

**ASSESSMENT OF THE PERFORMANCE OF GOVERNMENT HOSPITALS  
PROVIDING FREE HEALTH SERVICES USING THE BALANCED  
SCORECARD MODEL: A CASE OF KAMUZU CENTRAL HOSPITAL IN  
MALAWI**

**MASTER OF BUSINESS ADMINISTRATION THESIS**

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**UNIVERSITY OF MALAWI**

**THE POLYTECHNIC**

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**MASTER OF BUSINESS ADMINISTRATION THESIS**

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**October, 2020**

## DECLARATION

I adjudge, the content of this dissertation is completely done by unaided effort and the material in it, has never been published before and opinion that is reflected in this dissertation is purely my opinion and does not represent any institution of higher learning's opinion.

Candidate : Dr. Etete May Nkura

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**CERTIFICATION OF APPROVAL**

We, the undersigned, certify that we have read and hereby recommend for acceptance by the University of Malawi, a thesis entitled “*Assessment of the performance of government hospitals providing free health services using balance scorecard model: The case of Kamuzu Central Hospital in Malawi*”.

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## **DEDICATION**

The dissertation work is dedicated to my family and many friends. A very special gratitude goes to my beloved wife Emmie and my children who always stood by my side during the gruesome journey and who tirelessly encouraged me to keep going on.

## ACKNOWLEDGEMENTS

When this amazing journey was first started a couple of years ago, I was not aware of the huge difficulties that await me along the way. By and by, over the years, the successful completion of this study has largely depended on the efforts and assistance of many individuals, to whom I remain indebted and wish to acknowledge and express my gratitude.

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## **ABSTRACT**

Many developing economies have adopted management systems developed for advanced economies in order to enhance accountability, transparency, and service quality delivery. For instance, though the public-sectors of many countries with developing economies are reported to have implemented the balanced scorecard (BSC) concept, very limited literature has reported its implementation. In Malawi, the quality of health services rendered to the population, even though the Ministry of Health (MOH) policy tries to advocate for improved quality of services to be provided at health facilities. Some of the direct results of the public uproar being unavailability of drugs, few medical personnel relative to patient demand, politicization of hospitals' operations. Consequently, there is congestion at the hospital. With this referral hospital's questionable performance, stakeholders have been requesting the government to assess how the hospital is fairing on the provision of free health services. The aim of this research study was undertaken to assess the performance of one of the government hospitals that provide free health services, Kamuzu Central Hospital in Lilongwe, using Balance Scorecard Model. In this research study the mixed methodology has been used, and questionnaires contained close ended as well as the open-ended questions. The performance of the Kamuzu Central Hospital has been measured using the Balanced Scorecard model. The study has revealed that the financial performance of the hospital is poor. However, the performance of the hospital had been rated as average on the basis of the output performance measures. The study has also established that there was a weak relationship between the financial and customer factors to the performance measures, there was a strong relationship between internal processes and innovation and learning on one hand and performance measures on the other. It is recommended that Kamuzu Central Hospital should introduce fund raising system that can be used to fund internal processes and innovation and learning processes of the hospital. It is also recommended that Kamuzu Central Hospital must design specialized trainings for its staff.

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## ACRONYMS AND ABBREVIATIONS

BSC	Balance Score Card
CHAM	Christian Health Association of Malawi
DHOs	District Health Offices
EHP	Essential Health Package
FHS	Free Health Services
FBOs	Faith-Based Organizations
GoM	Government of Malawi
HS	Health Services
HSAs	Health Surveillance Assistants
KCH	Kamuzu Central Hospital
MDGs	Millennium Development Goals
MGDS	Malawi Growth and Development Strategy
MNH	Maternal and Neonatal Health
MOH	Ministry Of Health
MOUs	Memoranda Of Understandings
MPRS	Malawi Poverty Reduction Strategy
NGO	Non-Governmental Organization
PPP	Public-Private Partnership
PHAM	Private Hospital Association of Malawi
SLA	Service Level Agreement
SWAp	Sector Wide Approach
USAID	United States Agency for International Development
ToRs	Terms of References

VCT

Voluntary Counseling and Testing for  
HIV/AIDS

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## **CHAPTER ONE: INTRODUCTION AND BACKGROUND**

### **1.1 Background to the Study**

Health services in Malawi are provided by public, private for profit (PFP) and private not for profit (PNFP) sectors. The public sector includes all health facilities under the Ministry of Health (MOH), district, town and city councils, Ministry of Defence, Ministry of Internal Affairs and Public Security (Police and Prisons) and the Ministry of Natural Resources, Energy and Mining (Ministry of Health, 2008b). Public provision of health care is enshrined in the republican constitution which states that the State is obliged “to provide adequate health care, commensurate with the health needs of Malawian society and international standards of health care” (Ministry of Justice, 2006).

