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The American University in Cairo School of Global Affairs and Public Policy

ACCOUNTABILITY, AUTONOMY, AND GOVERNANCE CHALLENGES OF PUBLIC UNIVERSITY HOSPITALS IN EGYPT

A Thesis Submitted to the

Public Policy and Administration Department

in partial fulfillment of the requirements for the degree of

Master of Public Administration

By

Yasmine Mohamed Badr

FALL 17

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List of Acronyms

AHC	Academic Health Center
BoD	Board of Directors
ССО	Curative Care Organization
GOTHI	General Organization for Teaching Hospitals and Institutes
HIO	Health Insurance Organization
OECD	Organization for Economic Cooperation and
SCU	Development Supreme Council of Universities
МОН	Ministry of Health
MOPMAR	Ministry of Planning, Monitoring, and Administrative
MOHE	Reform Ministry of Higher Education
MOF	Ministry of Finance

Acknowledgement

I would like to extend my sincere gratitude and appreciation to my supervisor Dr. Khaled Abdelhalim for his patience and advice along the writing process of this work. His insightful comments whenever things did not fall into place were always of guidance.

Also, I would like to sincerely thank Dr. Ghada Barsoum for her continuous support and constructive feedback since the early stages of the thesis and for accepting to serve on the committee. I am truly indebted to Dr. Mostafa Hunter for his continuous guidance professionally and academically. I appreciate his support in helping me with reaching out to key informants for the study.

Last but not least, I thank my parents wholeheartedly for always pushing me forward and for vividly showing me what persistence and dedication mean in the pursuit of an academic career.

As ever, I thank my loving husband for his constant encouragement, patience and understanding. I owe him for putting up with my busyness during the final stages of writing this work without any sign of discomfort. "To every person who defied the status quo seeking bread, freedom, and social justice in Egypt and beyond..." (Ahmed Khattab, 2013)

The American University in Cairo School of Global Affairs and Public Policy Department of Public Policy and Administration

Accountability, Autonomy and Governance Challenges to Public University Hospitals in Egypt

By Yasmine Mohamed Badr

Supervised by Dr. Khaled Abdelhalim

ABSTRACT

In Egypt, public university hospitals play a crucial role not only in education and research but also in the provision of healthcare services. What adds to the complexity of public university hospitals is their existence within two sectors; higher education and healthcare. This work highlights the inability of Egyptian public university hospitals to achieve their tripartite mission as a result of improper institutional governance arrangement that does not empower hospitals to cope with the requirements of both sectors. Despite the importance of institutional governance to university hospitals in Egypt, this topic remains under researched in the literature. This qualitative study aims to explore the existing institutional governance arrangement of public university hospitals in Egypt, identify key issue domains that they face and means to overcome these challenges, and the current reforms undertaken in public university hospitals. In-depth interviews are carried out with ten participants covering six different public university hospitals across Egypt selected purposively. Interviews range between 30-60 minutes each with subject-matter experts, top leaders/ managers in public university hospitals and medical schools, and representatives from regulatory bodies. The analysis of the study follows the framework for public hospital governance and the owner model of university hospital governance. Findings of this research reveal that public university hospitals follow the unified governance arrangement. It has a number of advantages such as easier agreement between clinical and academic enterprises, and alignment of academic plans with clinical training. Yet, there are associated problems with the existing governance arrangement manifested in the limited autonomy of university hospital managers, centralization of decision making at different organizational levels, financial mismanagement, and imbalance between academic and clinical endeavors in certain cases. The study recommends the continuation of the unified governance arrangement to university hospitals, yet with more autonomy to the dean, general manager of hospitals and hospital managers. The need to develop boards of directors professionally in terms of composition and size is crucial to the accountability of university hospitals. Hospital managers need to be adequately empowered in alignment with their clinical, administrative and financial responsibilities. Financially, all revenue streams need to be consolidated electronically and linked to the missions.

Chapter One: Introduction

University hospitals play a crucial role not only in education and training of young physicians but also as healthcare providers. The main dimension that makes university hospitals more challenging than other types of public hospitals is that they exist within two industries; higher education and healthcare. This makes university hospitals relatively more complex as they have to fulfill requirements of both industries the higher education and the healthcare industries (Allison & Dalston, 1982). They have to meet both external environments and cope with the internal environment of both the university and the hospital in addition to elements outside the control of both the university and the hospital (ibid). University hospitals share important characteristics and missions: every medical school must relate to a hospital to teach its students and graduate trainees, conduct clinical research, and provide its clinical faculty with the means of practicing their profession. The difference from one school to the other is the structure of these interlinked relationships.

In this context, speaking about effective and sound governing structures that enable university hospitals to fulfill their mandates is a key element for their survival and future institutional development. In today's environment all hospitals face challenges financial, political, operational, economic, legal etc. nationally and internationally (Harding & Preker, 2000). Thus, it is existentially important now more than ever for university hospitals to have effective governing structures that minimize the margin of poor quality of decisions, empower hospitals with adequate levels of autonomy, improve their ability to realize their potential, and to fulfill their mandate in educating and training healthcare professionals as well as to increase the quality of services provided to poor patients (Saltman et al., 2011). Therefore, recently there is heightened attention to the importance of governance in the hospital setting. It is considered a fundamental pillar to the development of organizations enabling them to proactively respond to constant environmental challenges CIPE & HeGTA, 2014). Governance in its basic essence lays the foundation for clear assignment of duties and responsibilities that result in efficient performance and better responsiveness to stakeholder demands (ibid). Considering the importance of governance in the hospital setting, this work explores this issue domain in Egypt. Even though university hospitals are considered one of the performing healthcare providers compared to other players in the healthcare sector in Egypt, there are concerns on their institutional ability to fulfill their mandates.

1.1. Rationale for conducting this study

Of all the potential contributing factors to the inability of public university hospitals to achieve their tripartite mission (education & training, service provision and research), the inadequate institutional governance arrangement is considered in this study the fundamental factor hampering public university hospitals.

The assumption is that the existing institutional governance arrangement of public university hospitals does not enable them to pursue their missions in the specific case of Egypt. Governance, in this context, refers to the ways and means by which organizations steer all their efforts for a common goal and set clear directions (OECD & World Bank, 2010). In the university hospital setting, it is important to identify key issue domains in how university hospitals pursue their missions. It is considered an essential entry point towards better governed hospitals and outcomes.

Institutional governance articulates the role of governing boards, the organizational rules and procedures, the guiding pillars for resources, the arrangement for how to manage the performance of the executive management, and the reporting obligations (Ricci, 1999). Every organization needs effective governing structures enabling it to fulfill its mandate and operate within the dynamic environment. "Good governance facilitates decision making which is rational, informed and transparent, and which leads to organizational efficiency and effectiveness. An important characteristic of good governance is that of probity. Decision-making should ensure that varying interests are appropriately balanced, that the reasons behind competing interests are recognized, and that one interest is not endorsed over others on arbitrary grounds" (Blom & Cheong, 2010). This implies that good governance practices can yield unparalleled success in guiding decision making in a way that balances different interests of stakeholders efficiently and effectively.

In university hospitals— being the unit of overlap between higher education and healthcare sectors— their governance arrangement is even more complex than other publicly-owned healthcare providers. In accordance, the understanding of the authority and function distribution among the different actors and their larger institutional affiliations as well as the modes of control is a key governance consideration that helps analyze the ability of the university hospitals to reach its objectives (Ricci, 1999).

In alignment with Ricci's proposition of governance, the following definition explains the multiple dimensions of the organization that governance processes have to deal with. "Governance processes deal with multiple dimensions of an institution: how it coheres; how its exercises authority; how it relates to internal members (students and staff); how it relates to external stakeholders (government, business, local community, international institutions); how it makes decisions; and how and how far it delegates responsibility for decisions and actions internally" (Blom & Cheong, 2010, p.12). Seeing that the inappropriate governance structure of university hospitals as one of the fundamental factors hampering hospitals to achieve their tripartite mission leads to the following theoretical considerations: How are university hospitals currently governed in Egypt and in what way is the existing governing structure enabling them to fulfill their mandates? Despite the importance of institutional governance in the university hospitals setting, limited evidence-based research is found on the case of Egypt.

The significance of this study steams from attempting to answer how university hospitals are governed in Egypt and to what extent does the existing governance arrangement enable the hospitals to achieve their missions. It sheds light on institutional governance of public university hospitals because this type of hospitals is a strategic provider of services in Egypt and a destination for a large segment of patients. Conceptualizing the existing governance arrangement helps in understanding the nature of this arrangement, the potential drawbacks, and in coming up with recommendations to capitalize on strength points of the system.

1.2. Research objectives

This research provides a description of the governance arrangement of public university hospitals in Egypt. It takes university hospitals as the unit of analysis and examines the governance arrangement from an institutional paradigm. The study's objectives are to:

- Analyze the current institutional governance of publicly-owned university hospitals
- Highlight the potential challenges that university hospitals face given the current institutional governance structure
- Articulate the reforms directed to university hospitals

Based on the results of the analysis, possible recommendations can be inferred to improve the performance of university hospitals to achieve their tripartite missions.

1.3. Background

1.3.1. Overview on higher education system governance in Egypt

The Egyptian higher education system is characterized by high centralization where significant authority is in the hands of the Egyptian President where he/she appoints the university presidents of public universities (OECD & World Bank, 2010). Similarly, the Ministry of Higher Education (MOHE) has control over all higher education venues. The Ministry supervises and coordinates all postsecondary education, planning, policy formulation and quality control (ibid; El Said, 2014). The only public higher education institution outside the jurisdiction of the MOHE is Al-Azhar University (OECD & World Bank, 2010). It is the responsibility of the Central Administration of Al-Azhar Institutes, which is a department of the Supreme Council of Al-Azhar (ibid).

For public universities, the main regulatory body is the Supreme Council for Universities (SCU) (OECD & World Bank, 2010; El Said, 2014). It coordinates the work of the different public universities across Egypt and is chaired by the Minister of Higher Education in his occupational capacity (OECD & World Bank, 2010). According to governing law of universities no. 49/1972, SCU is mandated to set policies to all universities, academic education, and scientific research work in universities.

1.3.2. Overview on healthcare service providers in Egypt

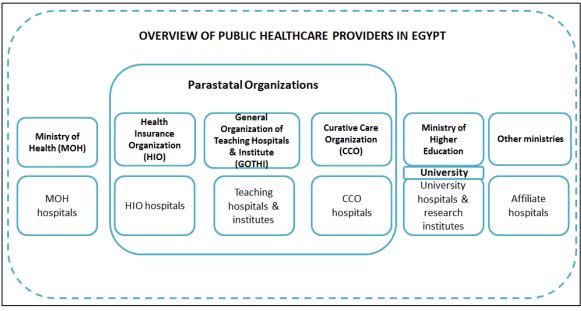
The Egyptian healthcare sector is characterized by being a pluralistic system, with a wide number of public and private providers. There are different public entities involved in service delivery which include: the Ministry of Health (MOH), MOHE,

and other ministries' hospitals (such as the Ministry of Aviation, Ministry of Defense, and Ministry of Interiors etc.) (DHS, 2014). In the Egyptian context, MOH is the main provider of primary, preventive and curative care through its healthcare facilities, while other public providers contribute with secondary and tertiary healthcare services (ibid). In addition to the service provision role, the MOH is also responsible for the overall health policy on a national level and for the regulation of the healthcare sector at large in terms of finance, private and public service provision, pharmaceutical sector etc.(ibid).

There are also semi-governmental organizations that are involved in service delivery. These organizations are considered governmental establishments operated through a government representation like the MOH or other ministries. These include: Health Insurance Organization (HIO), the General Organization for Teaching Hospitals and Institutes (GOTHI), the Curative Care Organization (CCO) in addition to other hybrid forms of public providers (DHS, 2014).

Publicly-owned university hospitals operate under the authority of MOHE. In total, there are 17 faculties of medicine across Egypt each with affiliate university hospitals (Supreme council of Universities, 2017). The total number of university hospitals is around 106 hospitals with the mandate of education and training, scientific research, and treatment (Ahl Masr News, 2016). According to the same DHS Report (2014), university hospitals are classified as secondary and tertiary care facilities. In comparison to MOH facilities, university hospitals are considered more technologically advanced and with a sophisticated medical expertise (ibid). Cairo University Hospitals, among other university hospitals, are the largest in size encompassing more than 5,000 beds and the oldest in history (ibid).

The following figure is a demonstrative overview of public healthcare providers in Egypt.



Source: Author constructed based on the DSH Report (2014)

1.3.3. Overview on public administration reform in Egypt

Currently in Egypt, the Ministry of Planning, Monitoring and Administrative Reform (MOPMAR) launched a national strategy for administrative reform in 2015. It envisions the public administrative system to be efficient, effective, transparent, fair and responsive (MOPMAR, 2015). The government seeks to establish the public administrative system in a way that provides quality services to citizens and ensures accountability of actors (ibid). The objective of the reform plan is to face the negative repercussions of administrative bureaucracy through simplifying the organizational structures of complex public institutions and enhancing human skills for better performance and introducing e-government methods (Social Research Center, 2017). The administrative reform strategy comes in alignment with the national vision of Egypt "Vision 2030" that has a pillar on efficient and transparent government institutions (MOPMAR, 2015). Egypt's Vision 2030 indicates the transformation of public government institutions to "an efficient and effective public administration

sector managing State resources with transparency, fairness, and flexibility. Subject to accountability, maximizing citizen satisfaction, and responding to their needs" (ibid, p.126). This vision is further elaborated into specific objectives of: (1) increasing the efficiency of the state's financial, material, and human resources, (2) offering the necessary public services needed by citizens in an efficient manner, (3) improve the services needed by the public enterprise in order to bring more investments, and finally, (4) achieving the interaction between the government, society and its institutions through a comprehensive governance system (ibid). Public university hospitals are of no exception to other public institutions in Egypt which need enhancement of their efficiency in their financial, material and human resources. This means that these national reforms implicitly apply to public university hospitals as well.

1.3.4. University hospitals in Egypt: The overlap between the healthcare and the higher education sectors

Public university hospitals are part of two industries: the healthcare and the higher education sectors. Being under the university umbrella implies a strong educational and training dimension, and being a hospital implies a strong service delivery component (Allison & Dalston, 1982). This is why university hospitals are relatively more complex than other types of public hospitals because they have to meet the requirements and regulations of both sectors while maintaining a balance between them.

University hospitals are widely popular in the Egyptian context and are the number one destination to many patients across Egypt because of the perception that the presence of academic staff within the premises of the hospital guarantees better healthcare to patients (DHS, 2014). Thus, the role of university hospitals is not only confined to offering medical education and training to young physicians but also has a strategic importance to the delivery of medical health services. The great demand for clinical services from university hospital needs to be understood within the health and economic status. In a country like Egypt with the majority of its population coming from low- and middle-income economic strata, makes the presence of big hospitals, such as these of university hospitals, strategically pivotal for public service delivery. The increasing demand for healthcare services from university hospitals puts a lot of pressure on them while other publicly-owned hospitals fail to keep up with the demand, despite the constant efforts to do so.

1.3.5. Organizational arrangement of university hospitals in Egypt

Being affiliated to universities, university hospitals follow Law no. 49/1972 in reference to the organization of the work of universities. From an institutional perspective, university hospitals are affiliated to the Ministry of Higher Education. The oversight function of the Ministry of Higher Education over the work of university hospitals is not as authoritative as that of the Ministry of Health over its hospitals (Supreme Council of Universities, 2017). The Supreme Council of Universities is the central body that regulates the work of universities across Egypt. The president of the Supreme Council is the Minister of Higher Education, according to the law no. 49/ 1972. Particularly for the work of university hospitals, Presidential Decree no.3300/1965 is the main decree that articulates the mandates of public university hospitals.

1.4. Research questions

In light of the strategic importance of university hospitals and their role in Egypt, the aim of this work is to explore the governance arrangement of university hospitals, the nature of current and ongoing reforms in the hospital setting, the main challenges that university hospitals face and means to overcome them. The main unit of analysis of this study is public university hospitals in Egypt.

This study attempts to give answers to the following questions:

How are university hospitals governed in Egypt?

- The question aims at exploring how university hospitals are governed which directly reflects on their fulfillment to the mandates and organizational objectives. It attempts to find answers to how the existing governance structure of university hospitals helps them operate or rather hampers them.

What are the main challenges facing university hospitals?

- The question aims at highlighting the main hurdles that university hospitals face in undertaking their mandates. It attempts to give a list of the main problems facing senior and top leadership at university hospitals.

What is the nature of current reforms that are undertaken in the university hospitals setting in Egypt?

- This question aims at exploring the different reform attempts, their scope and the main organizational dimensions they targeted. Answering this question will lay down an understanding of the most common clusters of reform that healthcare leaderships advocate for and support. In light of current reforms and existing challenges, how to improve the institutional governance arrangement of public university hospitals?

