.3039	
	(5.82)***	(0.22)	(4.92)***	(-3.71)***	
Board leadership structure*For-profit	0.4193	-0.2683	1.8362	-1.7906	
	(2.28)**	(-1.83)*	(1.74)*	(-7.03)***	
Board diversity*Not-for-profit	-28.4542	0.1374	-3.8759	1.4572	
	(-6.46)***	(1.78)*	(-0.86)	(2.10)**	
Board diversity*For-profit	-0.8939	0.0286	3.9256	1.6597	
	(-0.93)	(0.19)	(0.61)	(3.11)***	
Frequency*Not-for-profit	-1.4344	0.0721	-10.6205	0.7610	
	(-3.12)***	(4.01)***	(-5.64)***	(3.54)***	
Frequency*For-profit	-0.0998	0.3840	-4.1209	0.4288	
	(-3.10)***	(1.88)*	(-2.01)**	(2.48)**	
Hospital size	1.1129	-0.0187	0.7833	-0.2681	2.04
	(12.24)***	(-2.76)***	(1.91)*	(-4.58)***	
Hospital age	-0.0276	0.0096	-0.0456	-0.0040	2.01
	(-6.34)**	(1.66)*	(-2.59)**	(-1.46)	
Location	-0.1126	0.0096	1.0290	-0.4196	1.46
	(-0.73)	(0.66)	(1.49)	(-3.79)***	
Constant	2.3104	0.9582	12.4935	6.8567	
	(3.39)***	(20.22)***	(5.27)***	(15.88)***	

R-squared	0.5437	0.5525	0.6034	0.5745
F-stat	10.88	8.21	7.61	14.21
Prob> F	0.0000	0.0000	0.0000	0.0000
Obs	91	91	91	91

Notes: All regressions include a constant. t-values are in parentheses. ***, ** and * mean significant at 1, 5 and 10 percent level of significance respectively. Board size is defined as the number of board members. Board composition is defined as the proportion of outside board members on the board. Board participation by medical staff is the proportion of medical staff on the board. Board leadership structure is a dummy = 1 if the CEO is the board chair and 0 if otherwise. Board diversity is defined as the proportion of females on the board. Frequency of board meetings is the log of number of board meetings in the year. Hospital ownership structure is defined as a categorical variable = 1 if public hospital (reference point), 2 if not-for-profit hospital and 3 if for-profit hospital. Hospital size is defined as the log of number of hospital beds. Hospital age is defined as the number of years the hospital has been in existence. Location is a dummy variable = 1 if the hospital is located in the national capital and 0 if it is located outside the national capital.

7.5 Empirical Implications

The other objectives of this study were to examine the effects of the presence of hospital board and ownership structure on hospital performance, and also evaluate the effects of healthcare board characteristics and hospital ownership structure on performance. The findings of this study have shown that the presence of a hospital board is necessary in improving the performance of the hospital. Healthcare governing boards are said to be a crucial element of the overall healthcare governance system. They are accountable for the overall performance of their healthcare organizations and also contribute in shaping the hospital or health facility they represent and ultimately impacting the healthcare system in general. Lister (2006) explains that the board has an important role to play in establishing policies and guidelines that will assist in driving the quality transformation process. In the

view of Kroch *et al.* (2006), hospital boards have the ultimate responsibility of ensuring improvement in the quality of healthcare provided by the hospital. Therefore, hospitals that adopt a governance system by having a board in place will exhibit better performance and deliver better service quality to their patients compared to their counterparts, which have no hospital board structure.

Although stakeholder theory and resource dependency theory suggest the need for large board size to enhance performance, the findings of this study reveal that smaller boards rather exhibit better performance. Smaller boards avoid the prolonged boardroom discussion and the difficulty in reaching a consensus associated with large boards. Smaller boards are able to take quicker decisions in delivering better service to their patients and therefore, enhance performance. In that sense, smaller boards are more effective than larger boards. Lipton and Lorsch (1992) suggest that large boards tend to reduce effectiveness, thereby making it easier for the CEO to control. Recent thinking is leaning more towards smaller boards. The argument in favour of smaller board size is supported by previous empirical studies. For instance, Bader (1991) indicated that, small number of governing boards within a health system would ensure that boards focus more on their role within the system. Gu *et al.* (2010) also found that smaller boards exhibit higher performance. It however appears that, more effective boards are smaller and similar in terms of general performance outcomes only, but these do not consider institutional as well as stakeholder characteristics, which are very central to governance (see Andrews, 2010). However, this assertion does not apply in the interaction effect of mission and private hospitals where larger board size was rather strongly significantly associated with lower occupancy rates and provision of better service quality. This giving credence to previous studies that suggest larger boards have wider range of expertise and connections to resources that are useful in driving performance of organisations (Forbes and Milliken, 1999; Aguilera and Cuervo-Cazurra, 2004; Aguilera *et al.*, 2007; Zattoni and Cuomo, 2008). The interaction effect on

board size is explained by both the stakeholders and resource dependency theories.

Board composition is explained by managerialism theory, which proposes that inside directors are in a better position than outside directors to motivate managers in order to enhance performance. This is because inside management members have better insights about the operation of the hospital and therefore are in a better position to drive performance. However, the findings indicate that greater proportion of outside directors is associated with enhanced performance in terms of efficiency. Having a higher proportion of outside directors on the board increases the independence of the board. It is argued that independent boards can bring their experience to bear on the operations of the hospitals by guiding hospital management to implement effective internal control systems, which ultimately improves efficiency and performance. Previous empirical studies by Byrd and Hickman (1992) and Brickley *et al.* (1994) support the position that boards composed of greater number of outside or external board members bring about enhanced hospital performance. The findings with respect to board composition rather give credence to the resource dependency theory.

In the case of hospitals, the resource dependency theory proposes that having outside members such as outside physicians on the hospital board helps to improve the operations of the hospital, thus enhance performance. This supports the results of Molinari *et al.* (1995) who found that hospitals with medical staff and outside physician board participation perform better than boards with medical insider board participation and no outside physicians. The findings with respect to the effect of board composition also support the resource dependency theory, which advocates for having greater proportion of outside board members. The presence of external board members assists the hospital to protect itself against external environment and attract more resources, which subsequently increases performance. In the

hospitals, outsider members, such as outside physician board members help to keep hospital boards informed regarding developments in patient care and practices. The resource dependence theory emphasizes that external directors enhance the ability of a firm to protect itself against the external environment, reduce uncertainty, or co-opt resources that increase the firm's ability to raise funds or increase its status and recognition (Pfeffer, 1972; Pfeffer and Salancik, 1978). Middleton (1987) also argues that a board composed of influential members from the organization's external environment performs a boundary-spanning function that absorbs uncertainty, reduces operational dependencies, exchanges information, represents the organization to external stakeholders, and enhances overall performance. The findings of this study have shown that hospitals with greater representation of medical staff on the board exhibit lower level of occupancy but operate at higher cost in their provision of healthcare services. The finding with respect to the effect of medical staff representation on the board partially support the managerialism theory and resource dependency theory.