Health services in the public sector are free-of-charge at the point of use. The PFP sector consists of private hospitals, clinics, laboratories and pharmacies. Traditional healers are also prominent and would be classified as PFP. The PNFP sector comprises of religious institutions, non-governmental organizations (NGOs), statutory corporations and companies. The major religious provider is the Christian Health Association of Malawi (CHAM) which provides approximately 29% of all health services in Malawi (MSPA 2014). Most private and private-not-for-profit providers charge user fees for their services.

Government of Malawi is one of the governments in the world that provides free health services to its citizenry using its public hospitals. According to Anderson, Boumbulian and Pickens (2004) a public hospital is defined as a hospital which is government owned and is fully funded by government and operates solely off the money that is collected from taxpayers to fund healthcare initiatives. One such a hospital is Kamuzu Central Hospital which is found in the Capital City of Malawi, Lilongwe. This is a referral hospital, not only for the hospitals and clinics in and around Lilongwe, but also other District Hospitals including other cities of Blantyre, Mzuzu and Zomba. The public hospitals play a major role in delivering preventive, curative, diagnostic, and rehabilitative services. They also act as referral centers from primary healthcare facilities. The hospitals, therefore, profoundly influence performance of the entire health system. According to McKee and Healy (2002) report that in view of their centrality to health system performance, worldwide there is increasing pressure on hospitals to improve their performance. Discussions about how publicly funded organizations have intensified in order to achieve the objectives and improve performance has become quite common (Goh, 2012).



Besides that performance management in the public sector has become a growing phenomenon around the world (Goh, 2012).

In Malawi, the citizenry are very critical of hospitals evidenced by the number of negative media reports due to poor services, lack of drugs, sanitation challenges in wards, lack of political will among others and increasing litigation cases. Internationally, health policy-makers and managers are trying alternative interventions aimed at improving performance of public hospitals (Harding & Preker, 2000). However, there is lack of systematic analysis of how hospitals function and perform, and the challenges they face, that could be used to support policy decisions and strategies for improvement (McKee & Healy, 2002).

Generally, there is lack of consensus on the best methodologies for assessing hospital performance. Consequently, researchers use a variety of approaches. In developing countries, particularly in Africa, evaluation of hospital performance has focused on efficiency using economic models, most commonly Data Envelopment Analysis (DEA) (Marschall & Flessa, 2011). In these studies and traditionally, performance management system was deployed to attain financial outcomes, but later, non-financial measures became imperative for organizations. According to McKee and Healy (2002) purport that Kaplan and Norton shifted attention from financial measures to a comprehensive performance management system. The current study benchmarks a balanced scorecard (BSC), as strategic management system (SMS) tool to translate critical organizational elements for growth.

This model or concept was developed by Kaplan and Norton (1992). The BSC is a performance management system that can be used by any organization to align vision and mission with customer requirements and day to work, manage and evaluate business strategy, monitor operation efficiency improvements, build organization capacity, and communicate progress to all employees. The scorecard allows management to measure financial and customer results, operations, and organization capacity.

The advantages of using BSC in this study than other models is that it provides a powerful framework for building and communicating strategy, improves strategy communication and execution, better alignment of projects and initiatives, better management information. Other advantages of BSC is that it can be used to guide the design of performance reports and dashboards. This ensures that the management reporting focuses on the most important strategic issues and helps companies monitor the execution of their plan (Kaplan & Norton, 1992). Limitations of the traditional performance measures which emphasized the financial

perspectives of the business are what motivated Kaplan & Norton (1992) to come up with the BSC model.

