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THE AMERICAN UNIVERSITY IN CAIRO

*School of Global Affairs and Public Policy*

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**THE POTENTIALS FOR THE CORPORATIZATION OF PUBLIC  
HOSPITALS: THE CASE OF EGYPT**

**A Thesis Submitted to the**

**Public Policy and Administration Department**

**in partial fulfillment of the requirements for the degree of**

**Master of Public Policy**

**By**

**Mohamed Fayek Abdelhafez Abdelaleem**

Supervised by

**Prof. Ghada Barsoum, Ph.D.**

Associate Professor, PPAD, School of Global Affairs and Public Policy

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**Fall 2017**

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

THE POTENTIALS FOR THE CORPORATIZATION OF PUBLIC HOSPITALS: THE  
CASE OF EGYPT

Mohamed Fayek Abdelhafez Abdelaleem

Supervised by Professor Ghada Barsoum

ABSTRACT

With changing health landscape across the globe, increasing burden of chronic diseases, increasing citizens expectations that accompanied by cost limitations, health reform becomes inevitable for Egyptian health system to maximize benefits and overcome challenges. Reform might include healthcare service provision, health policies, workforce planning or public health programs strategies. New Public Management concepts and principles represent the basis for many of reform plans since its emerging in the early 1990s. Many countries have used New Public Management guiding principles to shape its health reform program. Egypt is undergoing a reform plan across the whole sectors through Egypt 2030 plan announced by Ministry of Planning and Administrative reform. The reform plan has identified a set of goals for the health sector to achieve and another set of indicators to measure the progress and level of achievement. This paper presents corporatization of public hospital as a tool that can fit into the new reform program. With the execution of universal health coverage, the autonomy of hospitals will help to achieve the targeted level of performance, efficiency, and quality of services. The main challenge facing implementation is the high percentage of poverty in Egypt and their dependency on the government hospitals to get healthcare services. Transforming these hospitals into revenue generating organization will affect accessibility except there is a social insurance scheme that can protect poor against the commercialization of healthcare services. Research question: is corporatization improving performance, increasing accessibility and enhancing the quality of healthcare services? Methodology: qualitative research where semi-structured interviews were conducted with healthcare professional and system experts locally and globally to get their views on the feasibility of implementation of such reform in Egypt. Conclusion: corporatization of public hospitals in Egypt represents a fair organizational reform strategy for Egyptian health system to increase efficiency and satisfaction. Yet, a rigorous readiness assessment of the system components (regulations, providers, payers, and beneficiaries) should be executed to measure the readiness for implementation.

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## List of Acronyms

CCO	Curative Care Organization
HIO	Health Insurance Organization
MOF	Ministry of Finance
MOHP	Ministry of Health and Population
MPAR	Ministry of Planning and Administrative Reform
NPM	New Public Management
NPSM	New Public Service Management
SMC	Specialized Medical Centers
THIO	Teaching Hospital and Institutes Organization
USAID	United States Agency for International Development
WHO	World health Organization

## I. Introduction

With increasing demand for high-quality healthcare services, increasing burden of chronic diseases and financial constraints, the state should be adaptive. It should respond adequately to these changing circumstances, fulfill system requirements and satisfy society health needs. For adaptation, developing and developed countries were urged to reform health care system overcoming the increasing bill of healthcare services and realizing better health outcomes for people. The government might implement a various types of reforms such as management reform, technology reform or reform of financing system. Healthcare reform manages the basic modifications of processes in strategies and organizational measures of the health sector, led by the government often. Achieving reform objectives depend mostly on the methodology, implementing parties rather than the plan itself. Political support is a cornerstone to accomplish national reform program (EMRO, 2006).

The Egyptian health system provides a great accessibility of healthcare services to outmost remote areas in the country and resolves many issues related to equity. However, it is ineffective against many other problems. The public health system in Egypt follows a vertical hierarchy as all healthcare delivery units receive a central funding from Ministry of Finance. The Egyptian government still provides free of charge medical services through more than 450 public hospitals and 5000 primary healthcare units (EMRO, 2006). Recently, the Economist Intelligence Unit released a report about Value-based healthcare (Shah, 2016). The report presented the results of a global assessment of 28 countries including Egypt. Egypt was classified as low level regarding alignment with VBHC based on the 17 indicators in the study. From public administration perspective and modern role of the state in the economy, a change in health care service delivery in Egypt has become necessary particularly in view of low economic performance in the last five years. Lack of finance has led to major problems including weak capacity and poor quality of service. In addition, poor utilization, inefficient

resource management and high cost against value provided, are among the critical problems facing the Egyptian health care system (Rannan-Eliya, Blanco-Vidal, & Nandakumar, 2000) (Salah, 2006). Moreover, the ministry of health cannot make the required changes due to constraints related to low wages, lack of strong programs for capacity building in management and scarce motivations for transformation (Saleh, 2006). To address efficiency, quality, productivity, and responsiveness the Egyptian health system might go for organization-based reforms, autonomization and corporatization that includes other reform approaches such as management, technological and funding reforms that should be addressed together for maximum benefits and enhanced results (Preker & Harding, 2003). Technological reform is critical for improving public hospital operations to overcome technology related issues particularly with the rapidly evolving digital health era (Porter, 2009). Management reform includes the application of private sector methods and best practices techniques for processes-reengineering, quality improvement and providing patient-centred care. Funding and payment reform includes migration from block funding to a mix of performance-based funding mechanisms capitation and fees for services elements (Eldridge & Palmer, 2009) .

This thesis will discuss the feasibility of Corporatization reform to the Egyptian healthcare system where hospitals and service providers have the autonomy to make their own decisions in pursuit of performance excellence.

#### A. The research questions

##### Main Question

How will corporatization of public service providers improve the health system performance, accessibility, and quality of care?

##### Secondary Questions

- What is the effect of corporatization on health system financing? Will it optimize government spending on health?
- How will corporatization empower consumer choice?
- Is corporatization against the social equity?

The research area of this study lies in the intersection between health policies, financing, and healthcare delivery areas. The study focuses on the applicability of New Public Management NPM to healthcare providers in Egypt where they can have the resources to make decisions to achieve excellence. We will also discuss the feasibility of NPM based corporatization and how it can curb the lack of empowering context for value-based healthcare in terms of policies, institutions, IT and payment methods (Shaw, 2004). This research generally focuses on corporatization as the appropriate solution for the recovery of Egypt's healthcare system (Bazzoli, 2004).



## B. Statement of the Problem

The health system in Egypt is poor, fragile and fragmented with many governmental and nongovernmental players (Shoukry, 2015). Furthermore, the quality of service provision is beyond global trends. Egypt has the highest rates of some diseases in the world such as the Hepatitis C (Grun & Javier,2013). The rates of health complications are also getting higher. In a global assessment report by economist intelligence unit, Egypt was classified as "low" in term of readiness to provide a value based healthcare with total score 1 (Shah, 2016).

The Egyptian healthcare expenditure is way beyond the global numbers as it was declined from LE 61 billion in 2008/09 (NHA,2008/09) to 42 billion in 2014/15. Furthermore, it was reduced –in one year– from 5.4% of total expenditure in 2015 to 5% in 2016 (Ministry of Finance , 2016). The Egyptian government owns more than 90% of the hospitals in the country (Grun & Javier,2013). This means that most citizens depend on the government to provide them with their health needs. However, Research shows that citizens pay more for medication than education and this has drawn international recognition considering the World Bank loaned the Egyptian government \$275 million in 2015 in to provide better healthcare (Ministry of Health and Population, 2016). The living conditions of Egyptian doctors are not much better. Young doctors often work in difficult conditions while receiving as low as \$30 as basic monthly salaries (Ministry of Health and Population, 2016). Research shows that 40% of the Egyptian doctors live under the poverty lines (Grun & Javier,2013).

Significant efforts have been paid to reform the Egyptian health system, but the list of unmet needs is still growing (Saleh, 2006). Due to the political unrest and financial crisis associated with currency devaluation occurred in the last November 2015, the problem has become more complex. Options to reform the system have also become much harder to apply. These built tightening measures in Egypt are forcing radical changes of the health system to

cope with new financial measures. There is an urgent need to improve the efficiency and quality of the healthcare providers in the country by coming up with better healthcare policies.

## C. Background

### 1. Organizational Reform

Healthcare reforms are increasingly considered as leading policy agenda items in most countries globally (Grun & Javier, 2013). In developing countries where resources are limited, it gets tough to face the growing health needs to meet local and global healthcare expectations. Healthcare is considered the largest expenditure category in almost all countries, but with such a large population, Egypt's healthcare spending is considered low compared to other countries with the same Gross Domestic Product (GDP) per capita (Grun & Javier, 2013). Most healthcare facilities in Egypt report significant shortages in medical equipment and healthcare practitioners. Thus, the average life expectancy in Egypt is low while the rates of dangerous infectious diseases are growing. Nearly 60% of all physicians in Egypt either work for the private sector or are employed outside the control because of the poor pay they get while working in their home country (Ministry of Health and Population, 2016). This clearly supports the need for healthcare reforms that review the current healthcare policies. The Egyptian government has initiated a health sector reform program to reform how the country's healthcare sector is financed, organized, and delivered to provide all citizens with healthcare coverage (Ministry of Health and Population, 2016). This policy might have had its advantages, but there are still problems with the Egyptian healthcare sector and for this reason the need to come up with more effective policies arises.

(Ministry of Health and Population, 2016).