The findings of this study indicate that hospitals with CEO duality perform better in terms of efficiency contrary to theoretical prediction. However, with respect to discharge rate and health service quality, the findings of this study appear to suggest a board typology, in which the positions of the CEO and board chair are decoupled. The results reveal that separating the roles of CEO and board chair leads to better performance in terms of discharge rate and health service quality. The findings on board leadership structure on discharge rate and health service quality are consistent with the stakeholder theory which suggests that duality seriously impedes the overall stakeholder orientation of board members, therefore, separating the functions of the CEO and board chair may be viewed as enhancing the board's monitoring and control ability, and improve director's information processing capacities (Sanders and Carpenter, 1998). It also strengthens the effectiveness of the hospital board to be able to deliver better quality of healthcare.

Gender diversity is also found to explain higher discharge rate and better service quality. This may imply that women are more intuitive and may bring up interesting dimensions to board discussions, and thereby improving the overall decision-making in ensuring better quality of care leading to higher discharge rate. Board diversity is based on the resource dependency theory. Diversity on the hospital board is important in order to increase effectiveness and competitiveness. The literature suggests hospital boards tend to recruit the most talented, dedicated, and accomplished people, and increasingly those people tend to be women with different perspectives, experiences, social network relationships, and problem solving approaches. The finding with respect to gender diversity supports the stakeholder and resource dependency theories.

The findings of this study also show that frequency of board meetings significantly lead to lower occupancy, and better service quality. The results with respect to the frequency of board meetings show that hospital boards that meet frequently are able to improve their service quality delivery, resulting in lower occupancy rate. Holding frequent board meetings ensures that the board receives relevant information on the hospital to enable it to make useful decisions that will enhance performance. This finding could be explained within the context of the resource dependency theory in the sense that, by having relevant information on regular basis, board members are in a better position to make meaningful contributions to the operations of the hospital and also assist in providing relevant resources to the hospital leading to improved hospital performance.

The findings of the study indicate that private hospitals record better performance than public hospitals, consistent with results of previous studies (see Barros, 2003; Weng *et al.*, 2011). The extant literature suggests that for-profit or private hospitals have an objective function of maximizing profit.

Rajshkha *et al.* (1991) suggest that private or for-profit hospitals are wholly responsible for organizational performance in a competitive environment hence, they adopt or extend new medical technology proactively. In the view of Hart (1995), the managers of private hospitals unlike their public counterpart are able to implement initiatives and innovations to improve efficiency and service quality (Hart, 1995). For-profit organizations are also said to be the most market-oriented providers and would have higher incentives to introduce new services and technologies that attract more consumers (Banaszak-Holl *et al.*, 1996). However, public providers lack clear control rights to implement changes, thus limiting incentives for innovations. The findings of this study also show that mission-based hospital exhibit better performance than public hospitals.

In terms of the interaction effects, the results reveal that mission-based hospitals with larger board size exhibit lower occupancy rate, higher discharge rate, improved level of efficiency and better service quality than public hospitals with smaller boards. Private hospitals with larger boards also exhibit lower occupancy rate, higher discharge rate, and better service quality than public hospitals with smaller boards. Both mission-based and private hospitals with greater percentage of outside directors record higher discharge, and demonstrate better service quality than public hospitals that have greater proportion of inside board members. In addition, mission-based hospitals with higher proportion of external board membership record lower occupancy rate than public hospitals with many inside board members. Boards of mission-based hospitals with greater representation of medical staff demonstrate lower occupancy, higher discharge, are more efficient and provide better quality health service than public hospitals that have fewer medical staff on their board. Boards of private hospitals with greater percentage of medical staff instead exhibit higher occupancy rate, lower discharge rate, lower efficiency and but provide better health service quality than public hospitals with fewer medical staff representation on the board.

The results of the interaction effects also indicate that mission-based hospitals that have the CEO as the board chair show higher occupancy rate, are less efficient and provide poor quality of services compared with boards of public hospitals that have decoupled roles of CEO and board chair. Boards of private hospitals with same person serving as CEO and board chair have higher occupancy, and provide poor service quality compared to public hospital with the CEO being different from the board chair. Mission-based hospitals with more female representation on the boards show lower occupancy rate, and better quality of services compared to public hospitals with less female representation on their board. Private hospitals with more female representation equally provide better quality of services than public hospitals with less female representation on their board. Both private and mission-based hospitals that hold frequent board meetings exhibit lower occupancy rate, higher discharge rate, and better service quality, compared to public hospitals that hold less frequent of board meetings. In addition, mission-based hospitals that hold frequent board meetings are more efficient than boards of public hospitals that hold less frequent board meetings.

7.6 Chapter Summary

This chapter discussed the effects of the presence of hospital board and ownership structure on hospital performance. It then evaluated the effects of healthcare board characteristics and hospital ownership structure on their performance and also examined the interaction effects of hospital board characteristics and ownership on performance. Multiple regression models were used in the study. The regression results revealed that, hospitals that have a governing board in place have higher occupancy but they are perceived to deliver better health service quality compared to hospitals without a governing board. This could be attributed to the fact that governing boards properly perform their supervisory and regulatory roles thereby ensuring that the hospitals deliver good quality care. Hospital boards are necessary in taking decisions that would improve the quality of services provided by the hospitals.

With respect to the effect of board characteristics, smaller boards were found to be associated with better health service quality and lower occupancy rate, suggesting that hospitals with smaller boards tend to take decisions to improve or provide better quality of health service and this can be translated into lower occupancy. Hospitals with greater proportion of outside board members exhibit lower expenses because these independent board members tend to make suggestions that assist hospital management to be cost efficient. The results also showed that hospitals with greater representation of medical staff on the board exhibit lower level occupancy but operate at higher cost in their provision of healthcare services. Hospitals with CEO duality perform better in terms of efficiency rates. However, with respect to discharge rate and health service quality, the findings of this study suggest that hospital performance enhances when the positions of the CEO and board chair are decoupled. Hospitals with higher female representation on their board ensure the delivery of better quality of healthcare, resulting in higher level of discharge rate. Frequency of board meetings is associated with lower occupancy, higher discharge and improved health service quality.

In terms of the effects of ownership structure, the results of this study revealed that both mission-based and private hospitals perform better in terms of occupancy, discharge, efficiency and health service quality. Mission-based and private hospitals generally tend to provide prompt and appropriate treatment compared to public hospitals. Providing better quality of healthcare to patients by mission-based and private hospitals, result in lower occupancy rate and higher rate of discharge. Public hospitals on the other hand are often confronted with very high number of patients and therefore have high occupancy rate and low discharge rate and low service quality.

The results of the interaction effects revealed that mission-based hospitals with larger board size exhibit lower occupancy rate, higher discharge rate,

improved level of efficiency and better service quality than public hospitals with smaller boards. Private hospitals with larger boards also exhibit lower occupancy rate, and better service quality than public hospitals with smaller boards. Both mission-based and private hospitals with greater percentage of outside directors record higher discharge rate, and demonstrate better service quality than public hospitals that have greater proportion of inside board members. In addition, mission-based hospitals with higher proportion of external board membership record lower occupancy rate and are more efficient than public hospitals with many inside board members. Boards of mission-based hospitals with greater representation of medical staff demonstrate lower occupancy rate, higher discharge rate, are more efficient and provide better quality health service than public hospitals that have fewer medical staff on their board. Boards of private hospitals with greater percentage of medical staff exhibit higher occupancy rate, lower discharge rate, lower efficiency and provide better health service quality than public hospitals with fewer medical staff representation on the board.