According to Kaplan and Norton (2000) several companies have already adopted the Balanced Score Card. They state that managers' early experiences using the scorecard have demonstrated that it meets several managerial needs. First, the scorecard brings together, in a single management report, many of the seemingly disparate elements of a company's competitive agenda: becoming customer oriented, shortening response time, improving quality, emphasizing teamwork, reducing new product launch times, and managing for the long term.

Second, the scorecard guards against sub optimization. By forcing senior managers to consider all the important operational measures together, Beer and Eisenstat (2004) note that the balanced scorecard lets them see whether improvement in one area may have been achieved at the expense of another. Even the best objective can be achieved badly. Companies can reduce time to market, for example, in two very different ways: by improving the management of new product introductions or by releasing only products that are incrementally different from existing products. Spending on setups can be cut either by reducing setup times or by increasing batch sizes. Similarly, production output and first-pass yields can rise, but the increases may be due to a shift in the product mix to more standard, easy-to-produce but lower-margin products. Balanced Score Card (BSC) is a business framework used for tracking and managing an organization's strategy. The BSC framework is based on the balance between leading and lagging indicators, which can respectively be thought of as the drivers and outcomes of your company goals. When used in the Balanced Scorecard framework, these key indicators tell you whether or not you're accomplishing your goals and whether you're on the right track to accomplish future goals.

With a Balanced Scorecard, you have the capability to describe your strategy, track the actions you are taking to improve upon your results and measure your strategies.

## **1.2 Problem Statement**

It is recognized that effective healthcare delivery involves providing high quality patient-centered care that is safe and evidence-based. According to Kocakülâh and Austill (2007) achieving this is a major challenge for health systems throughout the world. It is no wonder that healthcare is one of the most complex industry. Sekabaraga, Diop andSoucat (2011) share the experience of Rwanda. According to Sekabaraga, et.al (2011) the Rwandan community health insurance experiences have received even more visibility than Uganda's did in the past. Results confirm that financial access to health services and protection against catastrophic health care

expenditure can be dramatically improved in low-income countries (Sekabaraga, Diop & Soucat, 2011). However, this requires a combination of elements—including comprehensive public sector and health financing reforms, as well as political leadership, which are often difficult to build in complex political economy contexts (Dyball, Cummings & Yu, 2011). According to Campbell (2013) Uganda and Jamaica have comprehensive documentations of the impact of Free Health Services (FHS) in public hospitals with focus on utilization (access), coverage and quality services driven by funding, motivated health personnel and availability of equipment and drugs.

Malawi Government has a national health care service which is government funded, and free to all Malawians at the point of delivery. According to WHO (2004), total expenditure on health per capita is US\$93, and expenditure on health as percentage of GDP is 11%. With little funding, investigations are limited by resources, and diagnosis is largely based on clinical presentation. Similarly, According to Ministry of Health (2014) there is a growing concern about the poor quality of health services rendered to the population, even though the Ministry of Health (MOH) policy endeavors to advocate for improved quality of services to be provided at health facilities in Malawi. The performance by public health facilities in Malawi have not been well documented as it is being measured by the availability of drugs, quality of service, financing of hospitals, speed of service delivery, qualified health personnel and adequate health personnel among others. It is against this background that this study was undertaken to assess the performance of government hospitals that provide free health services at Kamuzu Central Hospital using Balance Scorecard Model.

### **1.3 Aim of the Study**

The aim of this research study was to assess the performance of government hospitals that provide free health services at Kamuzu Central Hospital using Balance Scorecard (BSC) Model.

### **1.4 Specific Objectives**

The study had the following specific research objectives:

- (a) To analyze consumer consumer's rating of the quality of health care service delivery and their levels of satisfaction.
  
- (b) To determine whether there is a relationship between financial, internal process, innovation and learning perspectives and performance of the hospital.

## **1.5 Research Questions**

The study tried to answer the following questions;

- (a) What are the consumer consumer's rating of the quality of health care service delivery and their levels of satisfaction?
- (b) Is there any a relationship between financial, internal process, innovation and learning perspectives and performance of the hospital?

## **1.6 Significance of the Study**

An enormous number of private and public-sectors have been adopting the BSC as their model (Saltero, 2012). However, as confirmed by Hoque (2014), the existing literature provides limited insights regarding implementation of the BSC as a performance management tool within the context of developing economies' public sectors. This study attempts to examine the practice of using the BSC holistically as a performance management tool in public-sector organizations in country with an emerging economy.