### 2. Egyptian health system

The healthcare system is fragmented and multifaceted with different providers and financing mechanisms. Ministry of finance MOF supplies a variety of healthcare services mainly provided by Ministry of Health and Population MOHP. Most services are free of charge

in 520 hospitals with more than 39600 beds (CAPMAS, 2016), and about 5000 primary healthcare units (EMRO, 2006). MOPH has a functional structure with both technical and administrative capacities within four levels; central, directorate, districts, and providers. University hospitals are the cardinal providers of all levels of healthcare services that lie under Ministry of Higher Education MOHE with a high level of autonomy. Thirty percent of the fund comes from service purchase by individuals. Other healthcare providers include Teaching Hospitals and Institutes Organization THIO, Curative Care Organization CCO and Health Insurance Organization HIO. THIO has 11 teaching hospitals and 20 research institutes offering different healthcare services. It receives funds from direct payments and MOF, MOPH, contracts with HIO and other firms. CCO is an independent, non-profit, and %100 self-funded organization. HIO provides insurance for about 55% of the population. The coverage of population with health insurance scheme has increased in the past decades to reach 62% after it was 4% and 36% in 1980 and 1995 respectively (Fikry, 2008). The other major provider in Egypt is the primary health care centres distributed over urban and rural regions. Although they provide free of charge services, they have low utilization rate even from the low-income population due to inefficiency and poor quality. (Shoukry & Sharaf, 2015)

The health system in Egypt is facing many challenges especially with increasing prevalence of chronic conditions with its high treatment cost. The system might undergo structural changes towards prevention and primary care model to decrease the financial burden in the medium and long terms (Fikry, 2008).

The private healthcare sector in Egypt is taking much wider space in the market due to the poor services provided by the public hospitals. The sector includes different types of services as primary, secondary, tertiary care, diagnostics, pharmacies and preventive services as well. Although the sector is expanding, it has weak financing mechanism depending mostly on out-of-pocket expenditures for inpatient and ambulatory services. The limited budgets

constrain them to provide high-quality services. Furthermore, one of the challenges facing this sector is the absence of forcible regulations or standards. For instance, prices and fees for private providers cannot not be controlled in line with the quality of services. There is no regulatory body that organizes the sector performance, so it is almost fragmented as well. (Berman, 1999).

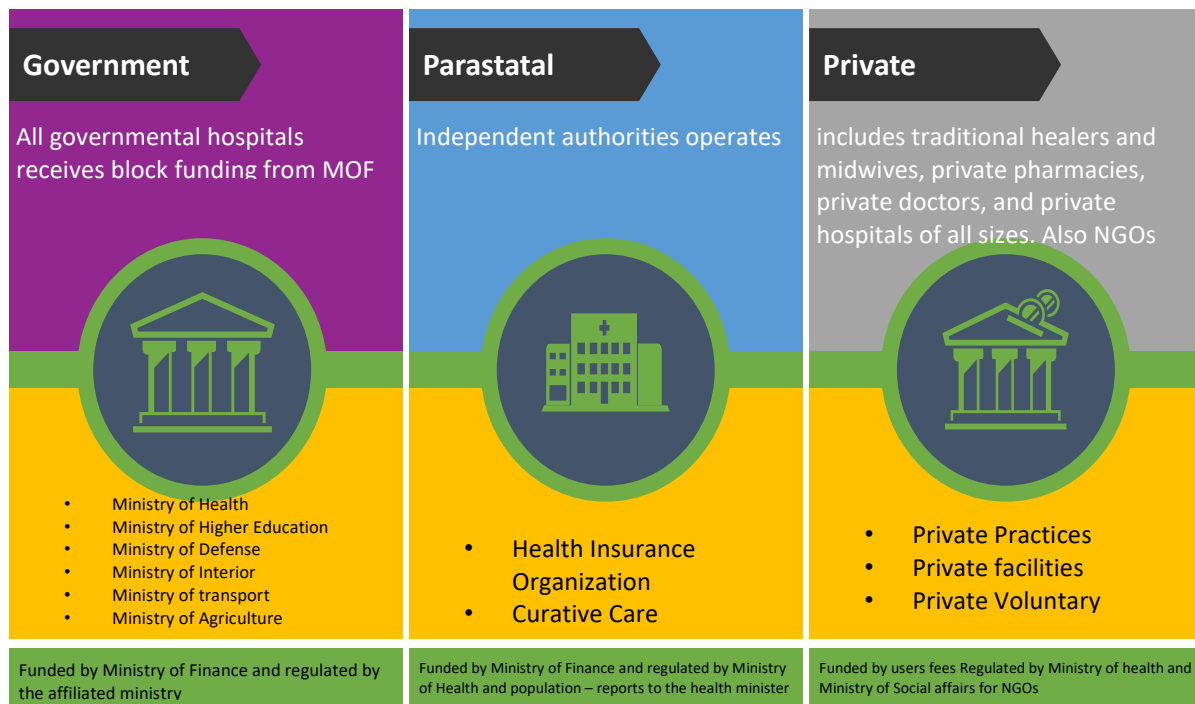


Figure 1: Egyptian health system Adopted from Demographic health survey DHS 2005 (Egypt Service Provision Assessment Survey 2002. , 2003)

#### a) Egypt vision 2030

The Egyptian government has developed the sustainable development strategy SDS to cope with the changing global ecosystems. The strategy depends on inclusive, sustainable and balanced regional development. The strategy includes three main dimensions; the economic dimension that includes four pillars, the environmental dimension that includes two pillars and the social dimension that includes the health pillar among other four pillars. The health pillar vision is

*“All Egyptians enjoy a healthy, safe, and secure life through an integrated, accessible, high quality, and universal healthcare system capable of improving health conditions through early intervention, and preventive coverage. Ensuring protection for the vulnerable and achieving satisfaction*

*of citizens and health sector employees. This will lead to prosperity, welfare, happiness, as well as social and economic development, which will qualify Egypt to become a leader in the field of healthcare services and research in the Arab world and Africa” Egypt 2030 website*

The strategy focuses on the most critical issues facing the Egyptian health system to implement the most efficient solutions to resolve these problems. The vision of the strategy for health emphasized on two critical issues. First, the importance of developing a national scheme of health insurance that guarantees coverage of the whole population. Second is the quality of healthcare system that ensures the contentment of both providers and citizens. A set of programs has been developed to achieve these ambitious targets. Four out of eight programs support the topic of this thesis. The first program “Adopting inclusive healthcare coverage” is about creating a national scheme for health insurance that protects the Egyptian society from the increasing healthcare costs. This study will discuss the accessibility to high quality services issue, and how public hospital corporatization will address this problem under the umbrella of the social security program for health. The second program is “Adopting the quality of healthcare service provision” which addresses the urgency of implementing the quality standards for the provision of safe and reliable healthcare services. The model suggested in this thesis underscores the importance of quality services and its relevance to health system incentives and organization. The third and fourth programs address the governance and decentralization of the health sector. Moreover, the strategy includes several indicators developed to measure the progress toward achieving the programs targets. As the study focuses on the organizational reform, we will discuss the governance and system performance through the study. The concept of the study relies significantly on these two programs of health pillars. The thesis also provides an analysis of the potentials of corporatization of public hospitals in Egypt.

### *b) New Egyptian Law for insurance*

A new law for health insurance has been developed to regulate the health financing in the country. In addition, it regulates the service provision and quality through establishment of two entities, one for service providers and the other for quality and accreditation. The new law has been approved by the Cabinet and passed to State Council for review and then to People's Assembly for final approval. The new insurance law states that the government will be responsible to totally pay for poor people who represent about 40% of the population. The implementation of the law will be initiated in Suez Canal region then it will be expanded gradually over the whole country (Ahram Online, 2017).

The new law will offer a fair context for healthcare provider to excel in service delivery and will empower consumers (patients) to choose among healthcare providers based on quality of services. So it will enhance accessibility and availability of high quality healthcare service. (A bill for a law "comprehensive social health insurance system", 2017)

### *c) Egypt health financing system*

Free healthcare services to all nations is a constitutional right. The government finances the health care system through the tax income. Ministry of Finance is the key source of funding for the public healthcare in Egypt. It finances 93% of MOHP and 72% of MOHE healthcare services. Collectively, MOF funds around one-third of total health spending in Egypt (Sharaf & Rashad, 2015). Health Insurance Organization HIO is an autonomous organization governed by MOHP with numerous healthcare facilities. The fund to HIO comes from recipients' payments, MOF, and patients' fees. Although coverage percentage reached 55% by 2008, the insurance scheme is not equitable. It is biased toward the rich in urban areas, and most of the insured population don't get benefit. This happened because Egypt has been implementing subsidized healthcare services for many years. These services are mainly directed to the poor.

The public health system could not meet the increasing demand. Most of the households started to go for the private sector relying on out-of-pocket expenses which led to different forms of accessibility inequalities. Out-of-pocket per capita expenditure was \$79 in 2012 while per capita governmental expenditure was \$53 according to health atlas 2014. (WHO, 2014). While 80% of households have at least one member covered by public health insurance scheme, only 25% really benefits from the scheme due to poor quality and availability of service.

Social insurance interventions in Egypt failed to improve the inequalities in term of access to healthcare services for genders and different social classes.

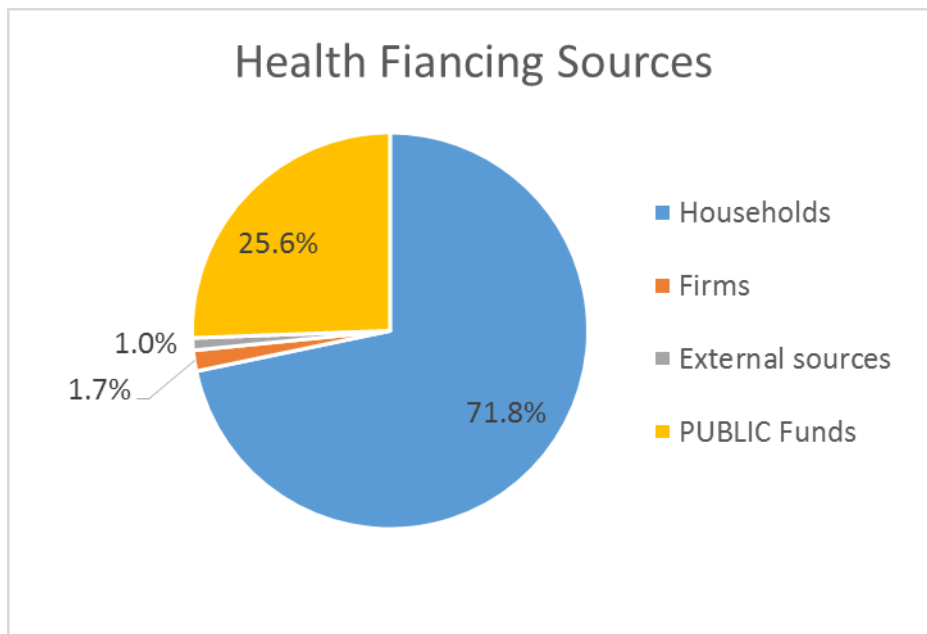


Figure 2: Financing sources as percentage of Total Health Expenditure - (Nakhimovsky, Glandon., Rafeh, & Hassan , 2011)

Figure 2 shows the financing sources of Egypt health system, indicating that more than 70% comes from the households as out-of-pocket expenditure (OOP). This percentage is too high in comparison with MENA region. This means that a significant portion of the population is susceptible to poverty. The dominance of out-of-pocket expenditure is the main issue facing the healthcare system in Egypt. OOP can cause 6% of households in Egypt to experience financial catastrophe. In addition, OOP has increased the poverty gap by 1.4% (Sharaf & Rashad, 2015).