The findings of the interaction effects also revealed that mission-based hospitals that have the CEO as the board chair show higher occupancy rate, are less efficient and provide poor quality of services compared with boards of public hospitals that have decoupled roles of CEO and board chair. Boards of private hospitals with same person serving as CEO and board chair have higher occupancy rate, and provide poor service quality compared to public hospital with the CEO being different from the board chair. Mission-based hospitals with more female representation on the boards show lower occupancy, and better quality of services compared to public hospitals with less female representation on their board. Private hospitals with more female representation equally provide better quality of services than public hospitals with less female representation on their board. Both private and mission-based hospitals that hold frequent board meetings exhibit lower occupancy rate, higher discharge rate and better service quality, compared to public hospitals that hold less frequent of board meetings. In addition, mission-

based hospitals that hold frequent board meetings are more efficient than boards of public hospitals that hold less frequent board meetings.

The results also revealed that larger hospitals perform poorly as shown in the higher occupancy rate and lower discharge rate. Older hospitals were found to be efficient. Older hospitals operating at lower costs may be explained by the learning curve and this can be translated into the provision of better service delivery to their patients. With respect to location, the results indicate that hospitals located in the national capital (Accra) are associated are associated with poor service quality, while those located outside the national capital are perceived by patients to render better quality of care Hospitals located outside Accra may be perceived to provide better service because of the relatively smaller number patients they have to attend to. A lower patient-medical staff ratio facilitates individualized care, thus, the delivery of better quality healthcare.

It is important to note however that, governance characteristics, ownership type and the control variable might very well be determined by the performance of hospitals. For instance, some hospitals could be taken over by other owners depending on their performance, and governance structures might also be changed relative to prevailing performance measures of the hospital. Thus, issues of endogeneity are expected in this instance. However, this study used non-randomly selected data in examining correlational associations between variables and not causal links (Menaldo, 2011).

The next chapter provides a summary of the study. It also concludes the study by drawing relevant implications for policy formulation based on the findings of the study. It also shows the limitations of the study and identifies areas for further research.

Chapter 8

Summary, Conclusion and Policy Implications

8.1 Summary

Healthcare governance or hospital governance is referred to as the process of steering the overall functioning and effective performance of a hospital, by defining the hospital's mission, setting its objectives, supporting and monitoring their realization at the operational level (Flynn, 2002). The axis of hospital's governing board is constituted by professional team of executive managers and the purpose of the hospital governance is to enable a more integrated approach of supporting and supervising all hospital activities, including clinical performance (Eeckloo *et al.* 2004). The effectiveness of the healthcare governance system in enhancing the performance of the hospital depends on how the hospital board is structured. The existing literature suggests that the structure of the hospital board is looked at in terms of board size, board composition, medical staff participation, board leadership structure board diversity, and frequency of meetings and these have implications for the hospital.

This study examined the effects of healthcare governing boards and ownership structure on the performance of hospitals from the perspective of an African country, Ghana considering that previous studies have examined the issue focusing on developed countries. The specific objectives of the study were to: i) examine the characteristics of hospital boards in Ghana; ii) ascertain whether or not the presence of a hospital board affects its performance; iii) evaluate the effect of hospital board characteristics on the performance of hospitals; iv) examine the effect of hospital ownership structure on hospital performance, and v) investigate the interaction effects of hospital board characteristics and ownership on performance.

In the second chapter, the principles of good hospital governance were also discussed and these were identified to include knowing what governance is, achievement of strategic ends, board-CEO relationship, unity of direction, unity of command, unity of accountability/responsibility, ownership needs, self-improvement, and understanding the cost of governance. It is expected that when hospitals adhere to these principles of good governance they are likely to experience better performance. The chapter also reviewed literature on hospital ownership and governance models. The major ownership types include for-profit, non-profit, and public ownership. The ownership type of the hospital obviously has implications for the form of governance system adopted by the hospital. The literature review chapter also discussed the importance of hospital boards and the role they play in healthcare quality. The essence of hospital governance is to ensure a more integrated approach of supporting and supervising all hospital activities including clinical performance. Governing boards are recognized as being an important target for intervention for policymakers hoping to improve care in hospitals. High-performing and low-performing hospitals are said to be differentiated by the level of board activities. The chapter then considered the literature on the effects of board characteristics including, board size, board composition, board participation by medical staff, board leadership structure, board diversity, and frequency of board meetings on hospital performance. The

literature also discussed the effect of ownership structure on hospital performance.

The healthcare system in Ghana was discussed in the third chapter of the study. It provided a review of the history of the healthcare system, the structure and governance of the healthcare system and healthcare financing and resource utilization. The chapter then discussed targeted health programmes, health infrastructure, indigenous healthcare system, health sector reforms, and health information technology. The structure of the healthcare system in Ghana and for that matter in any country would have implications for the type of governance structures adopted by healthcare institutions. Therefore, understanding the healthcare system is also important in explaining the hospital governance structures. In Ghana, teaching hospitals are required under the Ghana Health Service and Teaching Hospitals Law 1996 (Act 525) to have a board. However, in the case of the other public hospitals, they are not required under Act 525 to have a board. Therefore, public hospitals with a board might be following an existing practice prior to the passing of Act 525 or might be responding to administrative directives from their regional health directorate to have a board in place. The private hospitals are also not required by any Act to have a board. The formation of a hospital boards is thus at the discretion of the respective private hospitals. In the case of the mission-based hospitals, some of the churches for instance have a dedicated board overseeing a group of their hospitals in a particular district.

The fourth chapter discussed the various governance theories, including agency theory, stewardship theory, institutional theory, managerialism theory, stakeholder theory, and resource dependency theory. The theoretical basis of this study on healthcare governance can conveniently be covered under the managerialism theory, the stakeholder theory and the resource dependency theory. The fourth chapter also discussed how the hypotheses of this study

were formulated based on existing literature and the theoretical underpinning of the study.

To carry out this investigation, a survey strategy and questionnaires for gathering and analyzing data was employed. Three main regression models were estimated in examining the effects of healthcare governance and ownership on hospital performance. In the first model, the study focused on both hospitals with a hospital governing board and those without a board. The idea is to ascertain whether or not the existence or presence of hospital board, ownership structure and control factors affect performance of the hospitals. A dummy variable was introduced to define whether or not a particular hospital has a board in place. In the second model, the study limited the sample to hospitals in Ghana with board structures by determining how hospital board characteristics and ownership structure affect hospital performance. Hospital board characteristics include, board size, board composition, board participation by medical staff, board leadership structure, board diversity, and frequency of board meetings. Measures of performance include occupancy rate, discharge rate, efficiency, and health service quality. In the third model, hospital board characteristics are interacted with ownership variables to ascertain the effects on hospital performance.

The analysis and discussion on the results first presented the descriptive statistics of the variables used in this study. The descriptive statistics of the performance measures (dependent variables) showed that, over half of the hospital beds are occupied daily and on the average the hospitals discharge a very high percentage of inpatients. The overall mean score of health service quality suggests that the health service quality ratings of Ghanaian hospitals are just above the average. The descriptive statistics also showed the mean values of the dependent variables across the three sample groups. Public hospitals have the highest occupancy rate, followed by mission hospitals, and

private hospitals. Private hospitals exhibit the highest discharge rate, followed by mission hospitals, and public hospitals. Mission-based hospitals and private hospitals appear to perform better than public hospitals in terms of occupancy rate and discharge rate. Mission-based hospitals are the most efficient in terms of the management of expenses, followed by private hospitals and lastly public hospitals. However, in terms of patients' perception of health service quality, private hospitals record the highest score, followed by mission-based hospitals and lastly, public hospitals. The mean scores of both mission-based and private hospitals are above the overall mean, suggesting that mission and private hospitals are perceived to provide better health service quality than the average hospital.