 The question attempts to shed light on potential adjustments in the governance of public hospitals in light of the challenges that the hospital leadership faces. It aims at exploring potential areas of improvement on how to overcome the identified key challenges.

1.5. Structure of the paper

The paper is divided into six chapters covering the following domains:

Chapter one introduces the topic, the rationale for conducting this work and the research objectives. A glimpse on the status of university hospitals in Egypt is briefly discussed. It describes the two sectors (healthcare and higher education) that overlap at the university hospital unit. At the end of the chapter the research questions are presented and explained.

Chapter two offers a detailed review of the literature with respect to conceptualizing university hospitals, identifying different institutional governance arrangements, and identifying accountability and autonomy setups.

Chapter three presents the different theoretical concepts that guide the understanding in the study and how they are applied to the arrangement of university hospitals in Egypt

Chapter four describes the research methodology conducted in the research. The chapter gives details about the research design, the overall research strategy, the sample selection, data collection and data analysis technique. Ethical considerations are elaborated and finally limitations and delimitations of the study are discussed.

Chapter five presents a thorough analysis of primary data collected is conducted in alignment with the review of secondary data. Findings of the analysis are articulated in this chapter as well.

Chapter six concludes the main threads that came across the study and offers some recommendations based on the weak points demonstrated in the analysis.

Chapter Two: Literature Review

The governance of university hospitals is mostly accompanied with the question of what is the most suitable model and the governance considerations that guide the tripartite mission of university hospitals. The focus of this work is on conceptualizing publicly-owned university hospitals within the wider literature. The review is organized in three main thematic categories.

First thematic category refers to conceptualizing the term university hospitals. It covers a range of definitions to the term university hospitals, the conceptual differences between academic health centers and university hospital and highlights the balance created between the different missions.

Second thematic category tackles the notion of (institutional) governance in the hospital setting. Governance under this thematic category is understood in the hospital setting as the unit of analysis scoping out macro and micro level governance. The section covers main theoretical definitions of hospital governance and the main commonalities drawn from the range of definitions. It also covers a detailed portrayal of the different university hospital governance models. The thematic category also sheds light on the need for autonomy and accountability of public hospitals. For each of these subsections detailed review is conducted.

Third thematic category highlights the different attempts for reform in public hospitals and the reasons for carrying out the reform. Conclusions from the review of literature are drawn and the potential theoretical gap in this issue domain is highlighted at the final section of this chapter.

2.1. Conceptualizing university hospitals

This thematic category in the literature highlights the different definitions of university hospitals and positions them within the wider category of academic health centers.

2.1.1. Defining University Hospitals

2.1.1.1. Academic Health Centers and University Hospitals

University hospitals are considered a typical form of clinical enterprise that is affiliated to a university. The combination of both the medical school and a hospital (university-based) is referred to as an Academic Health Center (AHC) (Association of American Medical Colleges, 1997). AHCs are defined in reference to their organizational components which commonly include the medical school, potentially other health professions school like nursing and pharmacy, and what is commonly referred to as a clinical enterprise in the form of a hospital or other clinical outlets (ibid). Similarly, the Association of Academic Health Centers definition also highlights the same organizational components which include the medical school, other health professions and an affiliate or owned hospital (Institute of Medicine, Committee on the Roles of Academic Health Centers in the 21st Century, 2004). In alignment with this definition, the Commonwealth Task Force on Academic Health Centers defines AHC also in relation to a medical school and an affiliate clinical facility; which might not necessarily be in a hospital form (ibid).

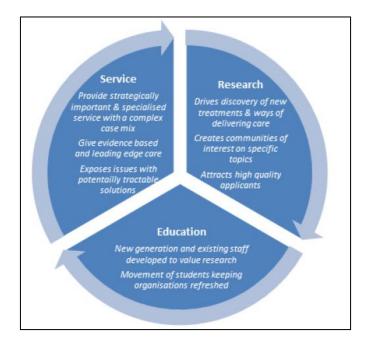
Although there is no widely communicated and accepted definition, there are common organizational elements that most of the definitions entail. These elements include the affiliation to a medical school which entails an academic dimension and the existence of a clinical dimension commonly in the institutional form of a hospital. "The core of the AHC constellation is its academic or university-related roles in education and research, which, in combination with patient care, are ultimately aimed at improving the health of people." (Institute of Medicine, Committee on the Roles of Academic Health Centers in the 21st Century, 2004, p.20). The relationship between the clinical and the academic functions, in this context, can be through different arrangements, for instance, through common ownership under a university umbrella other potential areas.

2.1.1.2. Focus on University Hospitals

The following are some conceptualizations with a special focus on the clinical enterprise manifested in the form of university hospitals. According to Collins English Dictionary, university hospitals are referred to as "a hospital that is affiliated with a university. University hospitals provide clinical education and training to future and current doctors, nurses and other health professionals, in addition to delivering medical care to patients."

The definition highlights two main dimensions that characterize the nature of university hospitals. First, the provision of clinical education and training to healthcare professionals including doctors and nurses is an essential dimension of university hospitals. Education and training are considered the heart of their work. In addition, providing healthcare services and medical treatment is another mission of university hospitals. However, the great research interest of university hospitals is not accentuated in this definition.

The Association of UK University Hospitals adds to the Collins Dictionary definition the great research interest that university hospitals entail. It depicts the three major interests that combined the core functions of university hospitals; namely teaching &training, academic research and medical service provision to patients (Association of UK University Hospitals, 2012). It is argued that intensive academic research, education and service delivery together form a circle where each dimension feeds into the other. The diagram by the Association of UK University Hospitals shows the cyclical relationship between the three mission centers of university hospitals.



(Association of UK University Hospitals, 2012, p.1)

The diagram depicts the key elements that make university hospitals unique compared to other types of hospitals. It is committed to developing new healthcare professionals and to apply scientific breakthroughs. Research engaged staff and education focused professions deliver together leading healthcare services to patients. University hospitals can also be characterized and defined not only by the functions that they carry out but also according to the different levels of hospitals.

According to Hensher et al. (2006, p.1230), university hospitals are defined as "tertiary-level hospital with highly specialized staff and technical equipment— for example, cardiology, intensive care unit and specialized imaging units; clinical services highly differentiated by function; could have teaching activities; size ranges from 300 to 1,500 beds." In this classification, university hospitals are seen as referral hospitals from primary and secondary levels of hospitals. They encompass highly

specialized medical team and sophisticated technical equipment offering services to patients and carrying out teaching activities.

Being equally responsible for the three aforementioned missions, scholars accentuate the necessity to balance between these missions. Steering the totality of the hospital with the three missions equally is an important dimension of successful university hospitals. This balance can be reflected in terms of hospital leadership selection and in resource allocation and financial support. For example, Wietecha et al. (2009), argue that in recognition to the different natures of academic and clinical functions, the selection of leadership needs to reflect needs to be based on a combination of both academic as well as hospital executive management competence. The balanced competence of leadership leads to better integration of both functions within the hospital and is more probable to lead to success of the interconnected missions (ibid). The leadership selection can also influence decisions related to resource allocation and financial decisions for both academic and clinical functions. In cases where the leadership is purely from an academic background, clinical functions can be overlooked. In terms of resource allocation, the same can happen where clinical functions are not adequately supported as academic functions and vice versa (ibid; Barrett, 2008). This strategic imbalance can lead to negative repercussions on the overall performance of the hospitals which encompasses both the academic and the clinical functions.

2.2. Governance of public hospitals

This thematic category discusses varies definitions of hospital governance, the different model of governance to university hospitals, and the autonomy and accountability of public hospitals. It draws on literature not only from the healthcare sector but also from the higher education sector, as public university hospitals are an area of intersection between both sectors.

2.2.1. Definitions

The focus of this section is on defining governance in the hospital setting. As most of the social constructs, there is no agreed upon definition of hospital governance despite some commonalities across all definitions. However, because university hospitals are part of the higher education sector, literature in reference to governance of higher education institutions is visited as well as from the healthcare sector.

Early discussions of the term hospital governance took place when decision makers synchronized better performance of healthcare organizations with proper and enabling organizational arrangement in the European context (Saltman et al., 2011). However, because hospital governance was viewed as an element of hospital performance decision makers started using the term interchangeably with hospital management (ibid). One of the reasons for the interchangeable use of the terms is the lack of an equivalent term for "governance" in European languages (Mossialos et al., 2010). This is why the conceptualization of the term hospital governance was complicated. Saltman et al. (2011) underscores this idea by stating that:

"The term governance, like other, similar English language terms relating to directing policy (e.g. stewardship and accountability), does not easily translate into some European languages, so that the concept of governance itself may have different meanings in different national contexts" (Saltman et al., 2011,

p. 4).

In accordance, Saltman et al. (2011) put hospital governance as the overarching notion specifying the different key relationships between actors and their decision-making. He defines hospital governance as:

"As set of processes and tools related to decision-making in steering the totality of institutional activity, influencing most major aspects of organizational behavior and recognizing the complex relationships between different stakeholders. Its scope ranges from normative values (equity, ethics) to access, quality, patient responsiveness and patient safety dimensions. It also incorporates political, financial, managerial as well as daily operational issues" (Saltman et al., 2011, p.38).

The definition stresses fundamentally on the processes and tools of decision-making in the hospital premises. These decisions are designed to steer the entire organization, influence organizational behavior and acknowledge the stakeholder environment. From the author's point of view, governance involves normative values such as equity and ethics as well as access, quality, patient responsiveness and patient safety dimensions. In alignment with his conceptualization of the hospital governance, Saltman proposes a framework assessing governance in the public hospital setting. In his framework, hospital governance is a mean to achieve autonomy of decisionmaking in hospitals. The framework blends strategic governance dimensions influenced by macro-level arrangements and with operational governance on the micro-level arrangement (hospital setting).

The strategic governance dimensions are usually decided by the government and the operational governance relates to the hospital's ability to translate broad decisions to implementation on an operational level (Saltman et al., 2011; Duran, 2011). According to the framework by Saltman (2011), strategic governance dimensions relate to institutional dimension, financial dimension and accountability dimension. The operational governance refers to the correspondence between responsibility and decision-making capacity at the hospital level (ibid).

Saltman and Duran both have leading work on hospital governance. They agree that hospital autonomy is the mean towards public hospitals that are capable to honor their promises and are able to translate the macro level decisions on the hospital unit. Their work stresses on publicly-owned hospitals in general without specifying the different public ownership types. Thus, university hospitals are a special type of public ownership where they belong to both industries the healthcare sector as well as to the higher education sector.

Stressing on the distribution of authority, Ricci (1999) defines governance as "the distribution of authority and functions among the units within a larger entity, the modes of communication and control among them and the conduct of relationships between the entity and the surrounding environment." It stresses on how organizations set their directions and the ways they use to organize their efforts towards a common purpose.

Derived from the higher education sector, governance deals with multiple dimensions of the institution. It relates to the exercise of authority, internal and external stakeholders, how decisions are taken within the organization and how does delegation of responsibilities take place within the organization (OECD, 2010). Moreover, governance arrangements have structures through which decisions are taken and implemented. "The structure of governance includes the role of institutional governing boards and presidents, their participative structures, their procedural rules and sanctions, their policies for resource allocation and their arrangements for performance management, monitoring and reporting" (ibid, p.84). The statement highlights some important elements that need to be included in any governance structure which includes the existence of a governing board and president that sets standards for resource allocation, performance management for the executive team as well as policies for monitoring and reporting obligations.

Assuring the proper structuring of governance within organizations implies smoother, rational, informed and transparent decision-making which results in organizational efficiencies and effectiveness (OECD & World Bank, 2010). "Decision-making should ensure that varying interests are appropriately balanced, that the reasons behind competing interests are recognized and that one interest is not endorsed over others on arbitrary grounds" (Blom & Cheong, 2010). Good governance has the characteristic of ensuring the balance between the conflicting interests of important stakeholders.

From the broad range of definitions we can infer that the term hospital governance is considered to be conceptually and practically a complicated construct to define. There is limited consensus around the common elements that best define the term and its multidimensional nature. Thus, we find authors who define hospital governance from a structural point of view, while others focus on the process dimension of governance and other look for linguistic synonyms.

Structure-oriented definitions introduce hospital governance through distinctive institutional arrangements and structural alignments of public hospitals description. There are other definitions that are process-oriented focusing on the different levels of hospital-related decision-making. These decisions include both strategic as well as operational decision-making activities. Others refer to the term 'governance', in the language of Osborne and Gabler (1993), as steering rather than rowing in the sense of giving directions and orientation.

2.2.2. University Hospital Governance Models

Literature focuses on how best to organize the relationship between the three different actors; university, medical school and the hospital. In this respect, governance shapes the relations of executive management and the fiduciary or advisory roles.

2.2.2.1. Conceptualizing Relationship between the Parent-University, Medical School and Hospital

Organizing the relationship between the three main actors in the governance of university hospitals is a key determinant of the structure of the governing model. In the literature, there is a clear trend towards the separation of the hospital from the control of the university giving different reasons for that.

Some authors believe that the separation between the university and the teaching hospital will enable hospitals to be more market-oriented, competitive in decision-making and flexible in decision-making (Allison & Dalston, 1982; Detmer & Steen, 2000; Schimpff & Rapoport, 1997).

However, other scholarly writers believe that there is no conclusive evidence about the most appropriate relationship between the three actors. They argue that whether the university and the hospital are under one umbrella or under separate institutional affiliations each has its successes and failures (Wietcher et al., 2009; Weiner et al, 2001; Duderstadt; 2000; Barrett, 2008).

Authors in support of the separation between the university and the hospitals argue that, university hospitals cannot be more market-oriented as long as they are controlled by university boards in which their relation to their hospitals is only for evaluation or accountability (Allison & Dalston, 1982). Consequently, the tripartite mission of hospitals; patient care, teaching and research is further divided. The dean would be responsible only for the academic matters reflected in research and education, whereas the hospital director would be responsible only for patient services (Ibid).

In alignment with the idea of separating structures, authors Detmer and Steen (2000) argue that reducing the role of the parent university will automatically result in improved decision-making in terms of flexibility and speed. Schimpff and Rapoport (1997) take a similar stance, yet, advocate for a more 'aggressive' approach. They suggest that university hospitals may be best served by: removing them from university governance allowing them to give primacy to their mission of patient care. Moreover, removing hospitals from state ownership allows them to use sound business practices in the competitive healthcare environment (Ibid).

These views can be critiqued for a number of reasons. First, under the separate arrangement for university and their hospitals, there is a threat on the ability of university hospitals to still support educational and training purposes, which in fact distinguishes them from other types of public hospitals (Duderstadt, 2000). Moreover, reaching an agreement between the hospital leadership and the medical school leadership, under a separate arrangement, results in potential conflicts and disputes where each leader legitimately seeks its own organizational interest (Wietecha et al., 2009). This consequently results in more time spent on negotiations to align the visions of both leaderships. In the words of Barrett (2008), there are two main reasons for the integration of the university with the hospital; strategic focus and financial discipline. Strategic focus aligns efforts and interests towards shared goals of both actors, which creates a better work environment (ibid).

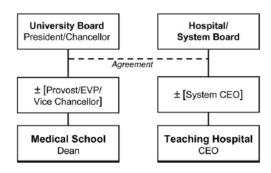
For the financial discipline, Barrett argues that academic missions can be advanced through the revenue generated by the clinical practices to support research and educational trainings (ibid). This consequently leads to what Wietecha et al. (2009) refer to as 'overall peace on campus'. In alignment with Barrett's proposition, Weiner et al. (2001) suggest that under one umbrella of the university all research, education and patient treatment are all met from within the organization without seeking them from outside.

2.2.2.2. Organizational Arrangements of University Hospitals

Unlike other publicly-owned hospitals, university hospitals have a special institutional affiliation between the university, the faculty of medicine and the hospital. The governing structure of this type of hospitals has to reflect the triangular relationship as well as enable the organization to realize its tripartite mission.

The literature addressing governing structures of university hospitals describe mainly two types; separate and unified governance. The separate governance format is based on what Wietcha et.al. (2009, p.170) describe as the "multiple fiduciary, multiple executive leader" which entails that the teaching hospitals and the universities each have their own fiduciary boards and executive management (ibid). There is a combination of organizational arrangements classified under the multiple governance structure that is expanded in the works of the writers Weiner et. al. (2001) and Cullbertson (1996) in attempts to answer the question of the potential organizational models for governing and managing medical school relations with the faculty practice plans and affiliated clinical delivery organizations. The main arms of the suggested organizational arrangements are between the *school of medicine* and what both writers refer to as *clinical enterprise* (which includes a collective reference to the clinical providers, delivery organizations).