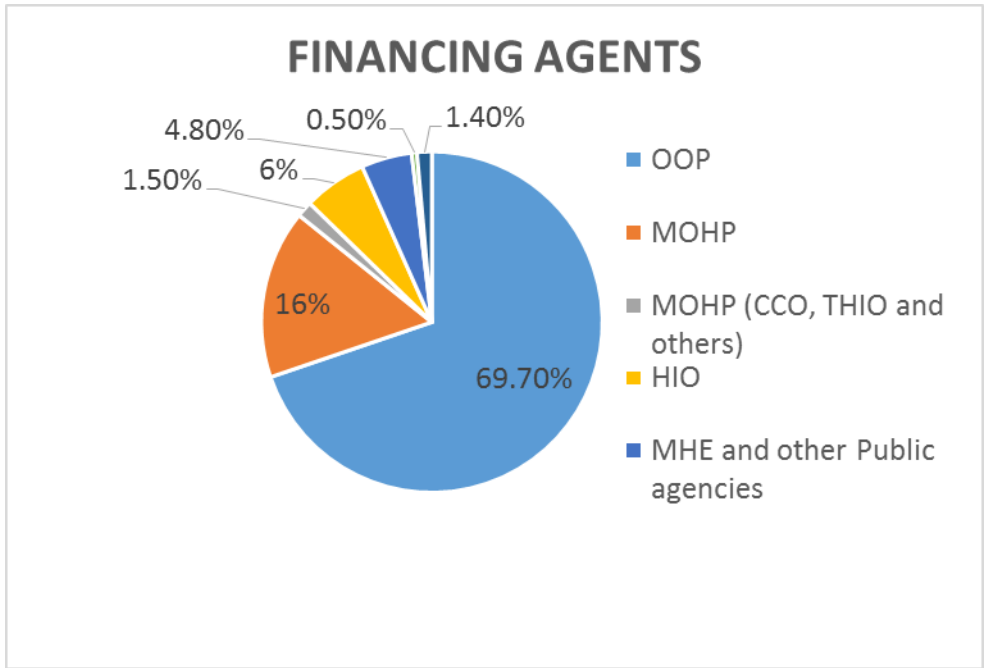


Figure 3: Healthcare Financing Agents in Egypt (Nakhimovsky, Glandon,, Rafeh, & Hassan , 2011)

Figure 3 shows healthcare financing agents in Egypt. The big pool of financing is out-of-pocket, then Ministry of Health, followed by Health Insurance Organization and other institutions.

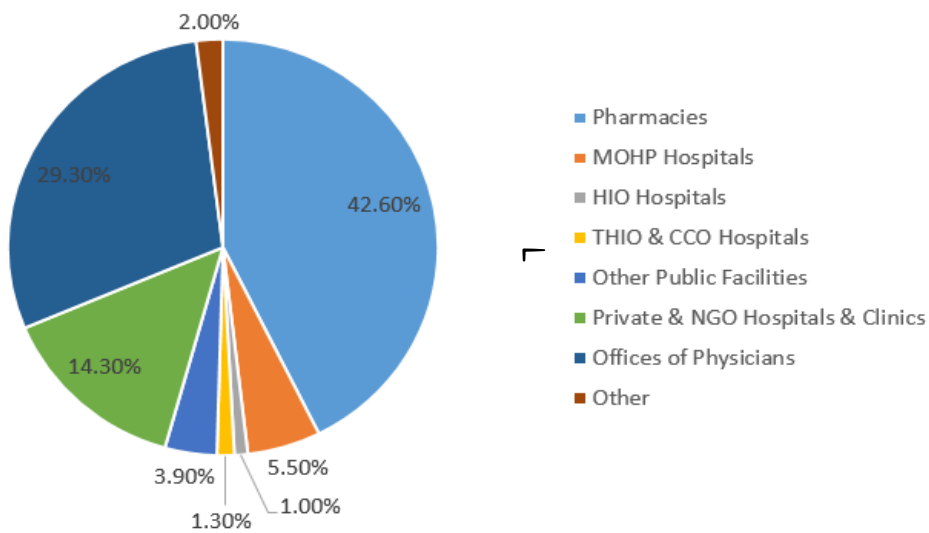


Figure 4 Household OOP Spending by Provider (Nakhimovsky, Glandon,, Rafeh, & Hassan , 2011)

Given that majority of health financing come from households, it is worthy to understand the spending pattern of households. Pharmacies are the main recipient of households spending by 42%. This is due to social habits of direct purchase of medications from pharmacies even without medical consultations.

*d) Health insurance and Program for Treatment at the Expense of the State (PTES):*

According to Health Insurance Organization data, the percentage of the insured population in Egypt reached 57% (Egypt National Health Accounts: 2008/2009, 2011), while according to households' health survey, it is only 51%. However, HIO is the main insurer in the country. In addition, Program for Treatment at the Expense of the State (PTES) is a key player offering a protecting mechanism for the poor. It is a special funding program established to pay for special treatment conditions inside or outside the country. It targets those who cannot pay from the population uncovered by HIO. The fund comes from MOF as a part of MOHP budget. The number of the program beneficiaries increased from 39,000 at 1994 to 1.9 M (only 2.5% of population) at 2009 with total expenditure around L.E 3 billion.

Insurance providers spend around 8% of Total Health Expenditure with 80% to Health insurance organization (HIO). HIO get funded by the households, the government, and public and private employers.

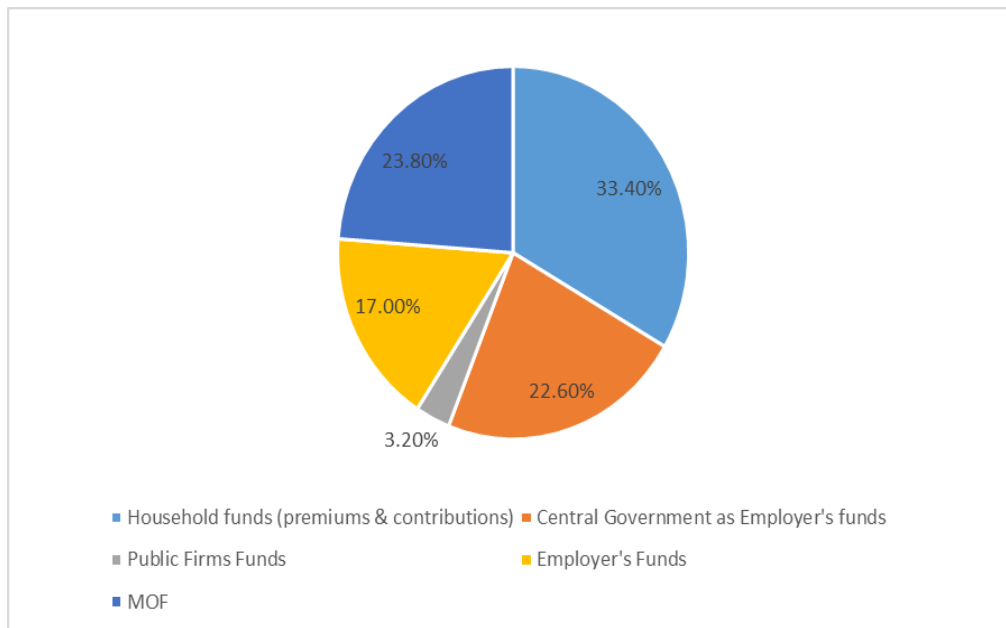


Figure 5 HIO Expenditure By Source (Nakhimovsky, Glandon,, Rafeh, & Hassan , 2011)

Figure 5 shows that 33% of Health Insurance Organization fund comes from the households without appropriate coverage to low-income people (Nakhimovsky, Glandon,, Rafeh, & Hassan , 2011). According to Rashad et al., the rich population gets more benefits from healthcare subsidies with a wide gap in the equalities issue (Shoukry & Sharaf, 2015). More data from National Health Accounts 2008/09 confirm that out-of-pocket OOP expenditure per capita wasn't affected significantly by the insurance status. The insured individual spent about L.E 536 against L.E 760 by the uninsured. This fact emphasizes the poor benefits of the current insurance scheme indicating low quality services and incompetence for benefits realization (Egypt National Health Accounts: 2008/2009, 2011).

## II. Conceptual framework

The conceptual framework illustrated the relationship between healthcare reform as a concept and corporatization as an executive solution on providers' level. It describes the logic framework of corporatization, predecessors, and consequences. In addition, it focuses on New Public Management and its applications in healthcare with evidence from different countries.

### A. New public management in Healthcare

New Public Management NPM theory reforms can be traced to the dominance of neoliberal ideas at the beginning of the 1980s after the oil crunch and the will of governments to recover budgets in the late 1990s. During the uprising of transition economies, International Monetary Fund and World Bank highlighted New Public Management NPM as a mean for good governance (Simonet, 2015)

New Public Management NPM theory reforms can be traced to the dominance of neoliberal ideas at the beginning of the 1980s after the oil crunch and in the late 1990s when governments aimed to recover budgets. During the uprising of transition economies, International Monetary Fund and World Bank highlighted New Public Management NPM as a means of good governance (Simonet, 2015).