In examining the characteristics of hospital board governance, the results of this study showed that, more than half of all the hospitals sampled have hospital board structures in place. With respect to hospital with a board, the mean board size falls below the general recommendation. Board composition, medical staff representation, board leadership structure, board diversity, and frequency of board meetings generally fall within the general recommendations. In terms of the of hospital board governance across the forms of hospitals, the results indicated that half of the public hospitals have a hospital board in place. All the mission-based hospitals have a board and majority of the private hospitals have a hospital board in place. Public and mission-based hospitals have an average board size, which falls within the range recommended in literature, while private hospitals have a board size below the recommended range. Mission-based hospitals have the highest proportion of outside board members represented on the board, followed by private hospitals. Board composition of both mission-based and private hospitals is consistent with best practice, which suggests that, the board should be composed of majority outside board members. However, public hospitals have the lowest proportion of outside board members, which does not comply with best practice. In terms of board participation of medical staff, the results indicate that all the hospital forms have medical staff represented on their board. Private hospitals have the highest percentage of medical staff on the board, followed by public hospitals. Mission-based

hospitals report the lowest percentage of medical staff on their board. The results show that, majority of mission-based and public hospitals maintain a board typology, where the CEO's position is separate from that of the board chair consistent with best practice. The board leadership structure of most private hospitals does not comply with best practice. All the hospital forms have female representation on their board in compliance with best practice. Private hospitals have the highest female representation on the board followed by mission-based hospitals. Public hospitals maintain the lowest female representation on the board. Apart from mission-based hospitals, the other two forms of hospital generally hold the required number of meetings as recommended.

The regression results on the effects of the presence of governing board, ownership structure as well as control variables on the performance of hospitals in Ghana revealed that, hospitals that have a governing board in place have higher occupancy but they are perceived to deliver better health service quality compared to hospitals without a governing board. This could be attributed to the fact that governing boards properly perform their supervisory and regulatory roles thereby ensuring that the hospitals deliver good quality care. Hospital boards are necessary in taking decisions that would improve the quality of services provided by the hospitals. Both mission-based and private hospitals perform better in terms of occupancy and discharge rates because they tend to provide prompt and appropriate treatment. They also provide better quality of healthcare to their patients compared to their public counterparts. Public hospitals on the other hand tend to deal with very high number of patients and therefore have high occupancy rate and low discharge rate and low service quality.

With regards to the effect of board characteristics on performance, smaller boards were found to be associated with better health service quality and lower occupancy rate, suggesting that hospitals with smaller boards tend to take decisions to improve or provide better quality of health service and this can be translated into lower occupancy rate. Hospitals with greater proportion

of outside board members exhibit lower expenses because these outside board members tend to assist hospital management with suggestion on how to be cost efficient. The results also showed that hospitals with greater representation of medical staff on the board tend to entertain lower level of occupancy rate but operate at higher cost in their provision of healthcare services. Hospitals with CEO duality perform better in terms of efficiency. However, with respect to discharge rate and health service quality, the findings of this study suggest that hospital performance is enhanced when the positions of the CEO and board chair are decoupled. Hospitals with higher female representation on their board ensure the delivery of better quality of healthcare, resulting in higher level of discharge. Frequency of board meetings result in improved health service quality. Consistent with the results on the effect of the presence of hospital board on performance, mission-based and private hospitals exhibited lower occupancy rate compared to public hospitals. Again, private hospital compared to public hospitals showed higher discharge rate.

The findings of the study indicate that interacting board characteristics with ownership structure have significant effects on hospital performance. The results generally suggest that both mission-based and private hospitals with effective board governance tend to exhibit better performance than public hospitals.

8.2 Contributions of the Study

The findings of this study make interesting contributions. This study applies the governance theories beyond the corporate world in a developing country context by focusing specifically on the health sector. This study sought to increase our standing on how healthcare governance and ownership structure affect the performance of hospitals. The view held in this paper is that the presence of hospital boards is important in the functioning of hospitals. Majority of the hospitals, thus, recognized the relevance of hospital board by

having one in place. Hospital boards are said to constitute an important element of healthcare governance and they play a very significant role in the healthcare delivery system. Bader (1993) and Alexander *et al.* (2009) suggest that the hospital board is a central factor in healthcare governance as they hold the legal responsibility for establishing objectives, and reviewing management's performance to ensure that the health facility is well run. The hospital board is also said to have the ultimate accountability in terms of how the hospital functions. The effectiveness of the hospital boards depends on how they are structured in terms of size, composition, medical staff representation, board leadership structure, gender diversity, and frequency of meetings.

The findings of this study make a case for having smaller boards. Smaller boards tend to have more focused boardroom discussion and easily reach a consensus. They are able to take quicker decisions in delivering better service to their patients and therefore, enhance performance. This means smaller boards are more effective than larger boards. This position is supported by the extant literature (see Bader, 1999; Lipton and Lorsch, 1992; Gu *et al.*, 2010). Bader (1991) suggest that, small number of governing boards within a health system would ensure that boards focus more on their role within the system. Lipton and Lorsch (1992) argue that large boards tend to reduce effectiveness, and thereby making it easier for the CEO to control. Gu *et al.* (2010) also found that, smaller boards tend to record higher performance.

This study established that board composition is related to enhanced hospital performance. The reasoning here is that having greater number of outside board members increases the independence of the board. The independence of the board is necessary in implementing effective internal control systems, which ultimately improves efficiency and performance. The finding supports the resource dependency theory considering that outside board members bring some expertise to the work of the board leading to improved hospital performance. This finding with respect to board composition is also in tandem with prior empirical studies by Byrd and Hickman (1992) and Brickley

et al. (1994) who found that boards composed of greater number of outside or external board members bring about enhanced hospital performance. It is also supported by the position of Baysinger and Hoskisson (1990), and Gautam and Goodstein (1996) that, outside directors are necessary to adequately monitor top management's performance. Also, in the opinion of Dalton *et al.* (1999), the independence of directors is an essential requirement for board effectiveness. Clearly, board composition enhances board monitoring and effectiveness, which could lead to improved performance.

The position held in this is that greater representation of medical staff on the hospital board lead to lower occupancy rate but higher operating cost in the provision of healthcare services. This finding partially supports the managerialism theory and resource dependency theory.

This study postulates the need for decoupling the roles of the CEO and board chair. This position is consistent with the extant literature, which also makes a case for a board typology, where the position of the CEO is separated from that of the board chair. It is evident from the findings of this study that such a board typology brings about better performance in terms of higher discharge and better service quality. The position held in this study is also supported by the stakeholder theory which suggests that, duality seriously impedes the overall stakeholder orientation of board members, therefore, separating the functions of the CEO and board chair may be viewed as enhancing the board's monitoring and control ability, and improve director's information processing capacities (Sanders and Carpenter, 1998).

The findings of this study give credence to the importance of female representation on hospital boards. Gender diversity is related to improved hospital performance and this is based on the resource dependency theory.