MULTIPLE MODEL



(Wietecha et. al., 2009, p.171)

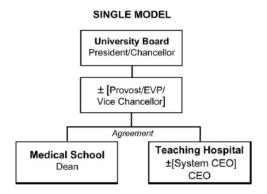
The figure above is extracted from the work of Wietcha et. al. (2009) on the multiple governance models of university hospitals. It is also known as the unlinked model of governance. The *multiple model* puts together the two independent, yet, interrelated boards; the University Board and the Hospital/System Board. Both boards reach agreements together to advance the mission of the hospital in alignment with the academic functions of the university. The University Board with the president or chancellor on top is followed by the provost/ executive vice president/ vice chancellor and followed by the school of medicine where the dean heads it. On the other side, the hospital/system board is followed by the System CEO and followed by the teaching hospital headed by the CEO. In this model, the executive arms under the university board and the hospital/system board reports separately to their respective boards. In accordance, the accountability of clinical and academic functions is the responsibility of the respective boards.

In alignment with the conceptualization of Wietecha et. al. to the multiple model of governance, the works of Weiner et. al. (2001) and Cullbertson (1996) put together a typology with a number of possible organizational arrangements within the multiple governance structure; which includes alliance leader model and community leader model along other variations of these organizational models.

The *alliance leader* organizational arrangement implies a moderate/partial integration between the academic and the clinical functions. Under this model, the medical school organizes the clinical activity of its faculty and interfaces with other components of the organized delivery system through tightly linked contracts rather than through equity or legal ownership. The dean or equivalent possesses modest authority in the governance and management of the clinical enterprise. However, both functions have a strong institutional linkage where the financial sustainability of one depends on the other function's sustainability (ibid).

In the *community leader model*, the school of medicine and the teaching hospital are not under common ownership and with separate legal identities. To advance its mission, the school of medicine relies on existing hospitals, not necessarily owned by the university, which creates fragmentation in the realization of clinical practices. The relationship is bound by contracts of limited scope and duration. However, to guarantee having a say in the clinical practice, in some cases the dean or equivalent serves on the board of hospitals to influence clinical practices in favor of academic dimensions. In addition, because the dean or equivalent has authority to appoint academic department chairs, he/she links clinical practice to academic plans. Plus, this person can play a consultative role in the selection of clinical partner organizations' CEOs.

The other discussed governance orientation in the literature is the unified governance format. It is based on "single fiduciary and one executive leader" where hospital, faculty, education and research endeavors are all under one overarching framework (Wietecha et. al., 2009).



(Wietcha et. al., 2009, p.171).

The *single model* puts the University Board headed by the president/chancellor at the focal point of both clinical and academic functions. The University Board is followed by the provost/executive vice president/vice chancellor, similar to the multiple model. This is followed by, on the one hand, the school of medicine headed by the dean and on the other hand, the teaching hospital headed by the system CEO and the hospital CEO. Both of the medical school and the teaching hospital should reach an agreement together on the conducted activities. The executive arms of the school and the hospital are unified at the University Board level. The accountability for both clinical and academic practices is at a single person who is responsible to the university president or board to all aspects. Similarly, Weiner et. al. (2001) refers to the single model as the *owner model*. It is a common ownership structure—typically a university or medical school parent holding structure—presides over the medical school, the faculty practice plan and the clinical function.

The owner model operates as a closed system in which the elements of system finance, hospital and institutional services, professional services and medical education are delivered under a single governance and administrative structure. Much of the academic and clinical enterprises' capital, research, and teaching needs are met internally—that is, they are "made" within the system rather than "bought" from other organizations (ibid; Barrett, 2008). Academic control is high in this model, with the

dean or equivalent possesses unified authority over the academic and clinical enterprises. He/she holds the traditional responsibilities of a dean or vice president for the academic mission and also exercises executive authority over the business operations of the organized delivery system" (ibid).

Similar to the owner model, the subsidiary model integrates both clinical and academic functions under the umbrella of the university, yet, with limited academic authority over the clinical practices (Weiner et al., 2001). "As a subsidiary organization, the medical school exercises relatively little power in the governance and management of the clinical enterprise." (ibid, p.118). The interdependence between the two actors is considered under this organizational arrangement asymmetrical as academic leadership does not have the authority to allocate financial resources between the academic and the clinical functions. It is rather the case that the medical school has a predetermined budget negotiated and allocated by the university for all operating units. Even in the appointments of academic department chairs and clinical leadership, the dean is only consulted but the final decision remains in the authority of the university (ibid).

The literature shows that both models do not give a clear answer to the question of how best to organize the relationships between the three main players. Both models do not ensure the balance between both functions of university hospitals; the clinical and the academic functions. Also both models have their drawbacks which drive organizations to move towards the other type of governance. Different organizational natures dictate the applicability of one model over the other.

The most cited drawback of the multiple model is that it gives space for confrontations and conflict in governing university hospitals because of differing primary missions (Weiner et.al, 2001; Barrett, 2008). Thus, the collaboration of the

two leaderships, where on the one hand, the academic front is responsible to ensure the funds flow within academic enterprise and on the other hand the clinical front is responsible to safeguard the patients and make sure that the funds are allocated to the treatment of patients, is a challenging task (Wietecha et. al. 2009; Kastor, 2004; Cullbertson et. al., 1996).

Although the single model of governance reduces the number of conflicts and offers a unified point of accountability and vision, "the university-governed clinical practices are viewed as financial liabilities to the extent that they negatively affect the university credit ratings" (Wietecha et al., 2009, p.171). It is argued that the clinical functions under the single governance model are under the umbrella of the university, which tends to weaken it because of the lacking competence to run the hospital in the competitive healthcare environment (ibid; Schimpff & Rapoport, 1997; Allison & Dalston, 1982). Moreover, Culbertson et al. (1996) observe that the capital requirements and financial risks associated with the single model design make it an unwanted governing structure to a number of medical schools. Moreover, under this type of governance model, the academic enterprise bears substantial financial risk for the performance of the clinical enterprise (Weiner et al., 2001).

2.2.2.3. Key Governance Considerations to Guide University Hospitals

Irrespective of the organizational arrangements that govern the relations between the academic and the clinical functions, scholarly writers give a number of key considerations for successful governance of university hospitals. From a study conducted on the governance practices in US academic medical centers, the study suggests three wide governance guidelines: appropriate education and personal development of board members, using hospital performance measures that guide quality and setting systematic board self-assessment processes (Szekendi et. al.,

2014). Wietcha et. al. (2009) suggest governing behavior for university hospitals that strikes a balance between the academic and the clinical functions. These behavioral considerations include:

Balancing criteria in the selection of executive leadership

In the selection of the executive leadership, potential candidates have to exhibit significant abilities in both academic as well as clinical fronts. He/she must be able to balance and prioritize between the different missions that might at certain times conflict.

Aligning the boards' mission and performance in defining successful stewardship

Boards of trustees'/ directors' composition have to encompass sufficient expertise and diversity of members. They have to allocate sufficient time and make proper judgments for the survival of the organization. The board in this case represents the fiduciary interests of clinical and academic functions. As a steward, the board should not show any favoritism in resource allocation for one mission at the expense of the other.

 Articulating the board of trustees' fiduciary responsibility for the collective outcomes of hospitals

Boards have the responsibility to assure long term financial sustainability of academic and clinical practices. The fiduciary duty of boards dictates on its members to work in the best interest of both interrelated functions. The academic function is dominantly led by advancements in knowledge generation and training that ultimately supports patient treatment. The clinical function is led by the patient care that is backed up by academic advancements. This is valid for boards within the single model of governance where assuring long term financial sustainability of the clinical and academic functions requires the board to have an overall picture of the revenue allocation to both and the allocation of funds to the accomplishment of the respective missions. This indicates that the funds that flow in between the two functions has to be visible to them.

2.2.3. Autonomy of Decision-making in Hospitals

The proposition of many scholarly writers about governance and autonomy is that good governance practices are the way forward for autonomous hospitals (Saltman et al., 2011; Duran, 2011; Bogue et al., 2007; Neave & van Vught, 1994).

Thus, this section focuses on understanding autonomy in the hospital setting with a special focus on literature on public hospitals as well as on higher education institutions.

From the perspective of public hospitals, autonomy is considered a key element of efficient and effective clinical outcomes of hospitals as several academic analyses suggest (Saltman et al., 2011). Bogue et al., (2007, p. 3) argue that "Freeing hospitals from institutional and governmental control, referred to as facility-based management, seems to be associated with better hospital performance. The values underlying facility independence, however, must exist simultaneously with other socially or politically defined priorities and accountabilities. Commitment to pursue higher-performing governance models will be possible only through thoughtful examination of the internal and external contexts that shape hospital behaviors, including market strategies, regulations, local definitions of autonomy and the scope and distribution of stakeholder incentives." The author, however, takes the argument beyond autonomy more towards independence from institutional affiliations and government control. He argues that adopting a 'facility-based management' approach would result in better

hospital performance (ibid). Unlike the complete independence presented by Bogue et al., Duran (2011) does not argue for complete independence but rather for semiautonomous hospitals that restrict the interference of local and regional political actors in decision-making. Along the same lines of the argument, Allison and Dalston (1982) argue that the more controlling the boards are, the less efficient the hospital outcomes. The argument of the authors in this sense indicates that hospital autonomy is dependent on the type of relationship the hospital has to its board rather than from local and regional political actors' interference. They argue that hospital autonomy in this case would enhance the responsiveness of the hospitals to market dynamics (ibid). There is a clear positioning in the literature about hospital autonomy that supports semi-independence of the hospital from direct hospital affiliations. Authors support hospital autonomy through hospital governance as they see governance as the pathway to more autonomy for public hospitals.

Looking at autonomy from the higher education perspective, there are a number of commonalities with the application of autonomy in the healthcare sector. The authors Neave and van Vught (1994) design the interfering relationship of the government with higher education organizations along a continuum. The continuum portrays the degree of government control at one end to the degree of government supervision at the other end (ibid). In the language of New Public Management (NPM), it is the governments' shift from "rowing" to "steering", or from "intervening" to "influencing". This shift in the role of the state is mirrored on regulations as well, where the authors argue that the state's role will shift from micro-regulation to meta-regulations (ibid). The shift in the state's role is considered an essential step given the contemporary setting of the higher education system. In alignment with the proposition of Neave and van Vught, Fielden (2008) suggests that by giving higher

education institutions more autonomy allows their management to cater better for their institutional needs and to better exercise their legitimate academic freedoms. The author explains that "the management of very complex academic communities cannot be done effectively by remote civil servants and the task should be left to institutions themselves. The constraints of centrally managing a system that needs to be flexible and responsive have become clear" (ibid, p.85). He accentuates the constraints that centrally managed systems by remote civil servants are great hampering factors to the flexibility institutions need for better responsiveness.

Agreeing on the importance of autonomy for institutions to better serve their organizational purposes, Berdahl (1990) provides a useful typology between two categories of autonomy; "substantive" and "procedural" (also named operational) in the higher education setting. According to Berdahl (1990), substantive autonomy refers to the authority that institutions have to determine their academic plans and research policies in alignment with their priorities. The core principle underpinning substantial autonomy lies in safeguarding academic integrity and freedom. This freedom includes what and how to teach, whom to admit as students, whom to employ and promote in academic staffing appointments (ibid). Procedural autonomy means operational freedom of institutions to administer their non-academic affairs. "Procedural autonomy refers to the authority of institutions in essentially nonacademic areas such as revenue raising and expenditure management, non-academic staff appointments, purchasing and entering into contracts" (ibid, p. 172). In alignment with the autonomy typology, the Government of India (2005) adds that procedural autonomy includes freedom over the management of financial affairs where the institution is free to allocate resources freely to support their organizational priorities. It is arguable that procedural autonomy proceeds substantive autonomy. Given institutions some autonomy to manage their administrative and financial affairs can be a step towards more autonomy in setting overarching policies in the academic realm. In support to the crucial need for procedural as well as substantial autonomy, "when institutions have more discretion over the mobilization of their resources, including personnel, they have greater flexibility to adjust their educational offerings to changing circumstances" (OECD & World Bank, 2010).

2.2.4. Accountability of Hospitals

2.2.4.1. Defining Accountability

In an environment where autonomous hospitals are created to take their own decisions, this requires an accountability framework that holds actors accountable to their actions, procedures and overall compliance (Saltman et al., 2011). Accountability has several dimensions that make it a complex construct where financial, political and performance related dimensions overlap (ibid; Birkenhoff, 2003). Particularly, in publicly-owned hospitals, accountability for social responsibility is a highly accentuated virtue in the healthcare system. This implies that the notion of accountability is the flip side of autonomy where organizations are responsible to the degree of freedom they assume (OECD & World Bank, 2010). In this regard, supervisory boards and boards of directors are highly associated structures to the notion of accountability where they are the ones who carry out functions in relation to setting strategies and missions, giving guidance to the executive management, evaluating the performance of the organization and exercising control and oversight (Saltman et al., 2011).

Fundamentally, accountability of public hospitals answers basic questions that revolve around who is accountable to whom, what are the reporting obligations of the different actors, what is the organizational arrangement and who is involved in the decision-making (Saltman et al., 2010; Burke, 2004). The answers to these questions lay down the foundation for accountability mechanisms. Birkenhoff (2003) accentuates the notion of answerability and obligation in defining accountability. He argues that a general definition of accountability includes "the obligation of individuals or agencies to provide information about, and/or justification for their actions to other actors" (ibid, p.5). It highlights the compulsory duty of actors to provide information to justify their decisions and actions taken.

By the same token, the answerability dimension implies, in accordance, the potential application of sanctions in cases of misconduct or inappropriate behavior which is also an important element of accountability (ibid). In his work, Duran (2015) highlights the power dimension that accountability should be designed to restrict it. He argues that "it derives from an act of delegating authority from a principal to an agent. Given that this act of delegating entails a discretional area, accountability responds to the need to control the agent" (ibid, p.785). The control of the agent with delegated power gets back to the question of "to whom". In the hospital setting, the question of "to whom" is a key question because of the differing; sometimes even conflicting, demands of the complex stakeholder groups. Thus, clarifying expectations and relevant stakeholders is important. In this context, Burke (2004) identifies different modes of accountability as he argues that the techniques and means of accountability depend on the mode. The modes of accountability, as described by the author relate to bureaucratic, professional, political, managerial, market and managed market:

"Bureaucratic accountability, for instance, tends to focus on inputs and processes and uses the policy tool of regulation, whereas market-based accountability emphasizes outputs and outcomes, and uses policy tools such as financial incentives and public disclosure of information about performance" (ibid, p.2).

As demonstrated, the conceptualizations of scholars on accountability differ from one another, despite the common areas between them. However, there is still no consensus around fundamental elements whether they are central to accountability or not. For example, the inclusion of sanctions as a central area of accountability is not agreed upon among academic scholars. Moreover, some authors believe that accountability is understood in many diffused ways where the concept of accountability is interchangeably used with the concepts of control and responsibility.

2.2.4.2. Conceptualizing Boards of Directors for Hospitals

As highlighted earlier by Saltman et al. (2011), the role of supervisory boards and boards of directors is an important role in accountability. Hospital boards are a key institutional element for accountability, thus, for good governance. From an organizational sustainability perspective, Alexander et al. (2001) highlights what stability and continuity of hospitals boards can provide to the organization. The authors claim that hospital boards of directors act more as a source of continuity than as the leading change. Incremental change in governance promotes stability and continuity. This may be highly desirable given the rapid pace of change in the healthcare sector. Boards' stability may ensure that a hospital stays in alignment with its mission, vision, and values. The board also provides continuity of leadership in a time when top management turnover continues to affect the hospitals (Ibid). Accordingly, from an institutional perspective, the existence of a board gives stability and continuity to organization in situations of change and crises.

Because of the strategic importance of boards for hospitals, it is important to conceptualize the boards of directors with their theories, size and composition.

There is a debate in the literature on theories of boards, yet, many of the theories applied to explain board behavior and structure are derived from the business world. The notion of boards in public organizations is yet under theorized compared to that of business for-profit board theories (Cornforth, 2003). The creation of boards started after the industrial revolution in an attempt to create gradual separation of ownership from control in the business sector (Chambers, 2012).

The earliest theory about boards is the agency theory, where the management becomes the agent of the board which represents the interest of owners and shareholders (Pointer, 1999). Other theories developed later include managerial hegemony, stewardship theory, stakeholder theory and resource dependency theory (Chambers, 2012). The managerial hegemony implies that the main decisions are made by the managers rather than the owners, unlike the stewardship theory where managers and owners share together a common agenda (Ibid). The stakeholder theory goes with the notion of representation where board members represent the different interests of stakeholders and the resource dependency theory describes the role of boards as to maximize the benefit of external dependencies.