New Public Management is an organizational theory with a group of managerial thoughts concerned with the application. It was also called “state managerialism” (Clarck and Newman 1997) and “new managerialism” (Hood 1991). New public management concept in healthcare includes numerous elements: dependency on market drivers, petition for organizational performance, interest in quality, decentralization and customer engagement. However, there is an inevitable role for the government in maintaining equity, quality, and accessibility of healthcare services. By means of market tactics, application of New Public Management to healthcare industry will : address public commitments, approach organization

behavior, and encourage high accountability and transparency from providers. Moreover, it will promote cost optimization, offer high-quality services, enhance patient economic responsibility, expand contracting and help alliances of actors.

With increasing demand for healthcare services over the last decades, the government has challenges with fulfilling the needs of people especially taxpayers. Much criticism was directed to the governments regarding efficiencies and proper utilization of resources when compared to the private sector. New Public-Sector Management NPSM originates from dissatisfaction with the quality of public services and the assertions around private sector efficiencies. The poor performance in the public sector is due to political domination, civil service law that protects managers, cost-based budgeting, monopoly and centralized management of resources (Shaw, 2004). This leads finally to “privatization” or “corporatization” as the appropriate solution. The system encourages adopting business-like practices of public entities, so they can break through effectively. It also considers the differences between the public and private sectors. Managing the health system in a business-like environment is a debatable issue especially due to the uneven knowledge shared between providers and patients, pro-poor calls to subsidize health services and health financing challenges. However, if all these issues well are managed, NPSM will become the treatment of choice. However, adoption of New Public Management to healthcare settings has different effects across many countries. For example, France and Germany were resistant to NPM but the UK was an ideal model for the application. Proper implementation of NPM model requires several regulatory changes to enhance healthcare practice. Developing an information system to easily track and monitor changes across the system is crucial for good implementation. Accreditation agencies are fundamental to look after the quality and accessibility of provided care, enhance standards of the safety of healthcare services (Simonet, The New Public Management theory and European Healthcare reforms).

It first happened in the UK during “Thatcher era”. They developed New Public Service Management to make National Health Services more productive and accountable. The shift started when Thatcher and her party took the responsibility of the government in the UK in the late 1970s. She executed several rounds of reform to reduce cost and redundancies in the public organizations that represented 44% of GDP then. Despite many reform trails in the public organizations, the long-term impact is still questionable. The same structure and processes of the organization were preserved, so there were little effects on behavior.

By learning from previous reform attempts, the established Efficiency unit launched a striving plan focusing on a new concept to disperse the service provision from the policymaking process. The target is to keep the government focused on centralized policies and transfer the responsibility of service delivery to other accountable parties (Shaw, 2004). Thatcher adopted these recommendations quickly and developed “Next Steps” program based on a group of principles. The principles emphasized on managing the service delivery through independent executive agencies with assigned chief executive officers. They were urged to develop 3-5 corporate plans with a one-year business plan of the agency. Although the program provided executives with high flexibility to manage resources, it deprived them of the lifetime job security, as they had to reapply for their positions every three years. In Healthcare, they have developed National Health Services executive entity (Shaw, 2004).

The “Next Steps” had many success factors. First, the program created autonomy, so that the executive agencies could make their own decisions away from political pressures and bureaucracies. Still, ministries were the governor of those organizations to ensure service delivery and monitor results against targets. Second, the executive agencies developed an incentives scheme to guarantee efficiency and effectiveness of employers according to a signed contract. Third, the program has underscored the importance of client choices and quality of

services. With time, the program has evolved and undergone a series of updates according to the emerging situations (Shaw, 2004).

Then, a number of Organization for Economic Cooperation and Development OECD countries have adopted different forms of New Public-Sector Management. The case is different in low and middle-income countries like Egypt (Databank.worldbank.org, 2017). The LMICs economies are characterized by budget deficits, international debts, public overspending and corruption in tax revenue collection. Moreover, the healthcare service provision is poor and lacks quality. In a study published by World Bank on the role of state revealed that 60% of managers rated efficiency of health services as low (Shaw, 2004).

From implementation perspective of New Public-Sector Management approach, there is no definite catalog for the right way. In the UK, Thatcher presented a government-wide universal model, which included the risk of unsynchronization, lack of specific data, and the deficiency of political will. In New Zealand case, the government inaugurated a strong program for reform called corporatization—the issue t discussed in this paper in detail. . Corporatization uses the separation “uncoupling” approach where the government is responsible for the regulation and managers of corporates are responsible for service delivery. The newly formed corporations are quasi-independent of the government, so they should have their own financial targets. This movement has succeeded to realize market-driven targets such as cost recovery and performance management with linking incentives to those targets. In US, the vice president Al Gore has launched a National Performance Review to build a cost-efficient government. The program targets to make US\$ 108 billion from merging public services, downscaling, ameliorating procurement practice, adopting technology and introducing fee-for-services alternatives. To achieve the best results, they started with the most customer-facing organizations. Five years later, an evaluation report for Donald Kettle, published by Brookings

Institute, reported that the plan was relatively successful in procurement reform and downsizing. (Shaw, 2004)

Based on the principles of New Public-Sector Management, some developing countries such as Kenya and Tunisia recently have experienced a certain level of public hospitals autonomization. While others as Argentina and Mexico have adopted managed competition and contracting strategies. The third group compiling China and Thailand has selected corporatization and privatization models.

### B. Changing Role of Government and Corporatization

The role of governments in healthcare service delivery has been changing due to the increasing burdens as budget deficits and snowballing of customer unhappiness. The Public hospitals experience the same problems for any publicly run organizations as poor throughput, impassiveness, incompetence, leftover, deception or dishonesty. Power and too much guidance by providers or workers are critical issues in public hospitals.

To manage these problems, the governments are looking for reforms to rearrange the hospital structure and relation to other system components. This type of reform is known as organizational reform. It has three categories, autonomization, corporatization and privatization that all have an element of marketization.

The Egyptian health care system adopts publicly funded hospitals, as illustrated above, through a vertical bureaucracy from MOPH till providers. The system focuses on inputs, human resource development, medical devices, drug purchasing and established buildings. This direction has helped the system to improve accessibility and management of infectious diseases. However, the system suffers from major problems as inefficiency, inappropriate utilization of facilities, and allocative inefficiency.. In addition, preventive and curative service distribution is usually unequal in rural and urban areas in favour of the latter. The government



has failed to provide the adequate fund to meet population needs. The most appropriate way is to align the intervention level with its capacity and depend on the private sector to fulfill the service gaps (Preker & Harding, 2003)

The cause of public ownership is to protect the social benefits upon market failure. When the private sector prevails, the market monopoly happens with only focusing on profit maximization with no attention to social aspects. So, preserving the public ownership can resolve this dilemma to protect social rights as well as providing high-quality services as private. Therefore, the challenge in adopting new reform is how to manage inefficiency problems while keeping the social protection and equity. .

Economics of organizations including the principal-agent theory, transaction cost economics, property rights, and public choice theory explains organization structure and performance. It explains that the public ownership has minimized the profit maximization but public servants are still making their own profits. The principal-agent theory has explained t how the government should develop monitoring and incentives framework to guarantee high performance of employees and the outside providers. With more clarity about the governance affairs between the government and the providers, it will reduce enticements and create a better understanding of responsibility.

Organizational reform becomes a cardinal element in any healthcare reform program. It changes the income privileges and the policy-making authority, and reduces the risk between all sectors players. A principal concept in this kind of reform is the separation between providers and payers. Corporatization transfers the decision-making authority to the providers. facing the same market pressures. Therefore, they are pushed to enhance performance, create incentives scheme and outline accountability framework to make the best use of the acquired autonomy.

Corporatization is resembles the organization reform and the efficiency of the private sector with full commitment to social goals through the public ownership. The manager is fully empowered to manage all service development activities. The corporatization entitles a legally independent organization with no budget, so they are totally accountable for making revenue on their own. As a result, corporatized hospitals will be able to meet their expenses and have the flexibility to make savings from the revenue.

Corporatization emphasizes on fair financial performance. Nevertheless, it ensures delivery of the social benefits through insurance schemes and demand-side funding as Program of Treatment at the Expense of State PTES. Corporatized hospitals are private organizations owned by the government and have a board of directors keeping the link to the supervisory body. They should have a plan including some financial objectives and indicators of expenses and investments options. This necessitates the hospital to make revenues to be able to pay a monthly bill of liabilities.

To maintain the social component of public hospitals, the government has developed a system for payments through direct transfers rather than providing free services to keep the market competition. (Harding & Preker, 2000)

*Table 1: The difference between budget based hospitals and autonomous ones against seven parameters that cover all the hospital functions*

<b>Functional area</b>	<b>Budgetary</b>	<b>Autonomous</b>
Legal structure	Government is the owner and manager.	Autonomy granted through presidential or ministerial decrees or by law approved by a parliament. Governments remain the owner of the hospital.
Governance	Managed according to general National standard operating procedures applied	Board of Directors is accountable to government

	to all government institutions.	
Management structure	Hospital director appointed by central level	CEO appointed by accountable board
Financial management	The government provides a line item budget. It is responsible for deficits accounts audited internally only.	Hospitals receive subsidies from the governments for uncompensated care. The hospital generates revenue from patient fees and sale of supplies and pharmaceuticals
Procurement	Procured centrally	Medical supplies and pharmaceuticals purchased by the hospitals. Other investments in building or equipping are proposed to the government for approval.
Human resources	Central government takes the control of all HR related processes from hiring till terminating.	CEO is responsible for staffing and all other related processes according to the national guidelines.
Information management	For statistical purposes, data is collected from departments. Not used for performance improvement	

**Adopted from Geyndt et, al.** (Geyndt, 2017)

The table reveals the effect of autonomy on efficiency of the organization. The corporatized hospital become more independent in making decisions related to managerial functions, finance or human resources. This level of efficiency will help the organization to move forward to better levels of performance as well as it will enhance quality of services. Nevertheless, the corporatization will affect accessibility negatively. The transformation of governmental-funded public hospitals into revenue-generating business units owned by the government will affect the accessibility. This kind of transformation should be monitored appropriately within realm of social security and equality of accessibility to all services.