Females bring interesting perspective to boardroom discussion and this has the tendency of improving the quality of service delivery and performance. Bilimoria (2000) argue that having women on boards is desirable business practice because it is likely to improve the reputation on the firm, the strategic direction (by better understanding women's issues that may impact on such direction) and to contribute positively to the firm's female employees. Siciliano (1996) suggests that, boards with increased gender diversity are more likely to enjoy high levels of social agency mission achievement. Elstad and Ladegard (2010) also argue that the higher the proportion of females on the board, the greater the level of perceived influence, perceived social interaction outside the boardroom, and to some degree, perceived information sharing. This finding with respect to gender diversity contributes to previous empirical studies, which also found that higher representation of females on boards lead to better performance (see Burke, 1997; Singh *et al.*, 2001; Carter *et al.*, 2003).

It is also established in this study that frequency of board meetings results in improved health service quality. The frequency of board meetings may be explained within the context of the resource dependency theory. Holding frequent board meetings ensures that the board receives relevant information on the hospital to enable it make useful decisions that will enhance performance. Also, holding frequent board meetings could be a way of ensuring that the board members are well informed to make meaningful contributions in addressing the resource needs of the hospital.

The study points to the fact that mission-based and private hospitals exhibit better performance than public hospitals. These hospitals provide prompt and appropriate treatment, and also provide better quality of healthcare. This position contributes to the property rights theory, which suggests that the managers of private hospitals unlike their public counterpart are able to implement initiatives and innovations to improve efficiency and service

quality (Hart, 1995). Hospitals in developing countries exhibit different ownership structure from hospitals in developed countries. The study contributes to the extant literature by examining how different ownership structures influence the performance of hospitals. In examining the combined effect of hospital board characteristics and ownership structure, it was observed that interacting hospital board characteristics with ownership structure significantly influence the performance of hospitals in Ghana. The results of this study have shown that mission-based hospitals and that of private hospitals with well-structured board characteristics record better performance. This finding signals the fact that effective board structure and ownership structure are both important in influencing hospital performance.

This study also contributes to the body of knowledge as a pioneering work to ascertain how governance affect hospital performance considering various ownership forms. To the best of the researcher's knowledge, this is the first study that ascertains whether or not the presence of a hospital board affects performance. In first equation, a model is estimated where a dummy variable is introduced with the value of one where the hospital has a board in place, and zero if otherwise. The dummy variable is used to define the presence of a hospital board. The model also captures the effects of the ownership structure (which is defined by a categorical variable) and the control variables on hospital performance. In the third equation, a model is estimated by interacting hospital board characteristics with ownership structure to ascertain their combined effect on performance. Another important contribution to the methodology is that performance is looked at from the point of view of both the health service providers and patients. Prior studies defined hospital performance from only the hospitals' point of view. In this study, apart from including hospitals' measures of performance (i.e., occupancy rate, discharge rate, and efficiency), the study includes health service quality as a performance measure from the patients' point of view.

8.3 Limitations of the Study

This study focused on how the governance structures of public, mission-based and private hospitals influence their performance. However, some limitations were identified with respect to the study.

Healthcare governance or hospital governance is regarded as a shared process of top-level organizational leadership, policymaking and decision-making of the board, CEO, senior management and clinical leaders. But this current study focused on an aspect of healthcare governance. This study specifically focuses on the importance of hospital boards by ascertaining whether or not the presence of hospital board influences hospital performance. The study also looked at how hospital board characteristics affect performance. The study could have included a more comprehensive measure of healthcare governance and quality of management.

Also, this study used structural measures to examine the effect of hospital governing boards on performance. However, structural measures do not capture the quality of governing board participation in the strategic management of the hospital. One of the hospital board characteristics is gender diversity. The extant literature defines board diversity to include age, ethnicity, gender, education, occupation, and religion. The study limited board diversity to only gender board diversity for lack of data. In this study, measures of performance include occupancy rate, discharge rate, efficiency, and service quality. It would have been useful to include other measures of performance.

The governance characteristics, ownership type and the control variables might very well be determined by the performance of hospitals, indicating a reverse causality in the determination of performance. For instance, some hospitals could be taken over by other owners depending on their

performance, and governance structures might also be changed relative to prevailing performance measures of the hospital. Thus, issues of endogeneity are to be expected in the estimation models used in this study. The methodology employed in this study does not include measures like the use of an appropriate instrumental variable to control for endogeneity.

Considering the changes in policy directions by the different political parties in Ghana, a longitudinal study into examining the healthcare governance in Ghana over a period could reveal some interesting trends in changes in structures relative to the different change in national politics/governance. This study is however a cross sectional one limited by changes in governance trends over time.

Adequate understanding of the mechanisms of governance in the healthcare sector could have been conducted with an in-depth study (e.g. case study) of a few specified hospital types, instead of the general approach to large sample size captured in this study.

However, the researcher believes that these limitations do not affect the findings of the research. The thesis provides interesting findings on the healthcare governance, ownership structure and the performance of hospitals in a developing country context.

8.4 Conclusion and Policy Implications

The governance and effectiveness of the healthcare sector is very important due to its impact on human well-being and the size of this sector of the economy. All serious governments and healthcare boards must know how to improve the governance of the sector. The findings of this study have revealed that, the performance of hospitals is influenced by the presence of

hospital board. The study has also shown that, depending on how the boards are structured in terms of their characteristics, these tend to have significant effects on the performance of the hospitals. Clearly, the results of this study have provided some useful insights into the importance of healthcare governance boards and ownership structure in influencing the performance of hospitals. The findings of this study, therefore, have important implications for improving healthcare governance, management and the performance of hospitals. The findings would be relevant for policy makers, hospital boards and management.

First, it has been established that hospitals that have a governing board in place perform better in terms of delivering quality healthcare. The presence of hospital boards is important as they take decisions that improve the quality of health services provided by the hospitals. It is, therefore, recommended that hospitals that do not have a board in place should consider composing a well-functioning board. It would also be useful for government through the Ministry of Health to consider giving a legal backing mandating all hospitals to have a governing board in place if the complex challenges of the health sector are to be dealt with critically. Hospitals boards need to be empowered to discharge their responsibilities with authority. For instance, the board should be able to execute their full authority on hiring and firing CEOs and senior management of hospitals based on their performance.

Second, it is argued that having a hospital board in place is not sufficient. It is also necessary to structure the board in such a way that it is effective in ensuring better healthcare delivery and enhanced performance. The findings of this study have shown that, the structure of the hospital boards in terms of their characteristics is important in influencing performance. This current study supports the recent call for smaller boards as it was observed that smaller boards bring about better health service quality and lower occupancy rate. This signals the fact that hospitals with smaller boards encourage

activities that lead to the provision of better quality of health service. Hospitals need to employ a smaller board as opposed to a bigger board, which often turns out to be ineffective.

One key policy recommendation is the need to have a hospital board made up of majority independent directors. The board should be composed of majority of outsiders. Having a governing board with majority of outsiders has been shown to be important in improving the performance of hospitals. It is established in this study that independent board members are often in the position to guide hospital management on how to be cost efficient.

This study argues for the need to have a good number of medical staff on the hospital board. In order to improve on the quality of healthcare of a nation, doctors and other healthcare professionals should be involved more in the governance and management of the health services. Higher proportion of medical staff on the hospital board has been found to lead to better performance in terms of high level of discharge.