For the board size, there is no agreed upon size by scholars. Determining the size of the board depends on a number of factors which include; the size of the hospital, number of beds, level of development and the scope of medical services and operations conducted (CIPE & HeGTA, 2014). In addition, the budget size, investment capital and relationship with affiliate stakeholders are also important elements that shape the size of the hospital boards (Saltman et al., 2011). The board composition needs to ensure diversity in necessary skills and experiences to serve on the board. According to the guidelines for governance in hospitals, "the composition of the board fosters diversity in expertise, age and gender. There is a good balance

between those with healthcare background and those with other backgrounds including financial, legal, hospitality and managerial disciplines. The board collectively has the knowledge and expertise needed to perform its duties" (CIPE& HeGTA, 2014, p. 47). The guidelines put diversity in the heart of board composition. Diversity should be reflected in both clinical as well as non-clinical matters. These include age, gender, and expertise. This implies that serving on hospital board does not necessarily imply the dominance of clinical physicians on the board. The principle of diversity needs to be respected in the composition of the board. In addition, diversity is also reflected in the inclusion of both executive and non-executive directors (ibid). The nature of boards of directors is strategic rather than operational; which implies that the board should not be dominantly composed of executive members. Introducing independent members to the board brings new blood to the board and experience that might be lacking within the hospital. This will guarantee the independence and professionalism of the board (Harding & Preker, 2009).

Another debatable question in the composition of boards is whether to include doctors on hospital boards or not. Some scholars highlight the benefits of the involvement of clinical professionals on governing boards (Altanlar et. al., 2015; Molinari et al., 1995; Chambers, 2012; Culicia, 2009). The authors argue that the inclusion of clinical professionals on the board enhances the experience of patients and has positive impact on the operational performance of the hospital (ibid). Thus, authors accentuate the importance of having clinical doctors in the strategic apex of the hospitals for better performance and better outcomes.

In practice, it is a common habit among hospitals to mandate the inclusion of physicians on the board. For example, the NHS Trust in England has the mandate to include at least one medical director and nursing director on their boards (Ferlie, Ashburner & Fitzgerald, 1995). Despite the contextual experiences with the positive impact clinical professionals have when serving on the board, the issue is broadly inconclusive. Yet, one can infer that striking a balance in the board composition with different expertise and backgrounds is the most important dimension in that sense. In the special case of public hospitals, Duderstadt (2000) argues that boards of public institutions perceive themselves as representatives of the special interests of the bodies and/or persons that appointed them rather than being guardians of the institution to protect and preserve it. Therefore, because university-affiliated hospitals do not have adequate influence over their governance, they cannot structure the boards in the best interest of the institution.

2.3. Rationale for and types of governance reforms in public hospitals

This section shows the different drivers for reform in public hospitals and the attempts to change its governing structures. Because university hospitals operate in the overlapping environment of both the healthcare sector as well as higher education, it automatically inflicts certain specifics on its governing structure compared to other public hospitals operating only in the healthcare sector. Despite the specifics of the hybrid environment of university hospitals, they share common reform features with other public hospitals.

Reforms in the public domain in healthcare have varying focuses; some reform focus on improving performance of hospitals, others on improving their efficiency, others focus on means to cope with sector competition. In the 1990s, there was a tendency in healthcare reforms to focus on the ability of health sector to improve overall performance such as equity, efficiency and competition (WHO, 2000; Mossialos et al., 2010). Automatically these policy orientations reflected on the decision-making strategies within public hospitals. Yet, all these reform attempts did not propose any changes in the governing structures or adequate structural changes in hospitals. Rather, they were focused on performance measures and setting objectives to realize the healthcare system goals (equity, accessibility, quality, etc.). During the same period, in the 1990s, the revolutionary book by Osbourne and Gaebler *Reinventing the Government* (1993) on restructuring the public sector has influenced many scholarly writers who developed analogies to the respective public sector domains. The book revisits the role of the state and introduces the entrepreneurial form of government that later on guided the conceptual frameworks of scholars. Inspired by these principles, authors April Harding and Alexander Preker (2000) introduce corporatization as the type of reform that is recommended for health organizations. The authors discuss options for reforming delivery systems; the main streams are management reforms and payment/funding reforms. These types of organizational reforms address problems of efficiency, responsiveness and productivity. The changing views on the role of the state in managing/providing services and leading development efforts led to the collapse of state-led efforts.

There are three waves that permutated the scene in public service delivery: 1privatizing the production of goods/services; 2- redefining the role of the state delivery of infrastructure services; 3- engaging in "marketizing" reform modalities (Harding & Preker, 2000). The proposition of "marketizing" reform modalities is to bring the best of the public and private sectors. Borrowing from the private sector tools to manage public hospitals and arranging its governance structure in accordance, is considered a successful model of reform (ibid). The implication of this paradigm is that focusing on governance structures is a key determinant of any health reform that yields positive impact on performance, competitiveness, and efficiency concerns of health organizations. There are other scholarly writers that criticize corporatization reforms. Lown (2007) argues that the underlying reason for the breakdown of the healthcare system is the onrushing marketization of all human transactions. He debates the impact of this reform is to denature fundamental human values. However, the debate around corporatization reforms is not conclusive.

2.4. Conclusion

As demonstrated in the review, governance in university hospitals is a highly complicated construct with multifaceted dimensions. The literature highlights a range of definitions for governance where scholars differently conceptualize it. For the governance arrangement of university hospitals in particular, multiple governing models are presented. Each model differently describes the relationship between the university (and medical school) and the hospital under either a unified or a single governance arrangement. While some articulate the necessity of the integration between the clinical and academic functions for better overall performance of university hospitals, others highlight the drawbacks of the integration and accentuate successes of separate governance arrangements. However, the debate is inconclusive as neither the unified nor the separate governance arrangement assures the strategic balance between the academic and the clinical functions in all cases. Proponents of respective typology highlight potential successes it can bring about to university hospitals with associated drawbacks.

Despite the vast literature on governing models of university hospitals and organizational arrangements that shape the relationship between the clinical and the academic practices, there is an evident gap in addressing the governance of university hospitals in the Egyptian context. Literature in that regard does not provide answers to the question of how university hospitals are governed in Egypt and how relationships are organized in this area. This work attempts to address this gap through an exploratory study on the governing structure of university hospitals in Egypt and the challenges to the current governing structure, and the reforms that take place in university hospital context in Egypt.

Chapter Three: Conceptual Framework

This study attempts to explore the governance arrangement of public university hospitals in Egypt. It explores governing structures designs, the potential challenges to existing structures and ways to overcome them, and the ongoing reforms within the hospital setting to be able to achieve its tripartite mission.

3.1. Theoretical concepts

There are a number of definitions and different conceptualizations to the term governance. The working definition guiding this study refers to Saltman et al. (2011) definition of governance. The conceptualization of governance, according to Saltman et al., takes the hospital as the focal point of the definition and outlines the governance dimensions within the hospital setting. Hospital governance is defined as:

"A set of processes and tools related to decision-making in steering the totality of its institutional activity, influencing most major aspects of organizational behavior and recognizing the complex relationships between multiple stakeholders" (Saltman et al., 2011, p.38).

Since this study focuses on the hospital as the unit of analysis, this definition gives a clear understanding of what governance means within the hospital setting of publiclyowned hospitals. It accentuates several dimensions that are important to describe the governing arrangements of hospitals. It highlights the **processes and tools** that shape the **decision making** to steer all institutional activities, and identifying the **complexity and multiplicity of stakeholders**. Given that the study focuses on university hospitals as the unit of analysis, applying this definition is a helpful conceptualization to understand the governance of this type of hospitals.

Derived from this definition, Saltman et al.' (2011) propose a framework for operationalizing hospital governance from a semi-autonomous approach. Their framework proposes four dimensions to guide the analysis of governance in public hospitals positioning them as the core variables for semi-autonomous hospitals. These dimensions encompass:

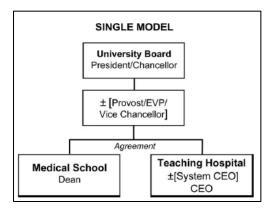
- 1. institutional dimension
- 2. financial dimension
- 3. accountability dimension
- 4. correspondence between responsibility and decision making capacity

According to Saltman et al. (2011), the first three categories (institutional, financial and accountability dimensions) address decision making that is typically decided on the strategic level where broad objectives and strategies are put. Saltman et al.'s framework refers to these dimensions as "*strategic governance*". The fourth category is the hospital's ability to translate board's decisions to implementation and operationalize strategic governance dimensions to practice. Saltman et al. refer to this dimension as the correspondence between the responsibilities that the hospital management carries out and the decision making capacity. This dimension is referred to as "*operational governance*" (Saltman et al., 2011).

The presented work of Saltman et al. is applicable on publicly-owned hospitals at large regardless of the difference in public ownerships. Because this study focuses on a special type of public hospitals, namely university hospitals, the author of the study adds a complementary dimension to the proposed dimensions by Saltman et al. University hospitals have the mission not only to deliver clinical services but also to carry out academic functions. The ability to balance between the clinical and academic fronts needs to be reflected in the applied framework. The balance of missions dimension is considered an additional dimension to the operational governance dimensions highlighted by Saltman et al. The hospital is the focal point where the balance between the academic and clinical functions takes place. Thus, it is considered an operational governance dimension. The five dimensions of the proposed framework of this study are further explained. For the strategic governance dimensions, they entail:

1- Institutional dimension:

The institutional arrangement gives answers to what the hospital is entitled to and defines the identity of the organization. It defines the legal form of the hospital and the set of desired objectives it attempts to achieve; which can be political, social, economic etc. "Foundations, corporatized public companies, public entities with delegated management and other "new" types of institution typically include mechanisms and tools to help hospitals strive for a desired set of objectives (social, political, etc.) and to preserve public values in a market-oriented model" (Saltman et al., 2011, p.42). Publicly-owned university hospitals are a special type of public hospitals, which implies a special type of arrangement. In the literature, there are different organizational arrangements that guide university hospitals' governance. This study focuses on the unified governance arrangement of university hospitals. Unified governance arrangement is identified as the "single model" Wietecha et al. (2009, p.170) or as the "owner model" Weiner et al., (2001, p.116). The single/owner models both have the same characteristics and describe the same organizational arrangement of university hospitals. This arrangement best describes the organizational arrangement of public university hospitals in Egypt as clinical and academic functions are all under one overarching umbrella, the parent university. The single/owner model implies a 'single fiduciary and one executive leader' structure which is translated in an encompassing framework that overarches the hospital with affiliated clinical duties, medical faculty, education and research endeavors (Wietecha et al., 2009, p. 170).



(Wietecha et. al., 2009, p.171)

Weiner et. al. (2001) refers to it as the owner model where all the elements of the system are delivered under a single governance and administrative structure. "It operates as a relatively self-contained, or "closed" system in which the elements of system finance, hospital and institutional services, professional services, and medical education are delivered under a single governance and administrative structure" (ibid). In this model, typically a parent university ownership structure supervises the medical school, the faculty practice plan, and the clinical function. This governance model is characterized by high academic control where the position of the dean unifies authority over both endeavors, the academic as well as the clinical. In this model, the dean typically carries out the responsibilities of the academic mission and also exercises executive authority over the clinical operations of the service delivery in affiliate hospitals (ibid). The authority over both clinical and academic functions is manifested in the appointment of the head of the clinical hospitals and the academic department chairmen. Moreover, the dean's authority is manifested in setting budgetary targets and allocation of resources to all affiliate hospitals as well as allocating resources between the clinical and the academic functions (ibid).

2- Financial dimension:

Although most financial arrangements are predetermined in the public domain out of the scope of the hospital, there are a number of changes in the financial arrangement that makes hospitals more reflective to market challenges. The financial dimension of the framework highlights the degree of financial autonomy of university hospitals. It attempts to answer questions about the financial sources, the process of running costs, and the 'freedom' that the hospitals have to handle their allocated resources (Saltman et al., 2011, p.43). The financial dimension corresponds to the decision making environment to determine the level of independence that the hospital enjoys to handle investments in terms of sources, to adjust the operating expenses, and to find additional sources of funding.

3- Accountability dimension:

The accountability dimension refers to the identification of reporting obligations that different actors have within hospitals and the identification of who is the hospital acting on behalf of. To determine the accountability of hospitals, direct emphasis is placed on the board of directors in terms of their functions and their composition. The principles and guidelines for governance in hospitals developed by the Center for International Private Enterprise (CIPE) and the Healthcare Governance and Transparency Association (HeGTA) puts the main features of hospital boards as being "effective, professional, and independent, in terms of its composition, size, behavior as well as adequately empowered to discharge its responsibilities and duties (CIPE& HeGTA, 2014, p.45). The manifestation of the aforementioned features is in the responsibilities, structure and composition of the board. The duties of hospital boards include advisory role to management, performance evaluation, oversight and control. For the operational governance dimensions, they entail:

4- Correspondence between responsibility and decision-making capacity:

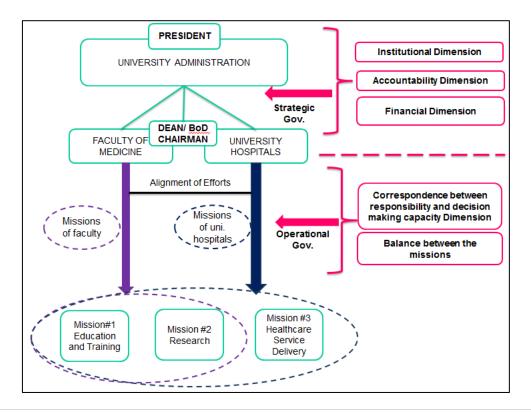
This dimension attempts to answer questions related to the level of flexibility and autonomy the hospital has in its decision making processes. From a governance perspective, the correspondence between responsibility and decision-making capacity is the litmus test to the appropriateness of the organizational arrangement. This dimension puts emphasis on the implementation level where it relates the operationalization of high-level decisions *vis-a-vis* the decision-making processes within the hospital setting. "For reasons of efficiency, effectiveness, quality and responsiveness, the decisions on the hospital level ought to be separated from direct political scrutiny and control" (Duran & Saltman, 2011, p.46). The main proposition of this dimension is the sufficient space given to hospitals, with limited undue interference to adjust its practices in response to unforeseen challenges.

5- Coordination/ balance between the organizational missions:

The university hospital setting is the focal point for the realization of the tripartite mission. Education and training, research, and healthcare service delivery are the three mission centers of all university hospitals. To strike a balance between all the three mission centers is a necessity. One of the success factors for governance arrangement in university hospitals is to strike a balance between service delivery and other academic functions (Wietecha et al., 2009). "Effectively striking a balance is the goal, and it supersedes the preferred desirability of any specific model" (ibid, p.174). The need to balance these missions requires coordinating the understanding of the complexity of the respective missions and responsibilities.

3.2. Applying the conceptual framework to hospital structure in Egypt

The conceptual framework combines together the appropriate model that best describes the organizational arrangement of university hospitals in Egypt with the operational categories to describe the governance of publicly-owned university hospitals. Based on the nature of the institutional arrangement of university hospitals in Egypt, the *single/owner model of governance* characterizes the relationships between the university, faculty and affiliated hospitals. This setup is generalizable to all university hospitals across Egypt because of a unified institutional arrangement that apply to all university hospitals. The university administration is typically the overarching umbrella that holds both academic and clinical functions. University hospitals and other clinical enterprises are under the ownership of the university. The dean is the position that connects both the faculty and the university hospitals. He/she is the chairman of the general board of directors of all affiliate hospitals. The faculty is responsible for academic related functions that feed in its two main missions, education/training and research. The missions of the hospital overlap with these of the faculty in addition to treatment or healthcare service provision. So, because there is an overlap in the missions, the faculty and the hospital have to reach an agreement to be able to balance between the different missions.



Source: Author constructed based on the single/owner model of university hospital governance (Weiner et al., 2001; Wietecha et al., 2009) and the framework for assessing public hospital governance (Saltman et al., 2011)

The above figure is a visual representation of the conceptual framework guiding this study. It puts together the single/owner organizational arrangement that best describes the arrangement of university hospitals in Egypt with the operational dimensions of governance. The identified strategic governance dimensions are typically decided at the upper organizational level manifested in the university administration and faculty of medicine. Operational governance dimensions are reflected on the hospital level. The ultimate goal of is the achievement of the tripartite mission of university hospital.

Chapter Four: Research Methodology

4.1. Qualitative research design

This study has a qualitative exploratory design aiming to examine the current university hospital governance structure, the nature of reforms that are undertaken in hospitals and identify the key hurdles to hospital management. The issue of university hospital governance and organizational arrangement in Egypt is still an untapped area of research, reaching out to key informants and policy makers is a key ingredient in order to attain a holistic overview of the subject matter of this study. The research questions that this study attempts to explore are how questions which by nature require exploratory tools that only a qualitative research design offers. For this purpose, a qualitative research design allows for deep human interaction and provides space for exploration.