This investigation would provide empirical evidence that the use of the BSC is positively associated with hospital innovation. The results is confirming the mediating role of the overall hospital competences as well as the specific perspectives of hospital competences including employee, technology and customer competence in the relationship between the use of the BSC and innovation. This study would offer evidence on the performance consequences of pursuing innovation as well.

To the academic world the research findings of the study would also contribute to the existing body of knowledge in the provision of free health services in public hospitals and enhance knowledge in the health industry. It is contributing to a pool of knowledge from which further research can be conducted.

To the Malawi Government and development partners the findings would be complementing the efforts in the development of health sector policies by Malawi Government and other health agencies like WHO. The findings of this study are expected to provide an insight into the state of health care services in Malawi.

To the students- Scholars would be able to use the outcome of the study to understand the performance of government hospitals practicing free health services.

## **1.7 Chapter Summary and Organization of the Study**

This chapter has highlighted the background to the study, the research problem statement, research, research objectives, research questions, and the limitations of the study. The rest of the document as follows:

Chapter 2 has discussed the literature regarding free health services in government hospitals.

Chapter 3 has discussed the research methodology that was used when coming up with the research findings.

Chapter 4 presents data analysis and discussion of the results obtained from the research.

Chapter 5 concludes the research study findings which are extracted out from the chapter 4 analysis and discussion. Thus, this chapter includes the conclusions and recommendations and suggestions for future research based on the findings of research project.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The purpose of this chapter is to explore and review the theoretical perspectives and practices of BSC implementation. This chapter discusses BSC implementation mainly by exploring its practices as a performance management system as described in the existing literature. This chapter is organised as follows. In the next section, the researcher briefly explores public-sector reform and in doing so establishes its relationship with performance management. This section is followed by a discussion of BSC practices, focusing on the development of the BSC concept, conceptual foundations, practices in public-sector organisations, and benefits of implementing the BSC, as well as critiques of the BSC. This chapter concludes by surveying the potential research gaps in the existing literature.

### **2.2 Public Sector Reform**

The need for public-sector reform has been an enormous topic of discussion in many countries. According to Osborne and Gaebler (1992) the basic problem is not merely to decide whether more government or less government is needed, but that in fact government must become better. The authors also highlighted that better governance is the process by which we collectively solve our problems and meet our society's needs. The need to improve public administration and public sector performance has been increasing over time. The challenge is not only to generate or deliver better service but, much more importantly, to bring vitality to national development. Evan and Rausch (1999) expound that the role of bureaucratic authority structures should be included as a factor in general models of economic growth. They also echoed the need for policy makers to construct better bureaucracies and for social scientists to conduct more research on the organisation of state bureaucracies. Public-sector reform, then, has clearly been a persistent item on the agenda for many countries around the world. According to Pollitt and Bouckaert (2004) public-sector reform can be defined as a series of deliberate changes to the structures and processes of public-sector organisations with the purpose of causing them to perform better. Public-sector organisations need to demonstrate that there have been improvements in performance and that goals and objectives are being achieved (McAdam et. al, 2005). Another, similar view was also expressed by Bruijn (2007) who proposed the importance of performance measurement in public sector by stating that "performance measurement is a very powerful measurement tool that reduces the complex performance of a professional

public sector organization to its essence, hence enable to detect poor performance allowing the organisation to be corrected if it performs poorly. If the public organization performs well, performance measurement might play an important role in making this transparent and in acquiring legitimacy”.

### **2.3 Balance Score Card Concept**

During early 1980s many organizational executives were convinced that traditional measures of financial performance do not assist in effective management. Arguing that executives should track financial as well as non-financial metrics, Kaplan and Norton (1992a) in their first article "The Balanced Scorecard Measures That Drive Performance", devised a framework called 'Balanced Scorecard'. They realized that although traditional financial performance measures worked well for the industrial era, but were proving to be insufficient in measuring the abilities and competencies essential for survival in changing economic environment. The Balanced Scorecard identifies the influence of non-financial factors upon strategic success and present advantages over historical performance measures.