### III. Literature Review

Mainly, this thesis focuses on linking effective health policies and efficient performance of the public hospitals. This will help building a level of autonomy that enables each hospital to make its own decisions, finance its operations and recruit its staff. In the following section, we will discuss the basic concepts of health sector reform and the different approaches to reorganize the health system. Corporatization will be addressed as an organizational reform approach. Through literature review, there will be an emphasis on the main drivers of the health system that need to be changed: advancement in medical technology and innovative modalities, increasing patients prospects due to widespread accessible health knowledge and political pressure on publicly-owned enterprises to restructuring.

#### A. Healthcare Reform Approaches

Most countries pursue a healthcare reform in a way or another. Some countries expand in the social insurance schemes and others extend the services to the poor in different regions. Furthermore, other countries have adopted decentralization to increase hospitals revenues. In general, all countries work to enhance the efficiencies through developing new methods of payments and service delivery. The different political situations, economic consequences and social perspectives make it complicated for decision makers to answer all the reform questions properly. How do they combine between cost reduction and expansion in social insurance schemes? What is better: to expand in building public facilities or go to different forms of private partnerships? How can they fulfil gaps in the health workforce? More out of pocket payments or increase the taxes? These questions and others go in minds of decision makers while thinking of the new reform plans (Roberts, Hsiao, Berman, & Reich, 2002).

Reform includes a significant purposive effort to improve the performance of the healthcare system. There are two axes determining the reform variation; the number of changed

aspects of the healthcare system and how far the change went from the last practice (Roberts, Hsiao, Berman, & Reich, 2002).

There are several dynamics that constitute the healthcare reform. From a process perspective, it is an essential and maintained process rather than a once-in-a-lifetime change. Moreover, it is purposive. The healthcare reform targets outlining the priorities, selecting policies and reorganizing institutions. There is no one single path for the right reform. However, the accurate remedy can be defined after analysis of the current policies and see how it addresses inefficiencies, accessibility challenges, cost optimization and receptiveness to population needs. Priorities of developed and developing countries are different. Developed countries face problems as aging and increasing cost due to advanced technologies. Unlike less developed countries which are more concerned with accessibility and improving service quality issues (Cassels, 1995).

Healthcare reform is a multidisciplinary process controlled by local factors and the level of system maturity. It depends on system data availability, competency level of administrators, economic development, social statuses, political system and institutional organization. In addition, disease patterns, natural resources, and state maturity level are among factors that determine the level of reform complexity and prospective solutions (Roberts, Hsiao, Berman, & Reich, 2002) It is not a straightforward process but in contrast, it goes through rounds of problem identification, diagnosis and solving successively. Besides, it needs relevant specific levels of experience and personal skills. (Roberts, Hsiao, Berman, & Reich, 2002). Real reform plans address the weak performance in a strategic approach bringing out real changes in the system. Healthcare systems are complex, diversified and resistant to modification so their response to reform is not consistent nor expected. Therefore, health care reforms usually face huge resistance and do not come into being frequently. They only come after sentinel events that enforce the governments, such as an economic crisis, a new government, or a public issue.

. Reform movements in the healthcare may differ according to the countries health goals and priorities. For example, some countries goals are to eliminate infectious diseases while others are to decrease chronic diseases burden. In addition, change in the political system between countries from democratic elected system to centralized one-party system also affects the course of the reform movement, defined priorities and feasibility of solutions. With evolving socio-political systems, healthcare reform has become more than an approach to solve outstanding health problems. It has turned into a chief goal for development and a tool to promote the welfare status. It has been proved that delivering the perfect bunch of healthcare services can decrease mortality and morbidity rates dramatically (Roberts, Hsiao, Berman, & Reich, 2002). Moreover, there are other kinds of reforms led by the international organizations as Millennium Development Goals, Poverty Reduction Strategy Papers, and Global Fund.

According to Roberts et al. 2002, there are four drivers of health care reform; increasing costs, rising expectations, limited capacity to pay, and scepticism about conventional approaches. Rising costs and expectations push the governments to reconsider dominating health policies. Countries with economic changes or with high living standards may experience limited payment capacity. Scepticism about conventional approaches may appear as a call for a novel organizational form or dissatisfaction with the weak governance structure. Moreover, it may induce interrogating the deep-rooted philosophies, which is a challenge and opportunity at the same time. It requires more analysis and opens the doors for innovation and creativity (Roberts, Hsiao, Berman, & Reich, 2002).

Most of countries, when they start to develop reform programs, tend to find a global solution to multiple problems across the system. They don't have the financial or the human capacity to develop a separate solution for each problem. Therefore, they prefer the multi-part reform models that hit multiple hot nodes simultaneously. Although this type of reform provides an affordable answer, it has some challenges with coordination of efforts, limited

resources, attraction of public attention and finally more political accountability. Such programs may require a lot of coordination effort to resolve the conflicts between the working groups. Reforms selecting specific areas of intervention can find the required resources better than those for each problem.

According to Cassels et al. (1995), institutional reform brings the reform of institutions to the core of the process. There is a set of guiding principles should be followed in any institutional reform. For instance, management and accountability, priorities selection, objectives and success measurement and clarification of institutional relationships. Management in the health sector needs to be so powerful that they could make decisions independently. So, institutional reforms should work on developing accountable health professionals who can work at well-structured organizations with different competencies. An effective monitoring system is a crucial component in the institutional reform to explain the genuine objectives and allocative efficiency. Institutional reform draws a clear map of relations between service providers, payers and regulators, providing a tool for performance monitoring (Cassels, 1995).

## B. The Role of Corporatization in Public Hospitals

Corporatization involves reorganization of the government-owned institutions to reflect the structure of a publicly owned corporation (Anthony, 2010). As compared to privatization, which includes taking away control of the health system from the governments, corporatization ensures gaining the maximum profits. Corporatization in the Egyptian health system will ensure that the government retains the ownership of the public hospitals but allows them to be run as efficiently as private institutions (Bazzoli, 2004). This is because the Egyptian government departments are inefficient with too much bureaucracy (Grun & Javier, 2013). The Egyptian healthcare system has been a subject of great interest, and had a rising focus in the

past few years (Grun & Javier,2013). Corporatization of the Egyptian health system will improve service quality and generally help the health system to recover (Bazzoli, 2004). A good example is the effect of corporatization on the healthcare system in Singapore. It emphasizes the need for extensive targeted government interventions to market mechanisms to improve health care systems (Ramesh, 2008).

Corporatization would promote competition among hospitals in Egypt (Bazzoli, 2004). Hospitals would be obliged to improve their clinical services, install new technologies and hire well-known physicians to retain patients well-treated. (Anthony, 2010). Corporatization can empower consumer choice, as the government would provide standardized and comparable information on cost, pricing, and clinical outcomes in an easily comprehensible way (Anthony, 2010). This, in turn, would prompt public hospitals to compete to retain the full-paying patients at a lower cost than their rivals (Ramesh, 2008) This unusual financing arrangement can help public hospitals in Egypt to gain surplus fund(Bach & Kessler, 2010). . Furthermore, the healthcare providers would be forced to reduce the cost of healthcare to comply with the government (Ramesh, 2008).

Generally, corporatization will enable the government to reduce costs of healthcare, improve quality and maintain access to the patients (Ramesh, 2008). Research shows that most countries, such as the US and Italy, that have implemented corporatization in their public health sectors successfully have revolved around the idea of monitoring public healthcare needs and delivering the best health services to the communities (Galetto et al., 2014). Studies also shows that in Singapore, corporatization of public hospitals and the subsequent competition mainly helped in improving service quality and clearing backlogs (Anthony, 2010). If the same reforms are applied to the Egyptian health sector, public hospitals would have operational autonomy and significant exposure to market competition (Galetto, Marginson & Spieser, 2014). The mixture of autonomy and control can help improve the state of the health sector in Egypt



(Bazzoli, 2004). Egypt's health sector would rely on market-like mechanisms. Thus, the government would deliver better services at a lower cost (Ramesh, 2008). The Egyptian government would have to increase physicians' benefits and review their salary structures to ensure that they do not lose out in the reform (Bach & Kessler, 2010). These reforms would also ensure an increase in the doctor-patient ratio due to the significant increase of healthcare practitioners (Anthony, 2010). Just like Singapore, corporatization in Egypt would ensure free choice for consumers, greater cost-sharing by consumers, market competition, and the establishment of compulsory medical savings schemes and appointment of professional managers with greater autonomy (Ramesh, 2008).

For these reforms to be implemented successfully, there is a need for changes to be made by the legislature, social and administrative levels of the country's healthcare sector when it comes to policies and practices (Braithwaite et al., 2011). The Egyptian government can reform the health sector by broadening autonomy to hospital managers by giving them the power to recruit their own staff, make decisions on the deployment of resources and setting remuneration (Galetto, Marginson & Spieser, 2014). Hospital managements would be accountable to a board of governors and would have to follow commercial accounting processes (Bazzoli, 2004). Managers would concentrate on attracting customers and help redirect the public healthcare to the appropriate pathway (Ramesh, 2008).

customers (Ramesh, 2008).

## 1. Health system performance:

WHO has created a framework for health system performance measurement. The framework includes three system goals; health, responsiveness and fairness. The three goals represent the basics of system performance evaluation, so they should be tracked periodically.. Health system affects the economic development directly, as improving health leads to economic growth. Contribution of the health system to economic development is a universal goal that should be measured.

Responsiveness to other population needs other than health is the second goal of the health system. It should pay attention to two areas, respect of the individuals and client orientation. Respect of the individuals includes many dimensions. What matters in this paper is the access to social support network and choice of the institution and the individual providing care. These two points will be discussed in data analysis (Murray & Frenk, 1999).

Fair financing and financial protection for community members are the third common goal for health systems. The health system should protect individuals from paying too much of their incomes to satisfy their health needs. The system should guarantee that the poor would pay less than the rich (Murray & Frenk, 1999).