4.2. Overall research strategy

To conduct this study, it is mainly dependent on in-depth interview strategy. "In-depth interview strategy stipulates a primary method for gathering data" (Marshall & Rossman, 2006). For triangulation purposes, first, interviewing process is designed to include different key informants and decision makers. The diversity is mainly in managerial positions and institutional affiliations. Second, verifying the obtained primary data is through review of existing secondary data.

In-depth interviews took place in one-on-one meetings with the identified key informants. The data collection process took one month. The duration of the interviews ranges between 30-60 minutes each. For consistency purposes, a set of interview questions are predetermined around how university hospitals are governed, the reforms that take place in the hospitals setting, and the key hurdles that face hospital management. In certain cases where further discussion is necessary, more

probing questions are asked. Working in healthcare sector and on institutional reforms in public university hospitals myself, made it attainable to approach the targeted calibers and to conduct interviews with them. Because most of the interviewees are practicing physicians and academic professionals, interviews are conducted in their private clinics, within hospitals where they work, or in their department offices.

4.3. Sample selection

The sampling type used to identify key interviewees in this study is non-probability purposive sampling technique. This typology of sampling allows to put specific criteria for the selection of participates to support the purpose of the study given the limited expertise and relevant knowledge about this topic in Egypt. Other sampling techniques might end up with the inclusion of participants that do not add to the topic and credibility of the information obtained is important. The selection is done in a way that guarantees diversity in managerial positions of leadership in university hospitals, institutional affiliation to different public medical schools across Egypt, and technical expertise in institutional governance and public hospital reform. Based on these criteria, a total number of 10 one-on-one interviews are conducted. The interviewees cover six different public medical schools across Egypt from Cairo and some delta governorates. The following are the 10 interviewees according to their positions:

- Top leadership of the medical school

Interviewing one of the top leadership positions of a medical school enriches the study with important insights on the academic functions and their alignment with the clinical functions.

- Top executive leadership of university hospitals

The selection of one of the top executive leadership positions in a university hospital is an added value to the research as the interviewee gives important insights on the overall picture of affiliate hospitals. The participant highlights important aspects from an execution perspective in relation to all affiliate hospitals.

- Two hospital managers

Two hospitals managers are selected for the interview from two different public university hospitals in Cairo. Their hands-on experience sheds light on the key challenges that university hospitals face on the implementation level. The two interviewees give insights on their responsibilities and define their authority in managing their respective hospital.

- Former assistant to the Minister of Health

The selection of a key informant from the Ministry of Health is important for the research because the interviewee gives insights from the healthcare perspective on the work of university hospitals. The key informant also gives a macro level perspective on university hospitals and their work across Egypt in the provision of services.

- Member of institutional reform team at university hospital

The selection of a member from the institutional reform team of one of the largest university hospitals in Egypt is an enriching insight on the efforts for reform undertaken within university hospitals. The interviewee also accurately describes the organizational affiliations of university hospitals and the current governing structure.

- Financial and costing officer in a university hospital

The selection of a key informant with financial expertise in university hospitals is a crucial element to describe the financial arrangement that university hospitals follow.

- Senior specialist

Interviewing a clinical specialist sheds light on the key operational aspects undertaken within the hospital premises. The interviewee gives insights on the clinical practices and the implementation level bottle necks resulting from the existing governance arrangements.

- Expert on institutional governance

Interviewing a subject-matter expert in institutional governance and hospital reform is a core added value to this study given the focus on university hospitals and their institutional governance arrangement. The interviewee highlights key issue domains in the hospital setting and potential ways to improve the governance arrangement.

- Member of the Supreme Council of Universities

The selection of a member of the Supreme Council of Universities for the interview opens up important discussions on the current reforms and policies regarding the work of university hospitals and their implication on university hospitals. The key informant perspective enriches this research with higher education insights on university hospitals.

- Top leadership from the faculty of nursing

Nursing staff is a key internal stakeholder to the hospital. Interviewing one of the top academic positions in the faculty of nursing enriches the study with their perspective on the work of university hospitals and their role.

4.4. Data collection

The study depends heavily on primary data given the limited evidence in the literature on Egypt. However, existing and relevant secondary data is reviewed. To operationalize the primary data collection, semi-structured interviews with each participant are conducted. The interviews' duration ranges between 30 to 60 minutes each. For participants that allowed audio tapped, their interviews were recorded for accurate transcriptions. For those who did not allow recording, instant notes were taken in a written form during the interviews. All interviews are conducted by myself bilingually; in English and Arabic. Secondary data is collected through desk research in form of international studies and theoretical models of governance.

4.5. Data analysis

All 10 interviews are transcribed separately. The analysis of the interview transcriptions is done traditionally with no use of software. The analysis followed the thematic categories of the conceptual framework. The coding exercise is guided by the dimensions of hospital governance from the conceptual framework. Results are clustered in alignment with these threads from the conceptual framework: institutional dimension, accountability dimension, financial autonomy, balance between missions, and correspondence between responsibility and decision making capacity dimension.

4.6. Ethical considerations

Primary data collection involves human subject matters and therefore involves a number of ethical considerations. In acknowledgement to the fact that participants of the study adjust their priorities and take from their time to contribute with their knowledge to the research, thorough explanation of the scope of the study, research purpose, and interview structure were given prior to the interviewing process.

Participants' anonymity and confidentiality are guaranteed to make sure to do the participants no harm. Informed consent for participation is collected from participants orally or written to guarantee voluntary participation. The Institutional Review Board approved the proposal of the study on the 13th of July 2017 prior to the data collection process. All possible ethical considerations were considered and approved prior to the data collection.

4.7. Limitations and delimitations of the study

The expected limitation to the study from a methodological perspective is the sample size. The relatively small number of the sample is an issue of the topic of governance itself and the limited level of expertise, particularly in the university hospital setting. Finding key informants that have knowledge on both university hospital and institutional governance is a considerable limitation to the study.

Another limitation from a logistical perspective is the interview setting. Conducting the interview on-site in hospitals or clinics infers numerous interruptions that are unavoidable. This reflects on the duration of the interview and the depth of information that is shared.

The delimitation of this study is that findings and policy implications derived from this research are not generalizable to other types of hospitals. The research is mainly focused on publicly-owned university hospitals. This implies that governance of private or not-for-profit hospitals is not within the scope of this study because of the different governing structures of public university hospitals compared to other types of hospital. Moreover, privately-owned university hospitals are also out of the scope of this study because of the different type of ownership that infers different governance arrangement. Moreover, findings of this study are contextual and derived from the Egyptian public sector setting.

Chapter Five: Data Analysis and Findings

The interviews and the review of guiding mandates shed light on the governance arrangement that describes how university hospitals are governed in Egypt according to the five dimensions of the conceptual framework. Throughout the exploration of the governing structure, some challenges are expressed affecting the achievement of better outcomes of the tripartite mission. Finally, interviews reveal a number of reforms that take place either on the national level or at the hospital level in Egypt.

In accordance, the primary data is organized under the two overarching governance dimensions highlighted in the conceptual framework; strategic governance and operational governance dimensions. Each of these overarching dimensions entails several sub dimensions that describe the governance arrangement of university hospitals in Egypt. A third cluster refers to the current and ongoing reforms taking place in the Egyptian context.

5.1. Strategic Governance Dimensions

The analysis of the strategic governance dimensions are in alignment with the three indicated dimensions in the conceptual framework.

5.1.1. Institutional dimension

The institutional dimension highlights the skeleton of any governance arrangement defining the structural relationships between the university, the medical school, and the hospital. Key informants are asked to describe the organizational arrangement that guides the relationships of the three actors of university hospitals in Egypt.

There is consensus among participants of the study that in Egypt the clinical and academic functions are both under one overarching leadership manifested in the university. The Governance Expert confirms: "There is full integration between the clinical and the academic functions in university hospitals in Egypt, unlike the system in the UK, for example. This integration is even manifested in the physical allocation of academic departments within the hospital premises" (September 2017).

The Governance Expert expresses the integration between both functions in university hospitals in Egypt. Clinical and academic functions are both integrated even in the physical sense where academic departments are placed within the premises of university hospitals unlike the UK system, where the functions are in isolation from one another (Ovseiko, 2010). In theory, this integration in the Egyptian context is referred to as unified governance or owner model of governance arrangement. Under this type of arrangement, hospital, faculty, education and research endeavors are all under one overarching framework (Wietecha et al., 2009).

The institutional arrangement of university hospitals follows the unified governance structure where the parent university is the overarching authority. "University hospitals belong completely to the university (full ownership) under the authority of the university president" (Governance Expert, September 2017). The owner of university hospitals is to the parent university. Article no. 1 of Law no. 3300/1965 confirms the statement of the Governance Expert highlighting the ownership of university hospitals to the parent university with technical oversight by the medical school. In accordance, the single leadership encompassing both clinical and academic functions is manifested in the university president, as also mandated in the same article of Law no. 3300/1965. "The highest administrative authority is manifested in the university president where many ratifications and approvals are centralized at the president's level not delegated even to the dean's level" (Governance Expert, September, 2017). This implies that the ultimate authority of

university hospitals is vested in the occupational capacity of university presidents. As expressed by the Governance Expert, ratifications and approvals to faculty level decisions are assigned to the university president. This authority is backed up by Law no. 49/1972 that confirms the independence and autonomy of universities to manage all affairs within the university. Consequently, university hospitals follow the university president's decisions financially and administratively, yet, clinically hospitals follow the medical school's regulation. One infers that the organizational structure of university hospitals follow what Weiner et al. (2001) call owner model of governance. It is a common ownership structure, under the unified governance arrangement, where typically the university or a parent holding structure presides over the medical school, academic plans, and the clinical functions (ibid). The owner model operates as a closed system in which the elements of system finance, hospital and institutional services, professional services and medical education are delivered under a single governance and administrative structure (ibid).

In certain universities, there are research centers and independent hospitals that are clinically not affiliated to the medical school but only to the university (i.e. Students hospitals, research institutes). "*There is no framework that coordinates the work of the faculty and its hospitals with the research centers and hospitals directly affiliated to the university*" (Governance Expert, September, 2017). This means that universities have other clinical institutions that are not affiliated to the medical school, thus, do not abide by any decisions taken by their board. The university directly manages them away from the medical school. According to the Governance Expert, the lack of a proper framework that coordinates the works of the hospitals affiliated to the medical school with those affiliated to the university creates redundancy and fragmentation in the achievement of the tripartite mission.

Under the unified governance model, the role of the dean of the medical school is a pivotal post that contributes to both the academic as well as clinical functions. In Egypt, school deans are appointed by a presidential decree based on the nomination of three professors by the Minister of Higher Education.¹ Once appointed, the dean is responsible for all the administrative, financial and academic affairs of the school he/she heads as well as the enforcement of all the decrees and decisions by the university council and the Supreme Council of Universities.² In medical schools, in addition to the academic role that the dean plays he/she is also appointed as the chairman of the board of directors of affiliate hospitals making him/her responsible for the clinical functions of the hospitals as well.³

"The dean of the school is the chairman of the hospitals' board of directors. He/she is the link between the faculty and the hospitals. Having one spokesperson for all hospitals and for the academic functions facilitates agreements and transactions with internal and external stakeholders. Talking to one person on behalf of both the academic side and the hospital side is an advantage in facilitating decision making" (Top leadership in medical school, September 2017).

This unification under the dean's position makes it easier to align the academic plan with the practical training given within hospitals. Moreover, negotiations are conducted with only one person that caters for both sides which decreases the potential areas of conflict between the academic and the clinical interests. The advantages highlighted by the dean express the positive aspects of the unified governance arrangement discussed by scholarly proponents of this type of

¹ Article no. 43 Law no. 49/1972

² Article no. 44 Law no. 49/1972

³ Article no. 43 Law no. 49/1972 and Article no. 3 Law 3300/1965

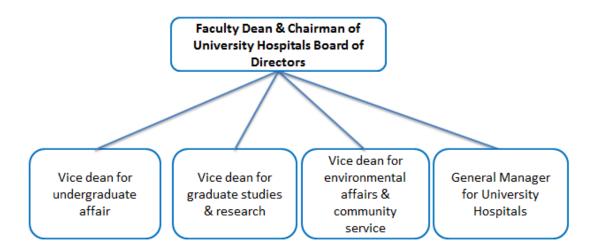
arrangement. Under the unified governance model, the dean typically carries out the responsibilities of the academic mission and also exercises executive authority over the clinical operations of the service delivery in affiliate hospitals (Wietecha et al., 2009). Unified arrangement creates "peace on campus" where there is a single point of accountability and a single vision that guides both the clinical and the academic endeavors (ibid, p.171). Also, the unified arrangement guarantees strategic focus of both functions (Barrett, 2008). This implies that both the medical school and the hospital pursue shared missions investing in activities that add value to both entities (ibid). This implies the reduction of any vested interest between both the academic and the clinical endeavors by unifying the point of management manifested in the faculty dean. In support of this arrangement, the Former Advisor to the Minister of Health articulates:

"The intersection between the faculty and the hospitals is at one person; the dean. Accordingly he knows the direction of both functions and enforces the educational and research policies from the faculty side at the hospital level. That means that the policy directions put at the faculty level are translated in the hospital setting through adequate supporting training modules and programs" (September 2017).

The Former Advisor to the Minister of Health highlights another advantage of this arrangement reflected on the mission centers of university hospitals. The main advantage of the unification of the dean's position with the chairman's position is the alignment of academic plans with the clinical practices. This fact works for the interest of training and education material for young professionals and undergraduate students who both align their theoretical knowledge with the practical experience that they are exposed to in the hospitals (Wietecha et al., 2009). One noticeable issue in

the appointment of the dean is the potential imbalance in the selection criteria that may be more in favor of academic achievements and overlook necessary managerial and leadership skills for the clinical enterprise (ibid). The imbalance in the selection criteria would potentially undermine clinical enterprise performance.

For the balance between the academic and the clinical missions, the deans of medical schools have three vice deans appointed by the university president⁴ and one general manager for all affiliate hospitals nominated by the dean.⁵ The vice deans and the general manager reflect the missions that the faculty of medicine as well as the hospitals are mandated to fulfill. The figure below visually demonstrates the different vice deans and the general manager nominated by the dean and appointed by the university president.



Source: Author constructed

Each vice dean is responsible for one of the mission centers of university hospitals; education, training, and research. The general manager of all affiliate hospitals is responsible for the clinical treatment provision. However, it is important to note that administratively and legally the medical school and the hospitals are considered two separate entities. As articulated, the medical school strictly follows the laws of the

⁴ Article no. 47 Law no. 49/1972

⁵ Article no. 9 Law 3300/1965

university and the academic faculty members are directly under the authority of the university⁶; whereas the hospital has its separate bylaws under the authority of the chairman of the board.⁷ The Former Advisor to the Minister of Health (September 2017), as well as the top leadership in medical school (September 2017) confirm that the dean does not have any administrative authority over faculty members. Thus, the dean only reports back to the university president potential issues with the academic staff but cannot take decisions independently. In practice, the dean has authority directly over nursing, house officers, and residents who fall directly under the administration of the hospitals, as highlighted by the top leadership of the nursing department during the interview. In alignment with the aforementioned statement, the Dean expresses:

"In cases of investigations or penalties with the nursing staff or house officer and residents, the general manger of hospitals asks for that from the dean and the dean is one that issues the decision with that" (Top leadership in medical school, September 2017).

This infers that the dean has authority over the hospital premises in terms of nursing, clinical residents, and house officers and no authority over academic staff members. The indicated role of the general manager of hospitals is noticeable in this setting; meaning that he/she cannot penalize their staff within hospitals but rather refer back to the dean for decisions. There are two observations in this setting. First, the centralization of authority is noticeable on the level of the university president and the level of the dean, yet, with different scopes. The authority of the university president on academic faculty makes the dean unable to influence their behavior for academic advancements he/she sees as important. The same rationale applies to the general

⁶ Law no. 49/1972

⁷ Law no. 3300/1965

manager of hospitals in relation to the dean on the hospital unit. The general manager himself/herself cannot inflict anything on the medical staff working in the hospitals without the dean's ratification. One can infer that the authority is centralized on a higher level than where originally decisions need to be made. This applies to decisions taken on the hospital level and on the faculty level. In accordance, there is an evident imbalance between the decision making right and the adequate authority to take the decisions.

Another manifestation to the integration between clinical and academic endeavors is manifested in the organizational hierarchy under the general manager of hospitals. He/she is responsible for the collective performance of all affiliate hospitals operationally, financially, and administratively.⁸ The general manager has deputy managers that assist him/her in carrying out the clinical as well academic missions.

"The general manager of hospitals has four main deputy managers:

- o Deputy for financial and administrative affairs
- Deputy for therapeutic affairs
- Deputy for training affairs
- Deputy for environmental affairs

Under each deputy there are a number of general administrations and general departments catering for different affairs under each component. In addition, the general manager has all hospital managers under his/her direct oversight"

(General Manager of University Hospitals, September 2017).