It is a set of measures that offers top managers a fast but comprehensive view of the business. Traditional performance indicators tend to measure financial and accounting aspects, impacting long-term productivity and profits, whereas, Balanced Scorecard provides the measures of synthetic indicators which companies should focus on, such as customer reactions, profits, quality and flexible production selection (Martin, 1997). Fitz-Gibbon (1990) define a performance indicator as a type of performance measurement that evaluate the success of an organization or of a particular activity (such as projects, programs, products and other initiatives) in which it engages. Woods and Grubnic (2008) highlight the potential of Balanced Scorecard to bridge the gap between vague mission statements and day-to-day operations.

The Balanced Scorecard was introduced as a performance measurement approach to assess the activity of both tangible and intangible assets of an organization. According to Kaplan and Norton (1992) current performance measurements, based on internal financial data, as obsolete and unresponsive to the activity of an organization. The genesis of balanced scorecard also includes activity based costing (ABC) approaches introduced in the 1980's by Kaplan & Norton (1987). The Balanced Scorecard approach was introduced to move organizations away from financially biased measurement to a more balanced approach that links four perspectives of an organization's success: financial, customer, internal processes and learning and growth (Kaplan & Norton, 2001). The balanced scorecard framework has evolved from this multi-perspective performance measurement system to a complex strategy management and control system. The

BSC uses both financial and non-financial measures to evaluate whether the organization achieves the common strategic goals based on the core outcomes from four perspectives: learning and growth, internal business processes, customer, and financial (Kaplan & Norton, 2001).

### **2.3.1. Financial Perspectives**

The financial perspective of the BSC is similar to that of several other management strategies. Financial performance is measured easily, due to the availability of both historical and current economic data. Analyses of operating income, cash flow, return on capital, and return on assets, among others yield a snapshot of the organization's past and present bottom-line. Further, recognizing that the business cycle comprises three stages (growth, sustain, harvest), an organization must determine into which stage it falls (Lighter & Fair, 2000). By identifying an organization's stage in the business cycle, analyzing historical financial data, and understanding goals, management is able to determine if specific financial changes would better position the organization in the future.

### **2.3.2. Customer Perspective**

Customer perspective describes the detailed strategy that firms utilize to attract and sustain customers. It includes product or service mix, pricing strategy, customer relationship management and company image needed by firms to differentiate themselves from competitors (Kaplan and Norton, 2001b). Bryant, Jones and Widener (2004) use customer satisfaction and market share to proxy for performance indicators of customer perspective. The other common measures of customer perspective include customer acquisition, customer retention, and customer profitability (Niven 2002, Kaplan & Norton 1996).

Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any company (Niven, 2002). These are called leading indicators: if customers are not satisfied, they will eventually find other suppliers that will meet their needs (Kotler & Keller, 2012). Poor performance from this perspective is thus a leading indicator of future decline. Even though the current financial picture may seem (still) good. In developing metrics for satisfaction, customers should be analyzed (Kaplan and Norton 1996). In terms of kinds of customers, and of the kinds of processes for which we are providing a product or service to those customer groups.



### **2.3.3. Internal Processes Perspective**

According to Papenhausen and Einstein (2006) internal processes as critical internal processes that drive the customers (stakeholders) satisfaction, and eventually the financial outcome. Amaratunga, Baldry and Sarshar (2001) clarify that when they view internal processes as mechanisms through which performance expectations are achieved. Once an institution has solicited needs and wants of its customers, it needs to put in place processes that can turn the wishes of customers into realities (Lee, 2006). People would need to have the necessary technical knowledge and skills at all levels in order to provide the needs to the customers (Amaratunga, Baldry & Sarshar, 2001). The skills and knowledge would be complimented by up to date facilities and technology, and also appropriate procedures and regulations (Punniyamoorthy & Murali, 2008).

### **2.4.4. Learning and Growth Perspective**

The fourth and final perspective of the BSC relates to learning and growth. While the “customer and internal-business process perspectives identify the factors most critical for current and future success” (Kaplan, 1996), the learning and growth perspective aids the organization in determining what capabilities will be required to meet the value demands of future customers and shareholders. Kaplan identifies three principal sources of organizational learning and growth: people, systems, and organizational procedures. Often, “businesses will be forced to invest in reskilling employees, enhancing information technology and systems, and aligning organization procedure and routines” (Kaplan, 1996).