Although the findings of this study suggest that CEO duality results in better performance in terms of efficiency, the essence of decoupling the roles of the CEO and board chairs is eminent in this study, as shown by the high discharge rate and better service quality. Hospitals need to recognize the need to have the functions of the CEO and board chair performed by two separate individuals. This ensures that the CEO does not have his/her way by pushing their personal agenda at board meetings. Such a two-tier board typology has the advantage of preventing opportunistic actions by the CEO and management.

The important role of female representation on hospitals boards is recognized by the findings of this study. Another policy recommendation is the need to have a good number of females on the hospital board. Females on hospitals hospital boards bring about interesting perspectives to boardroom discussion, which result in the delivery of better quality of healthcare with a subsequent effect on higher level of discharge.

The findings of this study have confirmed the notion that frequency of board meetings leads in improved performance. This study therefore recommends the need to hold frequent meetings at least once per quarter. Holding frequent board meetings provides the opportunity to receive relevant information that enables board members make important decisions that lead to the provision of better health service quality. Holding frequent board meetings is also important in ensuring frequent monitoring and this enables board members to contribute meaningfully to addressing the resource needs of the hospital.

Another important policy recommendation is with respect to the need for public hospitals to be prompt in the provision of healthcare services as in the case of mission-based and private hospitals. The findings of this study revealed that mission-based and private hospitals exhibit better performance in areas of occupancy and discharge rates because they tend to provide prompt and appropriate treatment. The performance of mission-based and private hospitals may be attributed to better reward systems. Therefore, it would be useful to institute a reward system that incentivizes better performing public hospitals. This is one way of motivating low performing ones to follow suit. The high patient-doctor ratios in public hospitals as well as the overcrowding in the hospital wards could be minimized by providing adequate resources (facilities and health personnel) to enable the provision of quality-individualized care in public hospitals.

There is the need for better policies and measures to be put in place through the Ministry of Health to improve on the quality of healthcare delivery, in order to boost donor and public confidence and trust in the health system.

In addition to ensuring a well-structured governance system at the hospital level, there is also the need to put in place a proper governance structure at the level of the national healthcare system. This is an important move in ensuring an effective and efficient healthcare delivery system. An effective governance system at that level would be useful in strengthening and streamlining the activities of the traditional healthcare system to supplement the healthcare rendered by the currently dominating rather strained orthodox healthcare system.

This study would also be useful with respect to curriculum design in the area of healthcare governance. Academic programmes on corporate governance abound. However, the researcher is yet to find one on Healthcare Governance, especially in Africa. Such an academic programme would be useful in providing the necessary training in improving skills and expertise of hospital board members and management to participate in boardroom discussions and decision-making.

8.5 Directions for Further Research

The findings of this study bring to the fore some issues for future research. It would be useful to include other elements of healthcare governance, such as the role of top management, the quality of management, and clinical leaders in hospital governance and how that affects performance. This is because findings of this study alludes to the fact that having governance structures in place by itself does not determine good performance, thus investigating the quality and competence of management in implementing policy directives

from the governing board would give a better understanding of healthcare governance.

The criteria used in appointing board members is equally crucial in evaluating board performance. Therefore, a study into the mode of appointment and measurement of board performance would be appropriate in a future study.

A study into how governing boards perform their role in terms of the appointment of hospital executives would be useful. Investigating the actual authority of the board in this regard and how this influences the monitoring of hospital management would further deepen the appreciation of healthcare governance issues in a developing country.

This study considered structural measures of hospital boards. It would also be useful for future studies to consider process measures of board activity. These may include the number of board-initiated proposals that are introduced and adopted, hours spent on the development or evaluation of strategic plans for higher performance, and the importance of board minutes.

Another important area for future study is examining the reverse causality. This study examined how hospital performance is influenced by governance characteristics and ownership structure. In addition to this, a future study could include how board governance and ownership structure are determined by hospital performance.

A qualitative interview-based study into finding out more about why some board characteristics like medical staff and female representation on boards significantly influence performance of mission hospitals and not private

hospitals. Thus, a case study of each of the ownership types or two or more of the same ownership form with different performance levels could be studied to find out what is really driving these variations.

Future studies may consider expanding board and gender diversity to include other measures, such as age, educational and other backgrounds of board members.

Another important area that could be considered in future studies is the inclusion of other measures of performance beyond the four measures used in this current study. For instance, this study did not look at performance in terms of profitability. A study on how the governance structures of private hospitals affect their profitability would be useful.

A comparative study of healthcare governance of Ghana with that of another African country would be worth investigating. It would be an interesting study comparing the different political and economic environments of African countries and how these impact on healthcare governance.

Future studies could also consider the level of satisfaction of employees of these hospitals as a measure of service quality.

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Appendices

Appendix 1: Questionnaire to Hospitals

Facility name	
Region	
Date of survey	

People interviewed

Name	Position	Department	Phone number	Email address

General Information

1. Name of hospital
2. When was the hospital established?
3. What is the number of your of employees?.....
4. What is the form of your business's ownership?
☐ public ☐ private ☐ mission-based
5. Is the hospital for-profit or non-profit?.....
6. Where are you located?.....

7. What was the revenue (IGF) for five years

[2005].....

[2006].....

[2007].....

[2008].....

[2009].....

[2010].....

8. What is the educational background of the CEO/Medical Director

☐ First degree

☐ Postgraduate degree

☐ Other, please specify

9. What is the professional training of the CEO/ Medical Director?

(Please you can tick more than one)

☐ Medicine

☐ Health service administration

☐ Human Resources

☐ Other, please specify.....

10. Do you have a Hospital Administrator?

☐ Yes

☐ No

11. What is the educational background of the Hospital Administrator?

- ☐ First degree
- ☐ Postgraduate degree
- ☐ Other, please specify

12.What is the size of the management team?.....

13.How many of those in management have degree or professional qualification?.....

Hospital Governance Issues

14.Do you have a working board of directors?

- ☐ Yes ☐ No

15.If NO, why?

16.How many board members do you have (excluding the board secretary?.....

17.How many of the board members are outsiders or do not work in the hospital?.....

18.How many of the board members are females?.....

19.How many of the board members are medical staff of this hospital?.....

20.How many of the board members are medical professionals from outside?.....

21.How many of the board members are relatives of the CEO/owner?.....

22.How many of the board members are friends of the CEO/owner?.....

23.How many directors have a degree or professional qualification?
.....

24.How many directors have a law degree?

25.Is the CEO/medical director also the chairman of the board?

☐ Yes ☐ No

26.How many board meetings do you hold in a year?

☐ None

☐ One

☐ Two

☐ Three

☐ Four

☐ other, please specify

27.Are board meetings based on prepared agendas?

☐ Yes ☐ No

28.Are minutes taken at board meetings?

☐ Yes ☐ No

29.Are agendas driven by and aligned with the annual board goals and work plan?

☐ Yes ☐ No

30.Are agendas and previous minutes sent to members ahead of board meetings?

☐ Yes ☐ No

31.If Yes, for how long do members have to study agendas and previous minutes before the next meeting?.....

32.What is the level of involvement of the outside directors?

☐ Highly involved

☐ Involved

☐ Some involvement

☐ Hardly involved

☐ Not involved

33. How are board members appointed or selected?.....

34. Who appoints the board members?

☐ Government ☐ CEO/medical director ☐ Other, please specify.....