The deputies of the general manager mirror the academic and clinical missions on the hospitals level. The Deputy for training affairs under the oversight of the general

⁸ Article no. 10 Law no. 3300/1965

manager resembles the vice dean for graduate studies and research. He/she is responsible for giving practical trainings to the young professionals within the hospital premises. The existence of these deputies under the overarching umbrella of the general manager ensures the realization of clinical and academic functions on the hospital level. The benefit of the central departments is usually for consolidated procurement of equipment and consumables and for the elimination of redundant activities that take place across all hospitals with limited differentiation in the processes.

5.1.1.1. Key considerations of institutional aspects

The institutional dimension analysis of university hospitals highlights important aspects: First, **the analysis reveals that university hospitals across Egypt follow the unified governance model.** As demonstrated, the ultimate authority is manifested in the university president representing the ownership interest. It is a common ownership structure, where typically the university presides over the medical school, academic plans, and the clinical functions. The university president appoints the dean who is responsible for the medical school and for the hospitals. He/she is also the chairman of the board of directors of hospitals. The dean unifies the academic and the clinical functions under his/her occupational capacity. As described earlier, there are other hospitals and research institutes affiliated directly to the university not to the board of directors of all hospitals. The problem with this arrangement is the duplication it creates. There are research centers and hospitals directly affiliated to the university that carry out the same functions that other hospitals affiliated to the medical school carry out. The consolidation of both types of hospitals under one arrangement can help coordinate the work of these hospitals together. Second, one infers from the interviews that the unified structure is a suitable organizational arrangement for university hospitals in Egypt. Interviewees highlight several advantages to the unified governance model, from the key informants' perspective. They agree that this closed system with clinical and academic functions tied together makes meeting the academic and clinical needs easier from within this system. Besides, the unified system aligns the academic plan with the practical training in hospitals that young physicians undertake. Even reaching agreements between the hospital and the medical school is easier to carry out as the dean of the medical school is the chairman of the board of directors of hospitals. The agreements are done with only one person that caters for both sides which decreases the potential conflicts between the academic and the clinical interests. This fact works for the interest of training and education material for young professionals and undergraduate students who both align their theoretical knowledge with the practical experience that they are exposed to in the hospitals. Although the unified governance arrangement is associated with a number of advantages that work for the overall vision of both clinical and academic enterprises, there are commonly cited issues with the unified arrangement. One of the relevant issues to the Egyptian context is the strong bias in the selection of the dean's position in favor of high academic skills overlooking management and leadership competencies. The bias in the selection would possibly reflect on the efficiency of the clinical enterprise.

Third, the authority is centralized on a higher level than where originally decisions need to be made within university hospitals. Although key informants agree that the unified governance model has a number of advantages in Egypt, the distribution of authority is not adequate to the same level where decisions need to be made. The authority of the university president on academic faculty makes the dean

unable to influence their behavior for academic advancements he/she sees as important. The same rationale applies to the general manager of hospitals in relation to the dean. The general manager himself/herself cannot inflict anything on the medical staff working in the hospitals without the dean's ratification. This creates an evident imbalance between the decision making right and the adequate authority to take the decisions.

5.1.2. Accountability dimension

5.1.2.1. Internal accountability mechanisms of university hospitals

Accountability sheds light on the roles and responsibilities of the different actors in the university hospitals setting. It highlights the hospitals' obligations towards their supervisory body.

University hospitals' board of directors is the supervisory body that holds hospitals accountable to their performance. The board of directors is the overarching authority over all affiliate hospitals to the university that is responsible for all affairs of the hospitals and puts general policies to guide their work.⁹ The decisions of the board have to be reported back to the university president, according to article no. 2 of the same decree.¹⁰ *"The mandates that guide the work and composition of hospital boards date back to the 1960s. You can imagine how outdated and out of context these mandates are to today's hospital setting"* (Governance Expert, September 2017).

There are two important remarks to point out. First, the mandates guiding the work of hospital boards are relatively outdated which reflects on their capacity to respond to the current environmental dynamics, in accordance with the Governance Expert statement. The context during the inception of these laws changed a lot making them irrelevant in some cases and do not enable hospitals to respond to today's demands and evolving needs. For example, in the 1960s during the socialist era in Egypt representation was a highly accentuated virtue. This is reflected in the wide representation serving on the board. In today's context, other board theories may

⁹ Presidential Decree no. 3300/1965

¹⁰ Article no. 4 Presidential Decree no. 3300/1965

better apply to the current setting and enable the hospitals to meet the needs of the sector.

Although there is no fixed number of directors to serve on the board, the size of the boards tends to be big. The board encompasses a wide representation of stakeholders which ranges from 30 to 70 members. As previously mentioned, the big size of the board is referred to the relatively large representation mandated in the Presidential Decree no. 3300/1965.¹¹

"The board represents the different stakeholder groups and their respective interests. It is chaired by the dean of the faculty of medicine and encompasses the heads of all departments, the managers of hospitals, head of the nursing, the four deputy directors of hospitals, and other stakeholder representatives such as the armed forces, the police, the media, public figures etc." (Top leadership in medical school, September 2017).

The top leadership in medical school expresses the wide array of stakeholders that are represented on the board encompassing both internal and external stakeholders.¹² The chairman of the board is the dean of the faculty of medicine. In addition, there are representatives from other auxiliary departments as well as external public figures serving on the board.

There are several considerations in relation to the board of director's composition. The board composition follows the stakeholder theory of boards of directors where different stakeholder interests are represented on the board (Chambers, 2012). The stakeholder approach to boards recognizes the need to position the organization within a wider societal context. It mandates the inclusion of stakeholder interests within the organization through their representation in boards (ibid). In Egypt, during

the 1960s representation was highly accentuated in all national policies. This virtue is manifested in the composition of the board that highly emphasizes on the representation of different stakeholder groups. Yet, this resulted in a large board size with diverse interests that in some cases are conflicting. The conflicting interest of the stakeholders serving on the board does not give objective basis for the evaluation of board actions and no guidance to how these interests are prioritized (Slinger, 1998).Another point in relation to the board composition is the imbalance in the representation of executive versus non-executive members to the board. It is clear from the board composition that, first, the number of executive members outweighs the number of non-executive members and second, the representative nature of the board makes its size too big to pin down strategies and policies for all affiliate hospitals.

In the empirical context, interviewees express similar disadvantages resulting from the current board composition and size. In many cases, board meetings become a place where operational matters rather than strategic planning are discussed and very specific departmental issues are brought to the agenda. These two issues combined encroach on the time for discussions of strategic matters and overall organizational performance of hospitals. According to the statement expressed by the member of institutional reform team,

"Theoretically, the board is mandated to put the strategy and overall direction to all its hospitals. Realistically speaking, it does not because board members raise individual issues from their departments on board meetings rather than discuss important strategic issues. In addition, the time allocated for important versus unimportant matters is limited. It does not give enough space to go through important matters thoroughly" (September 2017). The key informant expresses his concern about the time spent during board meetings to discuss individual academic department issues rather than making use of the time for strategy development for the affiliate hospitals. Moreover, the time allocation is imbalanced between trivial versus important matters. This automatically results in unbalanced meetings where strategic matters are not allocated enough time and academic faculty take the lead in setting the agenda. This indicates that the academic faculty encroaches on the priorities of hospitals during the meetings. In alignment with the statement of the member of institutional reform team, one of the interviewed university hospital managers expresses,

"Most of our board meetings are mainly about management issues that encroach on the time of other strategic matters. This is why we hardly find time to put plans and discuss strategic issues" (University Hospital Manager 1, August 2017).

The hospital manager accentuates the operational indulgence of the board in operational discussions rather than on long term strategy for all affiliate hospitals. Harding and Preker (2009) accentuate the strategic nature of board of directors where operational and purely executive matters should not be discussed. In theory, the main responsibility of the board is giving directions and oversight to all affiliate hospitals (CIPE & HeGTA, 2014). The board of directors' main responsibility is to put the overall vision of the hospital and to pin down general policies to guide the execution on the hospital's level (ibid). Applying these points to the Egyptian context, one infers that the practices of hospital boards are not in alignment with the theories.

5.1.2.1. External governmental accountability mechanisms in Egypt

University hospitals are publicly-owned which implies that they adhere to external regulatory and oversight guidelines in Egypt as other publicly-owned institutions.

The Central Auditing Organization and the Administrative Control Authority are considered the two main oversight bodies for financial transparency and for compliance with administrative procedures. The Central Auditing Organization (also named as Accountability State Authority) is an autonomous accountability body directly affiliated to the State President (Accountability State Authority, 2017). The main responsibility of the organization is to exercise oversight on public funds and hold public institutions accountable to their financial practices (ibid).

In relation to public university hospitals, they fall under the area of jurisdiction of the Central Auditing Organization as they are publicly-owned.

In relation to the hospital, the Organization has the right to investigate any financial aspect related to the hospital. As explained by University Hospital Manager 1:

"Any financial aspect regarding the expenditure or revenues of the hospital falls under the mandate of the Central Auditing Organization and as a hospital manager I am answerable to the Organization. For example, the Organization would send out an official letter asking about the justification for high electricity bills or water consumption, purchase of new devices etc." (August 2017).

The University Hospital Manager points out the common situations when the Central Auditing Organization inspects the financial performance of the hospital. The Organization might investigate or does a random inspection on the patterns of expenditure and the justification for the given consumption of overheads, for example.

The Administrative Control Authority areas of jurisdiction, as mandated in law no. 54/1964, covers all state administrative bodies, public business sector, public institutions, private sector contributing to public work, and any other form of

organization that the state contributes to (Administrative Control Authority, 2017). It helps the State President as well as other executive authority actors (Cabinet Ministers, Governors etc.) to verify potential areas of improvement in the administrative and financial systems of public organizations and to ensure that public organizations follow legal and administrative procedures properly (ibid).

Publicly-owned university hospitals are under the mandate of the Administrative Control Authority as they are considered public institutions. From an implementation perspective, University Hospital Manager 1 explains:

"The Administrative Control Authority would directly contact the hospital manager in cases such as: investigating issues of public tender procedures for medical supplies such as pharmaceuticals and medical devices, inspecting the expiry periods of medical supplies, and making sure that administrative and legal procedures are generally followed within the hospital" (August 2017).

In a situation where compliance with legal and administrative procedures is at stake, the Administrative Control Authority has the right to directly contact the hospital manager and investigate the issue. In other cases, the Authority can do random inspections to validate the compliance of the hospital.

In accordance, one infers that university hospitals are held accountable financially to the Central Auditing Organization and administratively to the Administrative Control Authority. Investigations and inspections are commonly undertaken on the hospital unit through the hospital manager.

5.1.2.2. Key considerations of accountability aspects

The accountability dimension underscores some aspects within university hospital setting:

First, **the current laws that govern university hospitals are outdated in relation to the current context.** The mandates that guide the board go back to the year 1965. Since the inception of this decree, the context of university hospitals changed making it difficult for boards to respond to today's demands and evolving needs.

Second, **the board of directors' composition and size do not enable it to perform its oversight and supervisory functions over affiliate university hospitals.** The actual size of the board of directors is relatively large. The size of the boards tends to be big encompassing a wide representation of stakeholders which ranges from 30 to 70 members. The size of the board is too large to discuss strategic decisions for all hospitals in a focused and constructive manner. The composition of the board encompasses a wide range of stakeholders, yet, the proportion of executive versus non-executive directors is high. Consequently, board meetings tend to be more operational than strategic, as expressed by some key informants. In addition, the domination of the academic staff also reflects on the discussions taking place on the board. The clinical aspects of hospitals tend to undermined by academic aspects that are brought on the agenda during board meetings.

5.1.3. Financial dimension

University hospitals have diversified sources of finance and funding streams. These encompass the predetermined budget by the Ministry of Finance, investment plans that are prepared by the administrative government units, submitted to the Ministry of Planning and Administrative Reform for negotiation, self-funding activities that hospitals conduct, special revenue generating medical service units, and donations. These sources are valid in all university hospitals in Egypt and do not include the financial aspects of the academic staff.

5.1.3.1. State budget:

The budget defined by the Ministry of Finance (MoF) is considered the main stream of finance to university hospitals. Generally, the state budget is divided into 6 sections in line-budget item form for spending (MoF, 2016). The most important sections of the line-item budget correspond to chapter one, two, and six of the state budget. Each of the six lines has a fixed amount allocated that cannot be transferred from one line item to another one and cannot be spent on items that are not already set out in the budget (ibid). However, some flexibility is given to move within the same line item of the budget. All hospitals have to spend within the limits of this budget and are not allowed to spend above the allocated sum from the state budget. The state budget is decided upon negotiations taking place between MoF and the university. However, as indicted by the Finance and Costing Officer at one of the university hospitals:

"Financial forecasts are conducted by the academic faculty where they use old data that does not reflect the current financial numbers. They are done with limited financial science behind it. The faculty staff shoots in the budget because they know they will get into a "bargaining" process with MoF" (Finance/ Costing Officer, September 2017). The statement by the Finance Officer highlights two main aspects. First, the budget decided on in an unscientific way by academics that do not necessarily have sufficient financial knowledge. The forecasts of the hospitals are conducted in a traditional manner by faculty members with the exception of the wage and salaries of administrative employees as it follows the national wage structure¹³ and the investment line in the budget. Second, the Finance Officer referred to the process as a "bargaining" process indicating a vague pathway that guides the allocation of budget which does not reflect the actual financial needs of the hospitals.

From an autonomy perspective, obviously there is limited flexibility and freedom to reallocate or transfer funds across the different line items by the decision makers of university hospitals. The predetermined budget at the macro level does not allow flexibility for hospital leadership to handle these finances. Another consideration is the lack of clear allocation of financial resources that reflects the different mission centers to make sure that no mission encroaches on the other.

5.1.3.2. Additional sources of funding:

To overcome the rigidity of the public budget, most university hospitals in Egypt have created additional sources of funding to sustain the operations.

"These revenue generating activities include for-fee service units, out-of-pocket payments, insurance, treatment on the expense of state and special agreements. These revenues are dedicated to the clinical practices within the hospital only." (Finance/ Costing Officer, September 2017).

The Finance Officer highlights the four main revenue generating streams that flow with funds to university hospitals. The revenues are usually under the authority of the general manager of hospitals as per the law he/she is the responsible person for the financials of all hospitals.¹⁴

• For-fee Service Unit (Elag b Agr)

The for-fee service units are originally incepted through the university president decree to generate revenue to cover the shortage in budget and generate cash flow to the hospital processes. The units are in different specialties located across all hospitals.

"From the revenues of the for-fee service units, 10% are paid for taxes, 20% for hospital fees and the rest is divided into 40% benefits and bonuses for the employees and 60% for improving services of the clinical department. The aforementioned 60% and 40% distribution for benefits and improvement are controlled by the heads of the For Fee Service units" (Finance/ Costing Officer, September 2017).

The percentile distribution expressed by the Finance Officer implies important dynamics of who has authority over the revenues of the for-fee service units. Because these units are physically allocated within the hospital premises, a portion of the revenues is used to cross subsidize other operations in the hospital. Other portions go to taxes and to employees in the unit. Moreover, the majority of the revenues go to support the department which is one of the advantages of the integration between clinical and academic functions. Revenue generating units can financially support the advancement of the academic departments (Barrett, 2008). In practice, this is what happens where the revenues from the for-fee-service units subsidize academic advancements in the department.

• Insurance

¹⁴ Law no. 3300/1965

There are private insurance companies/ organizations that receive services from university hospitals. However, as highlighted by the Governance Expert:

"University hospitals are not successful in attracting necessary private insurance companies because its existing medical wards fail to meet the health insurance requirements for providing medical services" (Governance Expert, September 2017).

The Governance Expert accentuates that university hospitals are not able to attract private insurance companies because they do not meet the health insurance standards. This indicates a relatively low stream of revenues from this part.

• Program of Treatment at the Expense of the State (PTES)

Medical treatment system at the expense of the state provides medical, therapeutic and surgical services for patients who are non-beneficiaries of neither public nor private health insurance systems and cannot afford medical services (World Bank, 2006).

"These patients are entitled to go to a unit at the Ministry of Health and get an amount of money to pay for the medical procedures they need. This amount is defined before the treatment is given to the eligible patients. The money is transferred later to the hospital" (Finance/ Costing Officer, September 2017).

The Finance Officer identifies the revenues from the PTES to be a source of funding for hospitals. Patients who are not covered by any medical insurance company apply for PTES and upon the completion of the medical procedure the hospital is paid for the procedure by PTES.

Special Agreements

There is a possibility to have special agreements with companies or organizations to treat patients for specific agreed upon rates.

"However, these agreements are currently minimal due to the unsatisfactory standard of medical services provided, which fall below the minimum requested by these hospitals" (Finance/ Costing Officer, September 2017).