Since its inception by Kaplan and Norton, the BSC has been recognized more as a strategic management control system which links with firm strategies than a simple performance measurement system which collects financial and nonfinancial measures (Campbell, Datar, Kulp, and Narayanan, 2015; Malina and Selto, 2001). According to Kaplan and Norton (1996) emphasize that the BSC contains the cause-and-effect measures which are derived from the business strategy. Malina and Selta (2001) examine the effectiveness of the BSC in communicating and controlling firm strategies using empirical interview and archival data. The results indicate that the BSC is an effective device in controlling firm strategies and also provide evidence on the causal relations between effective management control, strategic alignment and beneficial effects of using the BSC.

Using analytical method, Baiman and Baldenius (2009) investigate the use of nonfinancial performance measures as a coordination device among divisions. Linking division managers’ interests with joint project profitability, they find that the use of nonfinancial performance

measures is positively associated with project implementation efficiency. Tayler (2010) conducts an experiment to examine the use of the BSC as a strategy-evaluation tool in mitigating the effects of motivated reasoning where “individuals tend to evaluate and interpret data in ways consistent with their preferences”.

The results confirm the findings from prior studies, highlighting the importance of managers’ involvements in selecting the BSC measures and framing the BSC as a causal-chain (Taylor, 2010). Organizational results in each of these areas determine if the organization is progressing toward its strategic objectives. For example, some firms have noticed that when survey results show a decline in employee satisfaction, several months later there is a decline in customer loyalty and repeat customer sales (Taylor, 2010). Or expenditures in employee leadership development training can be linked to lower employee turnover and reduced time to hire managers from outside the organization (Taylor, 2010).

## **2.4 Recent Developments in Organizational Performance Measuring Systems**

To assess the merits of a particular strategy, a need for performance measuring tools arises. The past two decades have witnessed a dramatic shift in this process of performance measurement. Some of the theoretical propositions that guided performance measurement are discussed as follows:

### **2.4.1. Shareholder Value to Stakeholder Theory**

There are several ways to consider the strategy of the firm and each has different implications in reporting organizational performance. The key performance measurement processes are shareholder theory and stakeholder theory (Owen, 2006; Brown & Fraser, 2006). In the 1980s, any firm was viewed as belonging to the shareholders. Shareholder theory used shareholder return to measure overall organization performance and was thus, dominated by organizational performance measurement systems (Porter, 1980). The firm was considered as having responsibilities to a wider set of groups including shareholders (Freeman, 1984; Reich, 1998; Post et al., 2002; Brown & Fraser, 2006; Steure, 2006). Other stakeholders may include employees, customers, suppliers, governments, industry bodies and local communities.

### **2.4.2 The Triple Bottom Theory**

The Triple Bottom Line Around the same time that firms began adopting Balanced Scorecard, public, media and community groups started paying more attention to the effect of organizations on the natural environment and society as a whole. Several countries started attributing firms to more than creating economic value. In 1997, the triple bottom line (Elkington, 1997) emerged

as a new tool for measuring organizational performance. Although, based on stakeholder theory, it carries a wider perspective of the stakeholders influence on the organization when compared to Balanced Scorecard. The triple bottom line is essentially based on the idea that a firm should measure its performance in relation to stakeholders as well as local communities and governments. The stakeholders may only be those with whom the firm maintains direct relationships such as by way of employees, suppliers and customers, but a much wider population to which a firm is related indirectly such as the local community and environment.

The triple bottom line implies that responsibilities of organizations are much wider than simply those related to the economic aspects of producing products and services (Brown & Fraser, 2006). It adds social and environmental measures of performance to the economic measures. Environmental performance refers to the amount of resources, such as energy, land and water, a firm uses in its operations. It also includes the by-products created by an organization, like waste, air emissions and chemical residues. Social performance refers to the impact of a firm and its suppliers on the communities in which it functions. Measures developed by one organization are readily transferable to others, whereas social and environment performance are unique to each organization (Brown & Fraser, 2006). Unlike the Balanced Scorecard, the triple bottom line has not been successful in penetrating organizational performance system, as organizations are reluctant in accepting the influence of these performance measures have actual economic production.