35. Where are the outside directors found?

☐ Family members

☐ Friends of a director

☐ Business friend suggested

☐ Introduction from the Ministry of Health

☐ Introduction from external auditor

☐ Family member suggested

☐ From other hospitals

☐ Introduction from Solicitor

☐ Local links

☐ Other, please specify

36. What is the term of office of directors?

- ☐ 2 years and renewable for another years
- ☐ 3 years and renewable for another years
- ☐ 4 years and renewable for another years
- ☐ No limit to term
- ☐ Other, please specify.....

37.How is board remuneration set?

- ☐ No remuneration
- ☐ Set annual fee
- ☐ Per meeting fee
- ☐ Travel and other reimbursement
- ☐ Other, please specify

38.Is there a policy on evaluating the performance of the board?

- ☐ Yes ☐ No

39.How is the evaluation done and how often is it done?.....

.....

.....

40.Is there a policy on evaluating the performance of the CEO?

- ☐ Yes ☐ No

41. How is the evaluation done and how often is it done?.....

.....

.....

42. Do you have a policy on succession planning?

☐ Yes ☐ No

43. Do you have an internal audit department?

☐ Yes ☐ No

44. Do you have an audit committee?

☐ Yes ☐ No

45. Which sub-committees of the board do you have?

☐ Audit subcommittee

☐ Finance

☐ Compensation/Remuneration

☐ Technical

☐ Others, please specify.....

46.

On a scale of 1 – 5 Rank the contribution of the outside board

1. Not important

5. Very important

	1	2	3	4	5
Building organization reputation	☐	☐	☐	☐	☐
Strategic planning process	☐	☐	☐	☐	☐
Take care of access to resources	☐	☐	☐	☐	☐
Finance expertise	☐	☐	☐	☐	☐
Legal expertise	☐	☐	☐	☐	☐
Operational expertise	☐	☐	☐	☐	☐
Recruitment	☐	☐	☐	☐	☐
Help with growth problems	☐	☐	☐	☐	☐
Providing advise	☐	☐	☐	☐	☐
Networking	☐	☐	☐	☐	☐
Determining salary	☐	☐	☐	☐	☐
Evaluating management	☐	☐	☐	☐	☐
Directing succession problems	☐	☐	☐	☐	☐

47.What do you think are the problems to effective governance of the hospital?

.....

.....

.....

.....

48.How many beds does this hospital have currently?

49.How many beds did this hospital have in:

[2005].....

[2006].....

[2007].....

[2008].....

[2009].....

[2010].....

50.On the average, what is the occupancy rate (how many inpatients in the hospital per bed)

Daily?..... Monthly?.....

51.How many inpatients did you have in:

[2005].....

[2006].....

[2007].....

[2008].....

[2009].....

[2010].....

52.How many inpatients were discharged in:

[2005].....

[2006].....

[2007].....

[2008].....

[2009].....

[2010].....

53.What were your total expenses for the last five years?

[2005].....

[2006].....

[2007].....

[2008].....

[2009].....

[2010].....

Appendix 2: Questionnaire to Patients

Service Quality Issues

Facility name	
Region	

Date of survey	
----------------	--

The following set of statements relate to your feelings about the hospital/clinic you have attended. For each statement, please show the extent to which you believe the hospital/clinic has the feature described by the statement. Once again, circling a 1 means that you strongly disagree that the hospital/clinic you have attended has this feature and circling a 7 means that you strongly agree. You may circle any of the numbers in the middle that show how strong your feelings are. There are no rights or wrong answers - all we are interested in is a number that best shows your perceptions about the hospital/clinic which has treated you.

Strongly

Strongly

Disagree

Agree

1. The hospital/clinic has modern- looking equipment. 1 2 3 4 5 6 7

2. The physical facilities in the hospital/clinic are visually appealing.

1 2 3 4 5 6 7

3. Personnel in the hospital/clinic are neat in appearance. 1 2 3 4 5 6 7

4. Materials associated with the service (such as pamphlets or statements) are

visually appealing. 1 2 3 4 5 6 7

5. When the hospital/clinic promises to do something by a certain time it does

so. 1 2 3 4 5 6 7

6. When you have a problem, the hospitals /clinic shows a sincere interest in solving it. 1 2 3 4 5 6 7

7. The hospital/clinic gets things right the first time. 1 2 3 4 5 6 7

8. The hospital/clinic provides its services at the time it promises to do so.

1 2 3 4 5 6 7

9. The hospital/clinic insists on error-free records. 1 2 3 4 5 6 7

10. The personnel in the hospital/clinic tell you exactly when services will be performed. 1 2 3 4 5 6 7

11. Personnel in the hospital/clinic give you prompt service. 1 2 3 4 5 6 7

12. Personnel in the hospital/clinic are always willing to help you. 1 2 3 4 5 6 7

13. Personnel in the hospital/clinic are never be too busy to respond to your

requests. 1 2 3 4 5 6 7

14. The behaviour of personnel in the hospital/clinic instils confidence in you.

1 2 3 4 5 6 7

15. You feel safe in your dealings with the hospital/clinic. 1 2 3 4 5 6 7

16. Personnel in the hospital/clinic are consistently courteous with

you. 1 2 3 4 5 6 7

17. Personnel in the hospital/clinic have the knowledge to answer your

questions. 1 2 3 4 5 6 7

18. The hospital/clinic gives you individual attention. 1 2 3 4 5 6 7

19. The hospital/clinic has operating hours convenient to all its patients.

1 2 3 4 5 6 7

20. The hospital/clinic has personnel who give you personal attention.

1 2 3 4 5 6 7

21. The hospital/clinic has your best interests at heart. 1 2 3 4 5 6 7

22. The personnel of the hospital/clinic understand your specific needs.

1 2 3 4 5 6 7

Thank you for the time you have spent in completing this questionnaire.

Appendix 3: List of Sampled Hospitals

No.	Name of Hospital	Ownership Type	Location	Region
1	Akropong Government Hospital	Public	Akropong	Ashanti

2	Aboraa Hospital	private	Accra	Greater Accra
3	Achimota Hospital	Public	Accra	Greater Accra
4	Agogba Clinic	Public	Accra	Greater Accra
5	Airport Clinic	Public	Accra	Greater Accra
6	Akim Oda Hospital	Public	Oda	Eastern
7	Al-Ayar Clinic	Mission	Accra	Greater Accra
8	Alpha Medical Centre	Private	Accra	Greater Accra
9	Asamankese Govt. Hospital	Public	Aasamankese	Eastern
10	Akuse Government Hospital	Public	Akuse	Eastern
11	Atua Government Hospital	Public	Odumase-Krobo	Eastern
12	Aviation Clinic	Public	Accra	Greater Accra
13	Barnor Hospital	Mission	Accra	Greater Accra
14	Bawku Presby Hospital	Public	Bawku	Upper East
15	Bechem Hospital	Public	Bechem	Brong Ahafo
16	Begoro Hospital	Public	Begoro	Eastern
17	Bengali Hospital	Public	Tema	Greater Accra
18	Bennette Memorial Clinic	Private	Accra	Greater Accra
19	Biney Clinic	Private	Tema	Greater Accra
20	Bolgatanga Hospital	Public	Bolatanga	Upper East
21	Cacao Clinic	Mission	Accra	Greater Accra