In alignment with the statement of the Governance Expert on the lacking competitiveness of university hospitals to attract private insurance, the Finance Officer highlights the unsatisfactory standard of services that do not attract special agreements with the organizations.

5.1.3.3. Donations:

In the Egyptian context, paying donations for university hospitals take a formal path and an informal path. On the one hand, there are formal donations that consist of two main types; monetary donations as in cash payments and in-kind donations in the form of medical consumables, equipment, etc. or other items that the hospital puts on a list to channel donation funds. These donations are given either through institutions or through individual payers. Within the institutional setup of university hospitals there is an administration for fundraising that collects donations and documents them. In addition, there are non-governmental organizations (NGOs) that help in fundraising. In some hospitals there are NGO arms placed within the hospitals to handle donations; which are mostly the Zaka Fund and not-for-profit association affiliated to the hospital.

On the other hand, there are other informal streams of donations. As highlighted by the member of institutional reform team:

"Donations are given informally when individuals donate money to entrusted physicians who are usually from their circle of friends and acquaintances to support needy cases or to support in the purchase of equipment of medical consumables. This is a common practice in Egypt. Other forms of informal donations take place when physicians themselves pay out of their own money to cover the expenses of needy patients directly" (September 2017).

The Member of Institutional Reform Team underscores the different forms of informal donations that are usually not registered in the official financial system of the hospital. There are a number of associated problems with these informal donations as further explained by the Member of Institutional Reform Team,

"The problem with informal donations, particularly in cases where medical devices are purchased, is reflected on their maintenance. The running costs associated with the maintenance of the equipment is paid by the hospital, which indirectly constitutes additional financial burdens on the hospital finances that was not accounted for initially" (September 2017).

This means that the purchase of additional devices burdens the maintenance costs that forces hospital management to incur the burden of finance. The hospital is held responsible to repair the devices even if they are not formally registered. In addition, the accountability of the hospital leadership is not only confined to the maintenance of the equipment but expands also to leadership's responsibility to safeguard public assets.

In addition,

"Cases of duplicating equipment with the same specifications and the same scope are a common issue resulting from informal donations. For example, in the cardiology department at our hospital, we have five catheterization laboratories with the same specifications serving the same cardiac patients. There are no statistical ratios that justify the existence of the five laboratories" (Senior Specialist, August 2017). The Senior Specialist points out the negative repercussions of informal donations where the same equipment is purchased resulting in underutilization of existing devices and duplication of equipment. This mismanagement of donations gives negative image of public hospitals and results in reduction of donations.

5.1.3.4. Special funds:

The special funds refer dominantly to the revenue streams from the units with special purpose. These units are allocated within the hospitals which were initially designed through university decrees to generate revenue to support the hospital financially. The Governance Expert sheds light on the units with special purpose special financial arrangement saying:

"The units with special purpose were incepted by the university as a way to support hospitals financially. Although these units are physically allocated with the hospital premises, yet, they are administratively, financially, and technically independent from the hospital management and are under the direct authority of the Vice Dean for the Environment and Community Service. In accordance, the revenues are under the faculty not to the hospital" (Governance Expert, September, 2017).

The interviewee illustrates two main aspects of units with special purpose. First, despite the physical allocation of the units within the premises of the hospitals they do not fall under the authority of the hospital manager. This applies not only on the financial aspects but also on administrative and technical aspects. Second, the revenues generated from the units are allocated directly to the academic departments not to the clinical hospitals. As highlighted in the literature, the integration between the clinical and academic functions can create supporting funds to other academic advancements (Barrett, 2008). However, in practice this does not seem to be practical

because the academic function cannot encroach on the financial resources of the clinical functions. In fact, the practice in Egypt resulted in undermining the clinical mission in favor of the academic function. This goes more in alignment with Wietecha et al. (2009) proposition about the single governance model. The authors indicate that the clinical mission is more likely to be undermined under this governance model given that it is under the auspices of the academic arm (ibid).

Other interviewees accentuated this point as well. The member of institutional reform team explains:

"Institutionally, all units are in direct affiliation to the faculty of medicine management and are under the leadership of the Vice Dean for environment affairs and community service" (September 2017).

Despite the clinical nature of the services provided by the units with special purpose, financial revenues are linked to the academic faculty not to the hospitals. The financial accountability of these units is, therefore, to the Vice Dean for environment affairs and community services rather than to the hospital manager. Besides, the units that were originally designed to help cross subsidize other departments of the hospital are generating losses. "*The units do not offer competitive quality services and updated equipment to attract private and institutional payers*" (Member of institutional reform team, September 2017). Gradually, these units' attractiveness diminished and OOP patients and private institutions stopped seeking services from these units.

In practice, there are a number of issues with the management of the units with special purpose. First, the physical allocation within a public hospital automatically forces the units to accept referrals from the hospital and offer services for free, although they are not mandated to do so. The mixture between out-of-pocket and free-of-charge patients

complicates the finance of the hospital as the unit of analysis. The Governance Expert expresses some consequences of the placement of these units within the hospitals.

"The placement of these units within the hospital premises has a number of consequences. Being physically placed in a public free-of-charge hospital mandates the units to serve poor patients equally as out-of-pocket patients. In addition, there are special services offered only in these units and are not available in the other hospital departments. Poor patients cannot be restricted from using these services, in particular when their free-of-charge alternatives are not available" (Governance Expert, September, 2017).

Being a publicly-owned university hospital does not allow for any skimming practices to poor patients, which consequently means the provision of services free-of-charge even if the unit is for profit.

The second issue is in relation to the medical workforce. The same staff of physicians that works in the hospital works in these units as well. This creates a fragmented workload for physicians as well as a greater incentive to work for the for-profit units than working in the free-of-charge hospital departments. This is accentuated by the Former Advisor to the Minister of Health who articulates "*It is very common among residents and faculty members to prefer working in the units with a special purpose rather than in the hospitals free-of-charge as it is more economically rewarding. Of course this has negative repercussions on the medical workforce in the hospital"* (September, 2017).

Consequently, physicians are more incentivized to work for the units with special purpose in comparison to the free-of-charge units of the hospital. The statement by the Governance Expert reinforces the same idea as well where he states "*There is a clear fragmentation of the workload as the same doctors work at both; these units and the*

hospital" (*September 2017*). He accentuates the fragmentation of the workload of physicians between the hospital and the units.

For the consolidation of all the diversified funding sources, the general manager of hospitals is the person where the consolidated financial balances should be reported back.¹⁵ The Finance Officer points out:

"In theory, the general manager of hospitals is the one who knows all financial streams and consolidated balances. He does not review financial data from a number of units within the hospitals, such as the units with special purpose. This creates loopholes making the financial system of university hospitals vulnerable to corruption" (September 2017).

The Finance Officer further pinpoints that the general manager of hospitals is the person where all financial streams consolidate. In practice, this is a challenging task because first, there are unrecorded financials, for example informal donations. Second, the revenues of the units with special purpose fall under the Vice Dean for Environmental Affairs and Community Service. The unconsolidated financial system automatically results in vulnerability to corruption.

5.1.3.5 Key considerations of financial aspects

The description of the financial system of university hospitals reveals some considerations:

First, without proper consolidation of all financial streams a highly fragmented system is created. Having different sources of funding is a positive approach to diversify the financial portfolio. However, because there is no electronic system that consolidates all financial data together makes tracing the total figures quite difficult. In addition, there are informal donations flow in the hospital finances without appearing anywhere on the system. Moreover, there are unregistered equipment and medical devices that do not appear in the system incurring extra maintenance costs that were not originally accounted for. In accordance, the general manager of hospitals cannot trace back all finances of affiliate hospitals, thus, sound financial decisions are hard to take.

Second, the financial status of the units with special purpose is problematic, particularly, because they are allocated within the hospitals' premises. Accordingly, they encroach on the assets and the workforce of the hospital. Moreover, the revenue from these units flows to the medical school not to the hospital. That reflects an evident imbalance where the academic functions of the hospital undermine the clinical function.

5.2. Operational Governance Dimensions

In alignment with the conceptual framework, the operational dimension includes the correspondence between responsibility and decision making capacity and the balance between the missions.

5.2.1 Correspondence between responsibility and decision making capacity dimension

The hospital is the level of implementation where the operationalization of all strategic decisions materializes. From the governance perspective, the correspondence between the responsibilities that hospital managers are mandated to carry out in relation to their decision-making capacity is the actual indicator on the appropriateness of the organizational arrangement of university hospitals.

5.2.1.1 Centralization of decision making

Interestingly, key informants' responses to the decision making capacity of hospital managers similarly underscore the serious disparity between what managers are held accountable for and the limited authority they exercise. The Governance Expert explains that,

"The authority and decision making within university hospitals are very centralized. Although the hospital manager is at the hospital unit where a considerable level of authority is needed for execution, he/she is not granted the needed level of autonomy in practice" (September 2017).

There is inadequate level of empowerment to hospital managers compared to the responsibilities that they have to carry out. Being at the operational level of governance, hospital managers are not autonomous enough for execution. This is referred back to the centralized nature of the system. Because of the centralized nature of the higher education system in the Egyptian context (OECD & World Bank, 2010),

the decisions that need to taken on the hospital level have to be reported to the general manager of hospitals as he/she is the responsible person for all hospital affairs. Yet, his/her signatures have to be ratified by the dean as well. Consequently, a long chain has been created for decision making. Creation of bottlenecks, lengthy process and undermined executive power of hospital managers are common repercussions. As expressed by the Senior Specialist:

"Bylaws do not empower hospital managers to take decisions directly with the exception of minimal direct interventions in relation to the purchase of minimal operation material for emergency cases, the purchase of a small number of pharmaceuticals etc. Otherwise the decision for other matters has to follow a lengthy process" (Senior Specialist, August 2017).

The statement of the Senior Specialist accentuates the undermined executive power of hospital managers. The manager's decision making capacity is confined to minimal interventions that do not help managers advance their work in hospitals.

Another restraining factor to hospital managers is the unclear reporting obligations of some auxiliary departments placed within the hospital. There is a common practice among university hospitals in Egypt which is to have central auxiliary departments like finance, administrative affairs, human resource, procurement, maintenance, security etc. with a representation or "liaison" of these departments within hospitals.

"Most of the auxiliary departments do not report to the hospital manager but rather to their managers in the central administration, which leaves the manager no space to enforce his authority over their practices. Of course this is a major hampering factor to hospital managers. In practice, the managers' authority is manifested only on the nursing staff, residents (not academic staff *members), and house officers*" (Member of institutional reform team, September 2017).

In cases where hospitals have central departments, their representatives in the hospitals do not have reporting obligations towards the hospital manager. They report directly to their respective department heads. The only administrative authority is over the residents, nurses, and the house officers. However, even this authority is not absolute. Decisions in this regard have to be ratified by the general manager and the dean.

5.2.1.2 Financial constraints facing hospital managers

Moreover, from a financial point of view, the hospital manager does not have direct authority over the funding streams in terms of relocating them or negotiating the budget. As highlighted earlier in the analysis of the financial dimension, the budget allocated by the Ministry of Finance is fixed according to certain line-items that hospital managers cannot relocate. Moreover, units with special purpose are financially, administratively and technically independent from the hospital management, despite their physical allocation. Their financial revenues stream into the faculty pool of resources rather than into the hospital. One of the interviewed university hospital manager states:

"These units with special purpose use the resources of the hospital as in facility, electricity supply, infrastructure, and water supply. However, their revenues are linked to the faculty through the vice dean for environmental affairs and community service rather than the general manager of affiliate hospitals" (University Hospital Manager 1, August 2017).

This automatically undermines any control over these units. In practice, hospital managers have relative control over the donations only. "Only donations fall under

the authority of the manager from where he/she can pay for extra expenses and renovation for the hospital" (Former Advisor to the Minister of Health, September, 2017).

5.2.1.3 Accountability versus autonomy over clinical practices in university hospitals

For the clinical practices, in essence, the hospital manager is held accountable for the overall clinical performance of the hospital. However, in practice, the heads of the clinical departments exercise 'informal authority' over clinical outcomes but are not held accountable for clinical outcomes. "*The informal authority that department heads exercise restraints the managers' execution power and limit their authority over the clinical practices*" (Former Advisor to the Minister of Health, September 2017). The Governance Expert accentuates the same point highlighted by the Former Advisor to the Minister of Health about the informal power structure of department heads. He states:

"The inadequate empowerment to hospital leadership compared to the power structure of the department council and the departments makes the academic structure much more powerful compared to the hospital" (September 2017).

As explained by the Governance Expert, the academic structure overpowers the hospital structure. This disturbs the balance within the hospital setting. There is high accountability on the hospital manager; yet, control over clinical practices lays in the hands of the department heads. He gives another example to the imbalance between the authority and accountability given to hospital managers versus department heads. He states:

"Within the hospital setting, the lines of authority are quite blurry between the manager and the faculty members. In a situation, where faculty staff members are late for the list of operations and this hampers the flow in the Operating Room (OR), the hospital manager cannot really penalize them, although this affects the overall efficiency of the hospital negatively. Yet, when patients do not find the services the hospital management is held accountable" (September 2017).

This clearly accentuates the restrained authority of hospital managers to influence clinical operations within the hospital. Although hospital managers have the right to manage clinical practices of the departments within the hospital, their authority is bind by the informal relations that are formed due to the collegial ties between them.

5.2.1.4 Key considerations on the correspondence between decision making capacity and responsibility

There are some considerations for the analysis of the correspondence between the decision making capacity versus responsibilities dimension:

First, it is evident that hospital managers are not adequately empowered in alignment with the responsibilities assigned to them. There are multiple manifestations to the lack of decision making capacity of hospital managers; clinically, financially and administratively.

Administratively, ratification of any decision on the hospital level has to follow a lengthy processes starting with the general manager of hospitals and followed by the dean. In addition, auxiliary departments do not have reporting obligations towards the hospital manager.

Financially, most of the financial decisions are predetermined by the university president and the dean. The freedom of handling financial resources are only confined to the donations flowing to the hospitals otherwise the hospital manager does not have any decision making capacity to influence financial aspects.

Clinically, the informal power structure of academic department heads constitutes pressure on hospital manager restricting them from influencing clinical practices in

the hospital. All these factors combined restrain hospital mangers from exercising their authority over the clinical aspects, yet, are held accountable for everything within the premises of the hospital.

Second, the situation of the units with special purpose within hospitals is problematic in relation to the hospital managers' decision making capacity and resource mobilization. These units are completely out of the control of the hospital manager; financially and administratively. However, there physical allocation within hospitals has two repercussions. Primarily, these units encroach on the hospitals' assets and overheads with no legitimate control over them by the hospital manager. Moreover, the mixture between the OOP patients and the free-of-charge patients creates economic pressure on the units. As explained earlier, when the hospital does not have a service that the units have, free-of-charge patients are transferred to these units to receive the service. Accordingly, the burden of economic loses is incurred by the units hampering them from generating revenue as mandated.

5.2.2 Coordination/balance between the missions

Balancing the different missions of university hospitals is a key element to the success of their overall work. The hospital is the point of intersection where all three missions converge which implies that they have to be equally balanced in terms of resource allocation, time spent, financial planning for better overall outcomes.

Most of the key informants stress on the lacking balance between the missions in the hospital setting as one of the greatest challenges to university hospitals. Some missions encroach on the others in terms of resources and budget allocation. The Governance Expert illustrates the different scenarios where imbalances take place in the hospital setting. He states:

"In Egypt, the treatment role of university hospitals increased and overwhelmed the training and education role. Patients prefer services provided by university hospitals compared to other MOH hospitals. The high academic calibers in university hospitals drive patients to go to university hospitals rather than to other types of hospitals. Although the main mission center of university hospitals is education and training of young professional physicians, the treatment component being only a support center encroached on the other core missions. A large part of the budget is spent on treatment rather than on education; where the latter is the main mission center of these hospitals. This encroachment is manifested in the media which highlights the number of patients treated there and the problems associated to that, whereas the main indicator should be the level of excellence of medical school graduates, research contribution and quality of training as well" (Governance Expert, September 2017).

It is underscored in this statement that the necessary balance between the missions of university hospitals is not realized in the Egyptian context. More focus is given to the treatment mission, which encroaches on the other missions in terms of administrative capacity as well as budget allocation. Besides, the indicator of the quality of work that university hospitals produce is determined based only on the number of patients they serve and the quality of healthcare service delivery. Practically speaking, being a university hospital implies a strong educational and professional development component that cannot be undermined by service delivery only. Quality of graduating physicians and research contributions are as equally important indicators as the quality of service delivery. In line with the literature in that context, university hospitals provide clinical education and training to future and current doctors, nurses and other health professionals, in addition to delivering medical care to patients (Collins English Dictionary; Association of UK University Hospitals, 2012). One infers that the main proposition of university hospitals are education and training and finally to deliver medical services to patients.