## 2. Access to healthcare:

Institute of Medicine (IOM) has defined the accessibility to healthcare by “the timely use of personal health services to achieve the best health outcomes”. This requires access to care sites where indicated services can be received. In addition, availability of providers who can satisfy patient needs and build relations with them. Accessibility can be measured through different methods. Structural measures consider the availability of resources such as insurance system and permanent facilities. Other methods examine the relative easiness of patients to get into the system. Others measure the outcomes. (Agency for Healthcare Research and Quality, 2012). The possibility to have access to healthcare services depend on financial, organizational, social and cultural barriers. Accessibility can be indicated by both availability and utilization of services (Martin Gulliford, 2002). Accessibility to healthcare services means equal access to healthcare for those in equal need of health care. It is affected by many supply and demand factors. From the supply side, geographic distribution plays an important role in equal accessibility according to population size, costs and community health needs. On the demand side, individual ability to pay is the main concern. Introduction of service charges has an unfavorable effect so the accepted level of social equity should be considered. The demand side also includes the level of awareness, traditional norms, indirect costs as travelling costs, and their tendencies(Oliver, & Mossialos, 2004).

There is no evidence available to support the efficiency of the reforms or to generally address the adverse effects that come with its implementation. According to research conducted on Vietnam’s hospital autonomization, these reforms come with an increased degree of financial risks (Ramesh, 2008). However, these reforms in Egyptian hospitals would mean that poor citizens in the country would access health services since they would be enrolled in social healthcare insurance schemes (Haley & Beg, 2012). The reforms would also stand unopposed

by hospital staff and managers as they would increase their decision rights. They would generally lead to a more intensive style of care which would be beneficial to the citizens.

### 3. Quality of healthcare services:

WHO has defined healthcare services quality as “the extent to which the health care services provided to individuals and patient populations improve health outcomes. To achieve this, the health care must be safe, effective, timely, efficient, equitable and people-centered.” (WHO, 2017). Quality of health care services could be measured through input, process or outcome measures. Input or structural measures include indicators as number of specialists, beds/patients ratio or presence of health information system. Process measures are indicated by the preventive and curative services provided to individuals such as percentage of population received influenza vaccine or percentage of pregnant women received at least four antenatal care visits. Outcome measures are concerned with assessing the impact of healthcare services such as percentage of hospitalized patients with hospital acquired infections (Agency for Healthcare Research and Quality , 2015).

More research should also be conducted in the future in places where previous reforms as Specialized Medical Centers and Curative Care Organization. This kind of research could involve different determinants such as; community involvement, healthcare state of the context of the study, and deep assessment of the healthcare system of the case study (Grun & Javier, 2013). This, in turn, could be used by the Egyptian government as an experimental model (Schreyogg et al., 2015). Also, in order to avoid future implications and inefficiencies in the healthcare sector, such reforms and outdated policies in the health sector should be assessed and revised before being adopted (Grun & Javier, 2013). Generally, the Ministry of Health and Population (MOHP) in Egypt should critically assess its current policies, health services provided and the whole healthcare system. Corporatization remains a research field that has been scarcely explored (Schreyogg et al., 2015).

## IV. Methodology

### A. Interviewing

Generally, this research relies on qualitative methods that involve in-depth interviews with key stakeholders, health practitioners, and managers of healthcare providers in Egypt's health sector. Therefore, the study relies on the in-depth interviews with experienced individuals. . The type of research in question seeks to consider why and where policies and practices in the Egyptian hospitals are at odds with the local knowledge upheld by people. The research is conducted on both the unstructured informal and formal linkages and the process uphold by the country health organizations. Therefore, data was collected by interviewing individuals directly affected by the health crisis in Egypt. This, in turn, will provide a general and extensive overview of the current state of Egyptian health facilities, the challenges being faced, the emergence of the need to reform, and possible solutions to those problems (Welland & Pugsley, 2002).

For this study 10 interviews have been made for three groups including international experts, Egyptian government officials and Egyptian experts concerned with the healthcare reform in Egypt. In the first group, we have interviewed two international experts in corporatization. One of them led a corporatization project in one of the Arabian countries and the other is a global expert with great knowledge in corporatization. This group explained the minimum requirements for proper implementation of the corporatization model based on their vast experience in the field. The second group included three officials of different positions from Ministry of Health. They enriched the study with their realistic point of views about the feasibility of implementing a corporatization reform in the public hospitals. They also brought some insights about other reform initiatives and the lessons learnt from them. The last group included 5 researchers and health policy experts from Egypt. Many members of them have been involved in drafting the new insurance law and participated actively in consultation

rounds with World Bank, Ministry of Health and Population and other relative governmental institutions. The interviews of this group were very critical as they are extensively involved in health policies in Egypt with good experience in hospital function being physicians in origin. They brought up very insightful thoughts as the importance of equity issues while considering new reform model.

Getting information from those directly affected by the problem is quite beneficial since they are in a better position of to talk about these problems. In this case, interviewing citizens from all over the country who do not have access to quality healthcare and directly affected by the health crisis in Egypt would help in the collection of variable opinions about the health crisis in Egypt. This methodology, therefore, allows for valuable and first-hand information from the affected parties which would help with the reform recommendations (Marshall & Gretchen, 2008).

The application for Institutional Review Board IRB approval has been submitted and fulfilled all committee requirements. The approval was granted before conducting interviews to ensure compliance with IRB policy. This to make sure that interview process is executed according to the policy and guidelines.

Capturing the thoughts of those involved also helps give a clear picture of the current healthcare state in Egypt. This is important because most times problems cannot be addressed unless the meaning that humans attach to them is understood (Welland & Pugsley, 2002). Therefore, interviewing health practitioners who experience these problems over time and daily would greatly help in the collection of informative data. This kind of face- to- face interaction might be of great help in recommending deeper solutions. Interviewing also allows to discuss the problem through multiple perspectives and provide wider range of recommendations Marshall & Gretchen, 2008).

Little is known about how the Egyptians are generally affected by the poor conditions of the Egyptian healthcare system. It is, therefore, essential to view the problem from their perspectives when trying to find recommendations that are best suitable for the problems in Egypt's healthcare system (Welland & Pugsley, 2002). Considering this research generally focuses on corporatization as the appropriate solution for the recovery of Egypt's healthcare system, it would be important to get a look at how the parties involved define their situations. The primary purpose of this method of data collection is to capture the meaning of the experience of the participants in the Egyptian healthcare sector. This means that as a researcher, personal interactions with participants and developing trust foundations is also very important. Unstructured interviewing involves direct interaction between the researcher and the respondent or a particular group (Marshall & Gretchen, 2008). This is helpful because one does not necessarily have to a bid to a set of questions. This helps the researcher to move the conversation in any direction of interest that might arise (Welland & Pugsley, 2002). Considering the research cuts across various groups of people, both health practitioners and citizens, this would help cover and explore the topic broadly.



## B. Document Analysis

Other research methodologies included are literature reviews based on different countries that have used the corporatization reform in their healthcare sectors. This includes analyzing documents related to healthcare issues and corporatization. A descriptive analysis of the Egyptian healthcare sector and implementation frameworks of the reform are included as well. This methodology is less intimate as compared to the in-depth interviews methodology (Welland & Pugsley, 2002). It is important to discuss the feasibility of corporatization reforms of healthcare providers to the Egyptian health care. This can be done by analyzing how corporatization has improved the healthcare sectors in countries that have adopted it (Welland & Pugsley, 2002). This strategy greatly helps in eliciting the information being sorted, for example in answering the research question (Marshall & Gretchen, 2008). Is there enough evidence approving the effectiveness of corporatization as a type of reform in successfully addressing the problems in the Egyptian healthcare systems? This methodology is, therefore, likely to give convincing answers to people who might question the viability of corporatization.

List of the documents reviewed:

1. Reports by hospitals: reports about hospital performance that included financial and health metrics for one of the Specialized Medical Centers' hospitals were reviewed (confidential reference). The report showed how the Ministry of Finance have a big control over the hospital budget though the relative level of autonomy for this group of hospitals. The report was very useful for the study as it presented an evidence from the previous reforms' attempts, besides the successes and failures we can learn from. By this document analysis many insights were obtained regarding hospital budgeting processes and how these processes are not

linked to health outcomes. It was only a block funding based on the previous year expenses.

2. Egypt vision 2030 and sustainable development strategy also has been analyzed to clarify the government health goals in the next few years and how corporatization fits in the strategy initiatives.

### C. Direct Observation

The microanalysis of hospital services in Egypt could include direct observations supplemented by the analysis of services offered to the patients. Two visits have been conducted to public hospitals during July 2017. Direct observation suggests a more detached perspective than participant observation. Conducting the research through this method allowed watching how things are run at Egyptian hospitals. A great attention was drawn to complaints and feedback (Welland & Pugsley, 2002). This was used together with interviewing. (Marshall & Gretchen, 2008).

### D. Limitations:

Empirical analysis was not implemented. In addition, lack of recent sources analysing the Egyptian health system currently was a big challenge for the study.

## v. Data analysis

This section includes the qualitative data analysis. The data was collected through semi-structured interviews with subject matter experts, inside and outside Egyptian health system. The interviews were conducted with two experts from Egyptian health system and a subject matter expert of corporatization. One of The two experts in Egyptian health system is a member of National Health Reform Law committee and he is affiliated with one of National NGOs concerned with health rights. The other expert, from Ministry of Health, has his own leadership thoughts on the development of the Egyptian health care system. The interviews were structured to get their point of views about Egyptian health system performance explaining the challenges facing the system and the possible actions to fix these problems. In addition, the interview discussed the corporatization model as a potential answer to healthcare reform dilemma in Egypt now. The different effects of corporatization on healthcare quality of service provision, efficiency and healthcare financing were discussed as well. Healthcare financing was discussed extensively during the interviews especially due to the current financial crisis after Egyptian currency floatation and unprecedented inflation rates that affected medical supplies prices. Healthcare system financing is still the biggest challenge facing the health system in Egypt as out-of-pocket expenditure reached unprecedented levels, 72% of total health expenditure (Egypt National Health Accounts: 2008/2009). This fact was supported by one of our interviewees as he mentioned that the burden lies on households to get healthcare services

*“Egypt is overwhelmed with a lot of challenges, mainly increasing out-of-pocket health expenditure” (Insurance Expert -2017)*

This quote confirms the high level of out-of-pocket expenditure. This issue may hinder the implementation of hospital autonomy mechanisms, which requires the hospital to make revenue from paid services. In this case, who will pay for hospitals?