22	Cantoments Hospital	Private	Cantoments	Greater Accra
23	Caiquo Hospital	Private	Tema	Greater Accra
24	Calvary Clinic	Private	Tema	Greater Accra
25	Calvary Cross Clinic	Mission	Accra	Greater Accra
26	Cathedral Clinic	Private	Accra	Greater Accra
27	Central Regional Hospital	Public	cape coast	Central
28	Cocoa Clinic	Public	Accra	Greater Accra
29	Dangme East Hospital	Public	Ada	Greater Accra
30	Dangme West District Hospital	Public	Dodowa	Greater Accra
31	Dansoman Central Hospital	Private	Accra	Greater Accra
32	Dansoman Clinic	Public	Tema	Greater Accra
33	DAR- BEM Clinic	Private	Accra	Greater Accra
34	Del International Hospital	Private	Accra	Greater Accra
35	Deseret Hospital	Private	Accra	Greater Accra
36	Dunkwa Government Hospital	Public	Dunkwa	Central
37	Eden Family Hospital	Public	Accra	Greater Accra
38	Effia-Nkwanta Regional Hospital	Public	Secondi	Western
39	Fair Lady Clinic	Private	Accra	Greater Accra
40	Ga South Municipal Hospital	Public	Accra	Greater Accra
41	Gak Clinic	Private	Accra	Greater Accra
42	Ghana Police Hospital	Public	Accra	Greater Accra

43	Ghana Ports & Harbour	Public	Takoradi	Western
44	Greenhand Clinic	Mission	Accra	Greater Accra
45	Government Hospital	Public	Accra	Greater Accra
46	Holy Cross Clinic	Mission	Accra	Greater Accra
47	Holy Family Hospital	Private	Nkawkaw	Eastern
48	Holy Family Hospital - Nkawkaw	Mission	Nkawkaw	Eastern
49	Holy Family Hospital - Berekum	Mission	Berekum	Brong Ahafo
50	Holy Height Hospital	Public	Accra	Greater Accra
51	Holy Cross Clinic	Mission	Accra	Greater Accra
52	Holy Trinity Hospital	Mission	Accra	Greater Accra
53	Joana Clinic Ltd	Private	Accra	Greater Accra
54	Johpat Hospital	Private	Accra	Greater Accra
55	Karikari Brobbey Hospital	Private	Accra	Greater Accra
56	Kasoa Hospital Complex	Private	Kasoa	Central
57	Kyebi Government Hospital	Public	Kibi	Eastern
58	Kintampo Municipal Hospital	Public	Kintampo	Brong Ahafo
59	KNUST Hospital	Public	Kumasi	Ashanti
60	Koforidua Regional	Public	Koforidua	Eastern
61	Korle-Bu Teaching Hospital	Public	Accra	Greater Accra
62	Kumawu Health Centre	Public	Kumawu	Ashanti
63	Kwahu Government Hospital	Public	Kwahu	Eastern

64	La Hospital	Public	La	Greater Accra
65	Lagoon Clinic	Private	Tema	Greater Accra
66	Lake Side Clinic	Public	Accra	Greater Accra
67	Mab Medicare Centre	Private	Accra	Greater Accra
68	Manna Mission Hospital	Mission	Accra	Greater Accra
69	Mercy Clinic	Private	Accra	Greater Accra
70	Meridian Clinic	Private	Accra	Greater Accra
71	Mery Lucy Hospital	Mission	Accra	Greater Accra
72	37 Military Hospital	Public	Accra	Greater Accra
73	Military Hospital	Public	Tamale	Greater Accra
74	Mission Clinic	Private	Accra	Greater Accra
75	P M L Hospital	Public	Accra	Greater Accra
76	Narh-Bita Hospital	Public	Tema	Greater Accra
77	Neptune Medical Centre	Public	Tema	Greater Accra
78	New Edubiase Hospital	Public	New Edubiase	Ashanti
79	New Tafo Government Hospital	Public	New Tafo	Eastern
80	Nightingale Hospital	Private	Accra	Greater Accra
81	North Ridge Clinic	Public	Accra	Greater Accra
82	Notre Dame Clinic	Mission	Adeiso	Eastern
83	Nsawam Hospital	Public	Nsawam	Eastern
84	Nsawam Govt Hospital	Public	Nsawam	Eastern

85	Nyarho Medical Centre	Private	Accra	Greater Accra
86	Oda Government Hospital	Public	Oda	Eastern
87	Owusu Memorial Hospital	Public	Sunyani	Brong Ahafo
88	Pantang Hospital	Public	Accra	Greater Accra
89	Port Medical centre	Private	Tema	Greater Accra
90	Presby Hospital, Donkorkrom	Mission	Donkorkrom	Eastern
91	Princess Marie Children's Hospital	Public	Accra	Greater Accra
92	PURC	Public	Accra	Greater Accra
93	Queens Medical Center	Private	Accra	Greater Accra
94	Koforidua Regional Hospital	Public	Koforidua	Eastern
95	Ridge Hospital	Public	Accra	Greater Accra
96	Sakumono Hospital	Public	Tema	Greater Accra
97	Second Bridge Clinic	Private	Accra	Greater Accra
98	Sinel Hospital	Private	Tema	Greater Accra
99	Sogakope District Hospital	Public	Sogakope	Volta
100	St Jude Hospital	Mission	Obuasi	Ashanti
101	St. Anthony's Hospital	Mission	Ketu	Volta
102	St. Dominic Hospital	Mission	Akwatia	Greater Accra
103	St. Florence Clinic	Mission	Tema	Greater Accra
104	St. Joseph Hospital	Mission	Koforidua	Eastern

105	St. Martin's De Pores	Mission	Eikwe	Western
106	St. Patrick's Hospital	Private	Kpando	Volta
107	Saltpond Government Hospital	Public	Saltpond	Central
108	Suhum Government Hospital	Public	Suhum	Eastern
109	Swan Clinic	Private	Accra	Greater Accra
110	Swedru Municipal Hospital	Public	Swedru	Central
111	Tamale Regional Hospital	Public	Tamale	Northern
112	Tamale Teaching Hospital	Public	Tamale	Northern
113	Takoradi Hospital	Public	Takoradi	Western
114	Tarkwa Municipal Hospital	Public	Tarkwa	Western
115	Tema General Hospital	Public	Tema	Greater Accra
116	Tetteh Quarshie Memorial Hospital	Public	Accra	Greater Accra
117	The Community Hospital	Public	Accra	Greater Accra
118	The Rock Hospital	Private	Accra	Greater Accra
119	Trust Hospital	Private	Accra	Greater Accra
120	UEW Clinic	Public	Winneba	Central
121	University of Ghana Hospital	Public	Accra	Greater Accra
122	University Hospital	Public	Cape Coast	Central
123	Upper West Regional Hospital	Public	Wa	Upper West
124	Valco Clinic	Public	Tema	Greater Accra

125	Valley View Hospital	Mission	Accra	Greater Accra
126	Vicom Hospital	Private	Accra	Greater Accra
127	Volta Regional Hospital	Public	Ho	Volta
128	VRA Hospital	Public	Accra	Greater Accra
129	War Memorial Hospital	Public	Navrongo	Upper East
130	Weija Leprosarium	Public	Accra	Greater Accra
131	Winneba Hospital	Public	Winneba	Greater Accra
132	Wisdom Hospital	Private	Dichemso	Ashanti