The other typical scenario where imbalance takes place is when the academic functions hamper university hospitals from operational efficiency compared to international benchmarks. As expressed by the Governance Expert:

"Research and training might hamper the hospital's operational efficiency, thus, financial aspects of the hospital. An example from the ophthalmology discourse, a cataract surges that takes on average 15 minutes takes in a demonstrative training up to 2 hours; which can hamper the hospital operations" (Governance expert, September 2017).

From an operational efficiency perspective, the training of young professionals and educational case studies can encroach on the efficiency of the operative and diagnostic processes where a medical intervention can be conducted for educational purposes taking longer than guidelines mandate. To overcome this imbalance, the board of directors or trustees of hospitals has to responsibility to not compromise one mission on the expense of the other (Wietecha et al., 2009).

Another aspect of balancing the different missions with the hospital setting is manifested in the physical integration between the academic departments and the hospitals. The placement of clinical departments within the hospital premises enforces the educational and training purposes. Most of the key informants and interviewees agreed that the separation between the hospital and the faculty is not advisable. In cases where the medical school is geographically in distance from the hospital, training and education are affected. As stated by the Senior Specialist: "Training of physicians is not well-supported because of the distance between the faculty and the hospital. Trainings given in the faculty automatically result in the absence of the physicians from the hospital which is not feasible. In the other university hospital I serve at, the school is placed within the hospital where trainings and educational seminars are conducted directly before our day work starts in the clinics and the other sections of the hospital. Once we are done with the lecture, we directly get back to the clinics without losing time in transportation" (Senior Specialist, September 2017).

This implies that the current geographical integration between the hospital and the medical school results in a balanced time allocation between the educational and the treatment provision. As explained by the Senior Specialist, the physical integration allows physicians to attend educational lectures and seminars without encroaching on the time of clinical service provision. In accordance, all missions are met from within the without seeking them from outside (Weiner et al., 2001).

5.2.2.1 Key considerations on the coordination/ balance of missions

These are couple of important highlights from the coordination of university hospitals' missions dimension:

First, the current physical integration between the hospital and medical school strikes a balance between the mission centers where the transition between the activities does not encroach on the other missions. The proximity of the medical school from the hospital allows for smoother transitions between the different missions. Given that the academic faculty members are also part of the medical team in hospitals, the physical integration allows them to carry out both clinical and academic functions.

Second, there are two typical cases where the missions are not always balanced.

From an operational perspective, educational functions can hamper the efficiency of clinical practices in the hospital. In accordance, academic missions can undermine clinical practices. The other typical scenario is in cases where patient treatment exhausts the budget of other academic activities because there is high demand on services from university hospitals.

5.3 Current/ongoing reforms within university hospitals

Current reforms targeting university hospitals can be classified into two main categories; national level reforms championed by national regulatory bodies and localized organization level reforms championed by hospital leadership.

5.3.1 National agenda for reform of university hospitals

Strategic level reforms are championed by the Supreme Council of Universities as the main regulator of university hospitals. Recently, there are two national reforms in relation to the educational system and to the organization of university hospitals. As a member of the Supreme Council of Universities highlights:

"The Medical Sector Committee within the Supreme Council of Universities confirms the application of the (5+2) educational system starting the academic year 2018-2019. After the completion of these years, physicians who seek specialization are mandated to fulfill five additional years in their area of preference. The main proposition of this reform is to separate clinical education from the academic professional track" (September 2017).

According to the recently ratified amendment of article no. 154 of Law no. 49/1972, the enrollment duration for a bachelor degree is five years instead of six following the credit hours system. These are followed by two more years of clinical training. The change of the educational system automatically reflects on the structure of hospitals because they have to cater for the new academic curriculum structure and the training program structure.

Another national reform relates to a new law that organizes the work of university hospitals. As explained in the institutional dimension, it is common to have hospitals under direct administration of the university with no affiliation to the medical school. The Governance Expert points this out during his interview stating, "The law attempts to move the hospitals under the direct administration of the university to the administration of the faculty of medicine. This movement implies more responsibility allocated to the dean as well as more authority" (September 2017).

The new law has several implications on the institutional affiliation of hospitals, medical centers, research institutes that were previously linked to the university (not to the faculty of medicine) are moved under the administration of the medical school and follow the same mandates of the affiliate hospitals to the medical school. This reform is an important one because it consolidates all hospitals and research centers under the overarching umbrella of the medical school. This automatically leads to better aligned efforts and minimizes duplications.

Another important reform mandated in the new law about the creation of a Supreme Council for University Hospitals. In this regard, the Member of Supreme Council of Universities explains:

"The main purpose of the inception of this Council is to put overarching policies to guide and coordinate the work of university hospitals across Egypt, to recommend technical, financial and administrative bylaws of university hospitals to be ratified by the Minister of Higher Education, to give consultative opinion on the institutional performance of university hospitals, to identify general guidelines of service provision and to cooperate with the Ministry of Health and the Directorates of Health in the governorates in that regard, to articulate systems for performance enhancement in university hospitals, and to give consultative opinions on matters of the Council presented by the Minister of Higher Education or by universities" (September 2017). The scope of work of the Supreme Council for University Hospitals enables the coordination of activities across all university hospitals in Egypt. Moreover, the topics discussed in this Council are independent from influences and discussions of other faculty matters in the university, which usually takes place in the SCU. The idea is to create a specialized type of council that allows for knowledge sharing between university hospitals across Egypt.

On the level of hospital governance, the new law mandates the creation of a board of trustees for all hospitals in each university that encompasses top leadership from all healthcare related faculties through a decree by the university president. The main proposition of this new structural layer within the governance structure of university hospitals enables the collaboration between all healthcare related disciplines and for better interdisciplinary integration.

Moreover, the new organizing law to university hospitals indicates a different composition of the board of directors.

"There is a clear consideration to shrink the size of the board of directors. Similar to the existing board structure, the chairman of the board is the medical school dean. The other members include:

- chief executive manager of all affiliate hospitals
- all hospital managers of all affiliate hospitals
- five members specialized in healthcare affairs nominated by the chief executive manager and to be appointed through a decree by the university president

The main responsibilities of the board is to coordinate the efforts between all affiliate hospitals, to coordinate between the academic departments within the faculty and the hospitals, to monitor the performance of all hospitals, to organize

the educational and research purposes for students within hospitals, and finally to report periodically to the university president" (Member of Supreme Council of Universities, September, 2017).

The new law attempts to diminish clearly diminishes the number of members serving on the board. In addition, the type of members on the board of directors is dominantly of executive nature. Once this new law is ratified, the existing Law no. 3300/1965 is invalid. However, same issue with the board composition is noticeable here as well. The executive versus non-executive representation is relatively high which would reflect on the board discussions.

5.3.2 Localized organization level for reform

Reforms that take place within the hospital premises are mostly of operational nature rather than structural. Hospitals indulge in reforms that relate to enhancing their performance and their capacity. These are explained by one of the university hospital managers. He states:

"Typical examples of these reforms are upgrade of infrastructure, trainings to the medical staff and inception of educational programs for students, capacity building to administrative staff for computer usage and soft skills, enhancing the quality of medical services through infection control programs, and giving trainings to the medical staff on emergency cases" (University Hospital Manager 1, August 2017).

The reforms of the hospital include mainly infrastructure upgrade and soft skills training to physicians. These reforms follow more an input focused strategy that accentuates the expansion in inputs like equipment, beds, human resources etc. (Harding and Preker, 2000). In alignment with the statement of the University Hospital Manager, the Senior Specialist gives a similar picture of the reforms undertaken in another university hospital he works at. He states:

"Reforms that take place at our university hospital are dominantly manifested in the upgrade of infrastructure and enhancing the operational efficiency of the hospital, and the recruitment of academic staff members" (Senior Specialist, August 2017).

One can infer that the main reforms championed by the hospital leadership are input focused. It underscores the necessity for input in the hospital premises to ameliorate the operational flow and enhance the capacity. As highlighted by University Hospital Manager 1:

"As a hospital manager I am entangled in daily contengencies on the operational level. My main concern is to enhance the processes and organizational outcomes for day to day activities. Governance and structural changes are important aspects to consider but I have the obligation of patients to treat with or without structural changes" (August 2017).

It is clear that hospital leadership is involved in putting out fires on daily basis leaving no space for championing any structural reforms. Patient treatment and ameliorating the patient flow within the hospital premises are the main driving forces to the hospital leadership. In addition, University Hospital Manager 2 highlights the same idea as the first hospital manager. She states:

"In a situation where I have serious problems with the transfer of patients within the hospital because of no functioning elevators, I cannot think of any structural advancements but to solve the undue bottle necks in the hospital flow" (University Hospital Manager 2, September 2017). The operational processes and contingency situations absorb hospital leadership making it a priority to solve these issues. In accordance, there is no space left for any prospective thinking to hospital managers.

5.3.3 Key considerations of the reform

First, **the alignment of all affiliate hospitals under the overarching umbrella of the medical school minimizes duplications**. As described, there are hospitals and research institutes that do not relate to the board of directors of hospitals. They are directly affiliated to the university. The merging of these hospitals under the board of hospitals is a step towards consolidating the efforts and minimizing duplications.

Second, changing the educational system reflects on composition of the hospitals to fit in the new educational curriculum. The unified governance model implies that the change in one mission reflects on the other. The change of the educational system reflects on the clinical practices in the hospital and the structure of the training programs for physicians.

Third, **reform of boards of directors of hospitals still has issues in its composition.** Although the currently discussed law is an important reform for downsizing the size of the board, the composition of the board is still problematic. The presence of a relatively large number of executives on the board will reflect on the strategic role of the board.

Fourth, **input focused strategies are the guiding reforms on the hospital level.** As hospital leadership is entangled in a lot of firefighting and solving contingencies in the hospital, they are left with limited room for any strategic level advancement.

Fifth, the reforms still do not tackle the core issue with the 'stratified centralization'. Despite all the reforms that tackle inherent issues in the system of

university hospitals, they still do no target one of the main hampering factors to their work; centralization.

Chapter Six: Conclusion and Recommendations

6.1. Concluding Remarks

The study attempts to explore the governance arrangement of publicly-owned university hospitals. The central proposition for studying the institutional governance arrangement of public university hospitals is that it is considered one of the important enablers to achieve their tripartite missions effectively. Of all the potential factors that contribute to the achievement of the missions, the study takes institutional governance as the root cause of the inability of university hospitals to meet their missions effectively. In accordance, the aim of this work is to identify the governance arrangement of public university hospitals in Egypt, the challenges that face these hospitals based on the current governance arrangement as well as potential ways to overcome the identified challenges, and the nature of current reforms taking place concerning university hospitals.

The significance of this work lays in the description of the system that governs university hospitals and the potential challenges that arise from the current structure, and the current reforms undertaken. This description underscores areas of improvement for better performing public university hospitals. Through deploying a qualitative research design and creating a framework for exploring institutional governance in public hospitals, in-depth interviews are carried out and review of secondary data is conducted for triangulation purposes.

In reference to the research questions, this study illustrates the following considerations regarding the institutional governance arrangement of university hospitals.

• *From an institutional perspective*, public university hospitals in Egypt follow the unified governance model where the university presides over the medical

school, academic plans, and the clinical functions. The ultimate authority is manifested in the university president representing the ownership interest. The university president appoints the dean who is responsible for the medical school and for the hospitals. He/she is also the chairman of the board of directors of hospitals. The dean unifies the academic and the clinical functions under his/her occupational capacity. In the Egyptian context, the unified governance reveals a number of advantages that include: (a) alignment of the academic plan with the practical training in hospitals and (b) smoother agreements between the medical school and the hospitals as they are both represented in the dean.

- *From an accountability perspective,* the board of directors' composition and size do not enable it to perform its oversight and supervisory functions over affiliate university hospitals. Based on an outdated decree that governs the work of university hospitals, the actual size of the boards of directors is relatively large. The composition of the board encompasses a wide range of stakeholders, however, the proportion of executive versus non-executive directors is high and high representation of academic staff. In accordance, board discussions tend to be operational rather than strategic and focused on individual academic department matters. Moreover, limited information flow does not enable the board to exercise its oversight function and develop strategic plans.
- *From a financial perspective*, the diverse financial streams of university hospitals are not properly consolidated in an electronic system. This results in a highly fragmented system.

- *From a hospital leadership decision making capacity perspective,* it is evident that hospital managers are not adequately empowered in alignment with the responsibilities assigned to them. Throughout the study, clear manifestation of lacking clinical, financial and administrative decision making capacities are demonstrated.
- *From an operational perspective*, there is potential imbalance in the coordination of the missions where academic functions encroach on clinical ones and vice versa. Educational functions can hamper the efficiency of clinical practices in the hospital. In accordance, academic missions can undermine clinical practices. Also, patient treatment exhausts the budget of other academic activities because there is high demand on services from university hospitals.
- *From a reform perspective,* the new law currently discussed proposes a smaller size for the hospital boards of directors. However, the composition of the board is still problematic. The presence of a relatively large number of executives on the board will reflect on the strategic role of the board.

Most importantly, current reforms do not tackle one of the greatest hampering factors to the work of university hospitals which is the 'stratified centralization' across their organizational hierarchy.

6.2. Recommendations

Based on the analysis of university hospitals and the corresponding challenges that they face, there are a considerable number of areas of improvement in their governance arrangement. The following are some advisable improvements from both a public administrative reform paradigm and from an overarching public policy paradigm.

Recommendations from a public administration perspective:

Institutional enhancements:

- The study reveals that the unified governance arrangement is a favorable arrangement, which implies that reforms directed towards any separation between the medical school and the hospitals are not favorable. Improvement efforts should mainly be directed towards aligning responsibilities and roles between actors within this unified arrangement.
- In alignment with the ongoing discussions on the consolidation of all affiliate hospitals to the university under one umbrella of the board of directors to all hospitals, this is a positive step towards removing redundancies in clinical practices. Having all hospitals under the authority of the board of directors will automatically result in better alignment not only in clinical practices but also in academic and research efforts.
- More procedural autonomy needs to be given to the hospital manager, the general manager of hospitals and the dean for better decision making processes. This will result in efficiency in the decision making dynamics at the different levels of university hospitals. In accordance, the relationship between these three actors should move towards oversight adequate to the level of autonomy these actors have rather than a relationship with direct interventions and ratifications.
- The study shows that the situation of the units with special purpose is problematic. It is advisable to link these units under the authority of the hospital manager as it is located within the hospital he/she manages. This automatically implies that the units will be affiliated to the general manager of hospitals rather than the Vice Dean for Environmental Affairs and Community Service.

Accountability enhancements:

- The board of directors needs to be strengthened through professional development in term of composition and size. The size of the board should be an enabling factor for constructive discussions that enhances the performance of affiliate hospitals. Relying only on stakeholder representation on the board is not advisable. The diversity in the composition with a balanced representation of executive, non-executive, academic staff, clinical professionals, and independent directors ensures the existence of all necessary experiences for better planning. In addition, introducing independent board members would guarantee the inclusion of important expertise to the work of university hospitals.
- For members who serve on the board, they need to be given a professional training on the role of boards and the adequate practices of boards in university hospital settings for proper oversight and strategic planning.
- For better accountability, information availability and accessibility are key domains for well-informed actors of the hospital management and ultimately to the board of directors. Also, the dissemination of strategic information is a vital element to hold actors accountable to their performance based on accurate information.

Hospital management decision making enhancements:

- The adequate empowerment to hospital manager in alignment with the clinical, financial and administrative responsibilities that they carry is a fundamental pillar for well-governed university hospitals.
- Relationship dynamics between the hospital management and the department heads needs to be formalized in a way that allows hospital managers to hold the department heads accountable to the performance of their clinical practices.

• Auxiliary department representatives within the hospital premises have to report to the hospital manager not only to their central department. This will ensure that the hospital manager is well-informed about all aspects of the hospital for better quality of decisions.

Financial system enhancements:

- Incorporating an electronic financial system connecting all financial streams is a key element for a comprehensive overview of all financials. This will enhance the financial transparency and solve the issue of unrecorded financials.
- Proper financial performance indicators have to be incorporated within the financial system of university hospitals linked to the tripartite mission of university hospitals. Being held accountable by governmental control authorities for no fraud or corruption within the hospital does necessarily imply proper financial performance.

Recommendations from a public policy perspective:

The aforementioned public administration interventions need to be supported with national policies that promote proper institutional governance in all government institutions. Institutional governance reforms of public university hospitals can be the entry point to incorporate proper governance arrangements in national policies. It can be seen as a paradigm shift in public service delivery and the creation of public value not only in healthcare but also in other sectors. The principles of proper institutional governance are not confined to public university hospitals but are generalizable to other public service delivery institutions. The inception of a policy that encourages the reengineering of governing structures of public institutions will result in more institutional empowerment for better performance.

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