In addition, the health system becomes unable to fulfill the proper care requirements due to budget shortage which encourages to adopt a new model that secure a running cash flow to the hospitals. The following quote emphasizes the failure of current financing mechanism to realize the targeted financial performance degree

*“The allocated budget would not be sufficient to meet the needs of the hospitals” (Insurance expert –2017)*

The weak financial performance and poor associated outcomes directly affect the hospital's capabilities which, in turn, have negative effects on the quality of care. Another factor contributing to the weak performance of healthcare system in Egypt is the fragmentation and bad distribution of manpower and weak workforce planning. This was discussed clearly as one of the drivers for system change. A notable burden lies on hospitals in this regard as accentuated in the following quote

*“Public hospitals are extremely loaded with many problems including lack of proper management style and lack of accountability due to absence of the monitoring role of the government,” (Health systems expert – MOPH 2017)*

The disorganization within public hospitals results in poor service provision with poor quality, poor care and poor outcome. Regarding corporatization and the feasibility of model implementation, it should be preceded with a social security net that ensures equitable access to health care services. Importance of presence of national health insurance scheme has been stressed many times during interviews as it represents a critical success factor for the new structure. A new model of payments should be implemented to protect out-of-pocket payers. This what was clearly stated in the following quote.

*“The healthcare system in Egypt is not ready to adopt this kind of management style except a well-established universal health insurance covering at least 70% of population” (Insurance Expert – 2017)*

Adoption of new organizational reform that will give autonomy to hospitals to control their budgets should consider the presence of a significant portion of Egyptian population who cannot afford the cost of treatment. Alternative payment methods and approaches should be provided for this population group.

Such change in the public hospital's structure and financing model is challenging. The discussions highlighted the strength points that policymakers can rely on during the execution phase as mentioned below. The new reform can be implemented gradually through occur phases along the different governorates. This ensures the feasibility of the new model implementation when the coverage scheme in place.

*“Corporatization can take a gradual approach to start with specialized hospitals in big cities or with hospitals in the governorates that will apply for universal health insurance program” (Reform Expert – 2017)*

Although corporatization is a feasible efficient approach, it is a challenging model. It may face a lot of difficulties during the implementation as mentioned by one of the experts “facing resistance in ideation and implementation phases”. This resistance may arise from the government officials themselves or from other stakeholders. Moreover, lack of expertise in that perspective is a big challenge for the governments during the planning and implementation phases. It is a multidisciplinary approach that requires different expertise and backgrounds such as public administration, healthcare management, and health policymakers.

## A. Corporatization and health system performance

Meeting patient needs is the ultimate goal of the well-performing health system. Appropriate performance levels should be achieved in different scales; financial performance, clinical performance, health outcomes, and perceived quality. The relation between financial performance and perceived quality is too close. Therefore, customer satisfaction that reflects the level of perceived quality leads to better financial performance. According to a study on American Customer Satisfaction Index ACSI, it indicated that 1% change leads to 1.016% change in shareholder value. While another study, used Swedish Customer Satisfaction Barometer (SCSB), showed that 1% growth in satisfaction results in 2.37% rise in ROI (Gupta & Zeithaml, 2004). A third study with data from 51 hospitals found that dimension of quality illustrated 17-27% of the difference in financial metrics such as income, revenue, and ROA. While another one concluded that ROI of service quality is 45%. Healthcare organization performance is mainly measured by health outcomes such as mortality and morbidity rates. Then, the data is matched with data from peer organizations as a benchmark. Moreover, hospital performance could be measured through perceived quality or customers experience through conducting surveys for all relevant stakeholders including patients, workforce, and vendors. The data collected from such surveys is turned into useful information about hospital performance and trends in the hospital. Though, financial performance is still the most critical tool for measuring hospitals success. Financial data comes out from daily billing records, revenues, ROA compared to costs to get the full picture of organization performance.

Incorporating perceived quality ratings, financial metrics and clinical outcomes together represent the triple success factors for highly performing hospitals. The ultimate goal of performance improvement programs in hospitals is to achieve the best results in the three areas.

As declared below, the current confrontation against realizing these factors is the current financing model that still do the budgeting process centrally through Ministry of Finance MOF.

*“the hospital budget is estimated according to the total revenue in the previous year. All revenues are collected by MOF and then the budget is expensed from MOF in the beginning of financial next year” (Ex-deputy director of a public hospital – 2017)*

The budgeting process is one of the fundamentals of the organizational reform of public hospitals. Political restrictions around this issue are one of the remarkable points to be addressed during execution. From a financial performance perspective, health financing is categorized into three buckets; revenue collection, fund pooling, and purchasing. Revenue collection refers to direct transactions from households or corporates and indirect from governments or donors. It includes out-of-pocket payments, voluntary insurance rated by income, voluntary insurance rated by risk, compulsory insurance, general taxes, earmarked taxes, donations from non-governmental organizations and transfers from donor agencies. The determinant factor in revenue collection is the governance structure where corporatization has the maximum effect. Fund pooling is an accretion of payments in favour of members, so they share the financial risk. Fund pools are built according to population groups. They might be different for individual and non-individual health services with cross-funding between low and high risks. Purchasing is allocating certain funds for a specific organization or individual to supply a specific interference. The purchasing process is very complicated and should determine what is purchased, from whom and what inclusion criteria. The most critical practical issue in purchasing is the strategy to manage the capacity and the value of purchased items.

From another perspective, health system functions are classified as financing, provision of health services, stewardship and resource development. Each health system is concerned with designing, implementing, evaluation and reforming the entities that coordinate these functions.

Groups argued for corporatization suggested that it increases the allocative efficiency due to a high degree of flexibility in decision making and a strong incentive system pushing them to make good decisions. This finally improves the performance of providers. On the other hand, corporatization could be ineffective in case of unavailability of key criteria. Accessible data, organized workforce market, forceful regulation to transactions and presence of a strong lawful system for arbitrating in dispute are among the criteria required for implementing a competent corporatization model. In addition, protection of governmental role in service provision, research and making the decisions regarding service distribution are key criteria as well. The previous experience of Ministry of Health and Population with hospital automatization should be assessed properly in the light of the new reform and lessons learned should be considered. Below statement points up the noteworthiness of learning from previous models and analysing success and failure factors

*“Ministry of Health and Population has previous experience with hospital automation in Specialized Medical Centre SMC and Curative Care Organization CCO. we should study outcomes of these two organizations before taking any further steps on corporatization” (MOPH Official – 2017)*

Accordingly, application of private sector principles in public hospitals is not always successful. Poor management and fragile decision-making system characterize public hospitals besides political restrictions to change in staffing or other areas. The monopoly of some services at a certain neighbourhood or district might exist. Therefore, under these



circumstances, measurement of performance becomes inaccessible. In another word, corporatization as a tool for hospital reform cannot be accountable for performance improvement as it is usually accompanied by other change factors such as behavioural change or improvement of payment methods.

## B. Corporatization and Issues of Accessibility and Equality

After corporatizations, hospitals would become more accountable for their financials so old methods for payments (subsidizations) would no longer suit them. Accessibility and equity issues arise in this case. Urgent intervention by the government to cover the gaps is required. The government should develop other payment mechanisms such as insurance schemes and demand-side funding mechanisms (Preker & Harding, 2003). From accessibility perspective, the unaffordability of service charges represents a barrier to get the services. This point has been raised to intensify the gravity of considering this issue while making policies of the new model.

*“The Egyptian health system should bring national health insurance system into action before going for this kind of organizational reform. Such type of reform required readiness from the Egyptian government to find the possible solution to compensate poor people who can’t afford the charges for service in the corporatized hospitals” (Member of New Insurance Law Committee – 2017)*

Corporatization of public hospitals should seriously fix accessibility issues related to financial barriers. From another perspective, the government would be able to deliver new services through contracting with providers to purchase services. New talents would be developed within the government system to negotiate prices and get the best out of the available services.

This eventually would provide the government with a competent tool to optimize health expenditure and rationalize spending per capita. Theoretically, this would improve governmental health spending. For the government, instead of allocating budgets for operating a hospital that might provide unsatisfying services, they would pay only for high-quality services according to the signed agreement or contracts with providers. So, they would guarantee the high quality of services that would result in customer/patient satisfaction and cost savings. Not only this, the government also as the main regulator would play a sentinel role in regulating the purchase of healthcare services across the continuum. The government should put regulations that mandate coverage of whole populations through a different mechanism. Thus, the risk of increased cost would be transferred from the government responsibility to the newly corporatized hospitals that would make their best to optimize costs to maximize revenue. Another role for the government a regulator is to monitor the quality of services provided. (Preker & Harding, 2003). Under the current system, the central government is responsible for supplying hospitals with all materials through allocating budgets to different hospitals through certain chapters and entitlements. With increasing costs and financial constraints, the government could not provide a full load of required supplies. Shortage of medical supplies in public hospitals is one of accessibility barriers that hamper the care process. Below assertion highlights this issue

*“The healthcare system in Egypt is not able to fulfill the essential needs of hospitals from consumables and medicines” (Health system expert – MOPH 2017)*

Giving public hospitals certain level of autonomy would enable them to prioritize their needs and they would be able to prepare procurement plan according to their utilization rates and flow of patients. Contrariwise, additional exploration of accessibility considering corporatization revealed that supremacy of profitable providers would reduce access to

healthcare services for poor and uninsured people (Braithwaite, Travaglia, & Corbett, 2011). Again, the emphasis on importance of national insurance scheme has been featured to reassert the fact that majority of population are not able to afford the service fees.

*“Corporatization cannot happen in Egypt without a safety net for poor people in Egypt” (Insurance Expert – 2017)*

The statement endorses the assumption of Accessibility of health care as one of the big challenges for the healthcare system in Egypt. The corporatization implementation model should be accompanied with interventions to maintain the acceptable level of equity.

After

*“Corporatization cannot happen in Egypt without a safety net for poor people in Egypt” (Insurance Expert – 2017)*

### C. Corporatization and Quality of Healthcare services

Although quality could be undermined in facing incentive-based system. There is an opportunity for quality improvement within the corporatized hospitals. The main driver for managers and employees in autonomous context is profit maximization, so some unperceivable quality metrics could be stunted. However, the supervisory and regulatory role of the government enables it, as the owner of the hospital, to set a political agenda for quality of services that enforces all providers to comply with. Quality of healthcare services is a critical issue in service delivery. Many reform programs are initiated mainly to improve the quality dimension. The quality perspectives should be embedded into the new reform plans. The previous experience with establishing autonomous hospitals within the Egyptian health system was not successful in term of quality of healthcare services. Below declaration confirms the

urgency of quality assurance during planning to the new reform model to skip shortcomings of the previous models.

*“The quality of services in para-statal organizations in Egypt is not the best thing. we should look into quality enabling factors in the corporatization” (MOPH official – 2017)*

All quality dimensions should be at the core of corporatization model. Efficiency, effectiveness and perceived quality are the main targets of the new reform program and all enabling factors should be put in a robust framework.

Moreover, the government as the main purchaser of health service in the aforementioned ecosystem would enforce providers to follow the quality agenda as an incentive to sell their services. Another factor that helps to improve healthcare quality services is the market competition. Corporatized hospital enter competition with other hospitals in the market and this could be a driver for excellence in quality, hence better customer/patient experience, then more profit. (Murray & Frenk, 1999).

## VI. Discussion

Corporatization in the Egyptian health system has its advantages and disadvantages. Corporatization is a tool that might be used to overcome financial and performance challenges by the health system. It might be a source of criticism for the government due to embedded business-like management component. For ages, the Egyptian government has been the main providers of social services such as healthcare and education. This has built dependency of the community on the services provided by the government. Although governmental services are poor in quality and insufficient, they are the only affordable source of services to most Egyptians. Healthcare services provisions is almost free of charge for all Egyptians at Ministry of Health facilities.

But the healthcare system in Egypt became redundant and overwhelmed with massive unplanned resources, poor utilization of facilities and low budgets. Therefore, services are greatly affected. It became more harmful than useful by giving high rates of communicable diseases and hospital acquired infections. Healthcare system transformation in Egypt is mandatory for all system components including people, processes, organizations and technology. This kind of transformation should be on the system level and service provision level. On system and policy level, The Egyptian government has approved the new insurance law. Now, it is waiting the next parliament chapter to sign off and start implementation. . On service provision level, public hospitals might undergo the same kind of reform in term of legal structure, organizational structure and resource management. Driving more efficient and effective healthcare service is inevitable for better health, better care and better outcome. From the previous chapter, we have concluded that there are three main issues should be considered while building the case for corporatization. The first is effect of the new approach on performance, quality and accessibility. Second is the social justice and equity issues and the

third is to what extent corporatization fit into vision of health pillar in sustainable development strategy Egypt 2030.

Regarding effect of corporatization on organizational parameters; performance, quality and accessibility, the global results are different. Many factors may determine the success of corporatization and, in turn, improve the parameters. In the Egyptian case, the performance of public hospitals is still lagging behind if compared with private hospitals. Empowering public hospitals management through autonomous organizations and adoption of business-like techniques will support efficiency, hence productivity and performance at the end. In addition, adoption of autonomous organization specific incentives scheme will optimize performance reaching to targeted levels according to system priorities. Moreover, building accountable system with organizational structure in corporatized hospitals, will be reflected positively on quality of services. From another point of view, considering patients as customers will hold healthcare workers accountable to provide high quality services to satisfy patients and keep them loyal to the hospital. Recognizing proper healthcare as one of system goals has many determinants that ensure appropriate service delivery to all population. Quality is one of these determinants that should be impeded in the management system of hospitals. Establishing a clear accountable organizational chart in the corporatized hospitals with reporting mechanisms will result in high levels of compliance to quality standards. Controversially, corporatization might have minimal effect on quality of care due to other factors as weak implementation of quality system or poor adoption by the staff. Therefore, implementing a working corporatization model requires comprehensive look to other system components. Fortunately, the new insurance law in Egypt is addressing these issues. The law includes establishment of accreditation entity that looks after quality issues in facilities. This can represent a guarantee for corporatized hospitals to be fully compliant to national quality guidelines. Such institutionalization of overall context is critical for successful execution of the

new reform model. The failure of implementation of partial autonomy in Curative Care Organization (CCO), discussed before, was mainly due to lack of clear demarcation of management structure or any other form of accountable administration. Inability of curative care organization model to realize the goals of autonomization showed the importance of organizational capacity for proper execution of such models.

The big challenge that faces corporatization of public hospital is the commercialization component. A significant portion of Egyptian population have limited financial resources and cannot afford the payment for healthcare services. Social equity issue is one of the biggest challenges facing the proposed model. Imposing fees on the services provided would affect accessibility greatly and this would result in social equity problems. At this case rich people can access high quality healthcare services while poor people might not have the same privilege. It is not logic to create a model that provide high quality services but on the other hand it is not accessible for more than 30% of population. Egypt has a long journey with social equity. Many programs have been introduced to improve the social welfare. In healthcare, the Egyptian government has used to provide almost free of charge healthcare services for a very long time. With increasing pressures and demand for high quality services, the government has become not able to respond effectively. This dilemma is so explicit in a country like Egypt due to increasing population and increasing burden of both communicable and non-communicable diseases.

As mentioned above, the new insurance law is coming; this will represent the enabling environment for the proposed reform. With the new insurance law, the public hospitals will be able to charge fees for the services they provide turning into revenue making organization rather being a cost center as of now. This strategic transformation toward autonomy and self-funded organization will increase competition between hospitals. Each hospital will do the best to maximize the revenue, so they will work to recruit the largest number of patients. Recruiting

more patients will force the hospital to improve performance including high quality and safe services, hiring the best doctors and deploying best practices to achieve the best experience to the patients. This kind of competition eventually will lead to enhanced organizational performance with a high degree of accountability plus increased accessibility to standardized level of care.

As mentioned above regarding health system goals health, responsiveness and fairness, the Egyptian government through Egypt vision 2030 and programs of sustainable development strategy within the health pillar, it will be on track to achieve health system goals mentioned earlier. In the presence of universal health coverage, the corporatization will provide the Egyptian health system with the right tool to maintain system performance at the optimum levels in accordance with appropriate quality standards. For the decision maker in the Egyptian health system, they should consider a set of measures for proper understanding of the most relevant approaches that they can pursue for better outcomes of the new reform model.

#### Policy recommendation:

- Conducting a current state assessment for better understanding of system dynamics with full analysis of external and internal environments. This assessment will give a good picture about current system performance given all emerging issues and pressures the system is facing.
- Based on the analysis and the assessment conducted, essential policies and regulations should be in place and aligned with already existing policies.
- Good planning to implementation with clear stakeholder analysis and governance structure. This planning with assigned tasks will help to achieve the program objectives and engagement of all relevant stakeholders, ensure high rate of compliance from all related organization, then reform success.



- Considering a universal approach to tackle all system issues collectively in parallel rather than a gradual approach. This will enhance the reform effect and will realize the targeted results efficiently.
- Develop a mechanism for continuous monitoring, feedback and evaluation of progress against predefined key performance indicators KPIs for all phases from input till outcomes.

## VII. Conclusion

Health burdens and rates of chronic diseases have been increasing in Egypt for decades. Moreover, the Egyptian health care system suffers from weak capacity, poor quality of service, and high cost in comparison to the value provided. The Egyptian government cannot make the required changes due to lack of finance. Therefore, it has become a necessity to reform the health care system. This, finally, leads to corporatization as the appropriate reform solution to improve the Egyptian healthcare system.

Corporatization means to separate between regulation of hospitals or healthcare services, and financing them. The government keeps its role in the regulation of hospitals and the corporates become responsible for financing and service delivery. In another meaning, hospitals will have autonomy over their management and financial affairs. Hospitals will be accountable to make their own revenues to afford the supplies needed, which in turn would optimize the government spending on healthcare. Public hospitals will have to compete with the high quality of the private sector in Egypt. Hospitals would be obliged to improve their clinical services, install new technologies and hire well-known physicians to retain patients well-treated. This will promote customers' choice. They will have better quality with lower prices. As a result, the general quality and accessibility of the public healthcare services will be much improved.

Corporatization will promote healthcare system performance on different standards. It will improve the financial and clinical performance, system quality, and healthcare outcomes. Corporatization could be ineffective in the lack of accessible data, organized workforce market and strong lawful system to arbitrate disputes. The government role, in making decisions on service provision and distribution, must be protected to ensure accessibility.

Corporatization will change the payment methods of public hospitals, which in turn may lead to social problems. The public healthcare services may not become accessible or affordable to poor patients. Therefore, it is necessary for the government to develop other payment mechanisms, as insurance scheme to cover the gaps in the system. The corporatization implementation model should be accompanied with interventions to maintain the acceptable level of social equity and accessibility throughout the country.

In the presence of universal health coverage, the corporatization will provide the Egyptian health system with the right tool to maintain system performance at the optimum levels in accordance with appropriate quality standards. For the decision maker in the Egyptian health system, they should consider a set of measures for a proper understanding of the most relevant approaches that they can pursue better outcomes of the new reform model. It is also essential to acknowledge the fact that the implementation of corporatization of hospitals in Egypt can be greatly affected by policies in other government sectors. It is for this reason that it is important for the government to monitor policies and services that relate to the country's health sector to prevent future implications.

Corporatization remains a research field that has been scarcely explored. Thus, it is important for future research to further assess the relationship between the advantages and the disadvantages of the corporatization of public hospitals upon implementation. Rigorous impact evaluations of corporatization initiatives are much needed in this field.

More research should be conducted in the future to review and report the implementation process of corporatization on the Egyptian healthcare system. They can also get benefits from previous reform as Specialized Medical Centers and Curative Care Organization. This kind of research could involve different determinants such as; community involvement, healthcare state of the context of the study, and deep assessment of the healthcare system of the case study.

Generally, the Ministry of Health and Population (MOHP) in Egypt should critically assess its current policies, health services provided and the whole healthcare system.

Corporatization remains a research field that has been scarcely explored (Schreyogg et al., 2015). Thus, it is important for future research to further assess the relationship between the advantages and the disadvantages of the corporatization of public hospitals upon implementation. Rigorous impact evaluations of corporatization initiatives are much needed in this field.

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