## **2.5 Balance Scorecard in the Health Sector**

Whilst BSC was taken up fairly rapidly by a number of industries, Kocakülâh and Austill (2007) observes that there was initially relatively slow uptake within healthcare. Kocakülâh and Austill (2007) conclude that health care organizations have traditionally relied heavily on the use of non-financial statistics. However, often what looks like a Balanced Scorecard is just a simple list of easily collected measures with no direct or clear connection with the organization's mission or strategy. In a comprehensive review, Zelman, Pink and Matthias (2003) argue that the BSC has been introduced across all areas related to healthcare, both for-profit and not-for-profit, including; hospitals, health care systems, university medical / health departments, long-term care, mental health centers, pharmaceutical care, and health insurance companies. Not only has the BSC been used for strategic management at the organizational level, but the framework has also been used in the health sector for evaluation of health programs, quality of care and improvement projects, accreditation, clinical pathways, as well as performance measurement across a consortium of hospitals (Zelman et al 2003).

However, there had been success stories about the use of BSC. Bloomquist and Yeager (2008) report that Emory Healthcare in Atlanta (USA) underwent a major structural change from independent operating units (three hospitals and two faculty practices) to an integrated healthcare system. They found that using the Balanced Scorecard to assist in building a unified system was one of the keys for success in the transition.

The Northumbria Healthcare NHS Foundation Trust in England had been recognized as one of the most successful Trusts prior to the introduction of the Balanced Scorecard in 2009 (Marr and Creelman, 2010). To ensure they continued to be a high performing healthcare provider, the CEO wrote, “However excellent, past performance is no guarantee of future success. High performing organizations remain so by looking ahead, understanding the challenges and determining the right strategy to maximize [their] unique business opportunities and best manage [their] risks” (Marr and Creelman, 2010). A component of this was the introduction of the Balanced Scorecard as their strategic management framework... “We were looking for a new and powerful tool for sharpening our strategic formulation capabilities” (Marr & Creelman, 2010).

In Taiwan, the Mackay Memorial Hospital, an accredited medical centre and teaching hospital with 2,149 beds, implemented the Balanced Scorecard in 2001 in order to sharpen its competitive advantage (Chang, Tung, Huang & Yang, 2008). Chang *et al.*, (2008) retort that management saw the need to use best practice business tools to help them take a more strategic approach that would differentiate their services and attract more business, and that would also improve communication and collaboration between all levels of staff and key stakeholders. In addition, their board requested an annual performance report that would provide a more comprehensive view of the organization’s performance in fulfilling its mission.

The BSC was also introduced at the Medical Clinic along with associated medical departments and wards at Högländ Hospital (Sweden) as a management tool to combine financial control with quality improvement, along with the development of clinical staff competence (Aidemark & Funck, 2009). It was initially introduced in 1997 as a two-year trial but continued because of the success of the trial. Again, the Balanced Scorecard was initially introduced at St Vincent’s Private Hospital (Sydney, Australia) in the nursing directorate as a framework for improving clinical governance in order to achieve better outcomes for patients and staff (Aguilera & Walker, 2008). Due to the success of this trial, Aguilera and Walker, (2008) report that the study was later expanded across the whole hospital.

## **2.6 The Main Factors Associated with Successful Implementation of BSC**

Besides the activities that need to be accomplished if a company wants to implement its strategies, one should not neglect variables in the organizational context that could hinder or represent obstacles to effective strategy implementation. Hrebiniak (2005) identifies four broad contextual factors that deserve special attention when discussing obstacles to strategy implementation: the change management context, the organizational culture context, the organizational power structure context and the leadership context. These four factors affect and are affected by each other. When all four are synchronized, the prognosis for effective strategy implementation should be very positive.

Managing change is difficult but absolutely critical for successful strategy execution (Hrebiniak 2008). Wharton-Gartner's study (Hrebiniak, 2005b) found that problems with change management constitute the single biggest threat to strategy implementation. Leaders must therefore identify areas of necessary change and overcome any potential resistance to change. They are instrumental in changing and managing key people, incentives and organizational structures.

Organizational culture refers to the shared values, attitudes and norms of behavior that create the propensity for individuals in an organization to act in certain ways. One of the most common culture-related problems in companies is a lack of trust (Hrebiniak 2005), which usually results in poor or inadequate information and knowledge sharing between individuals and/or business units responsible for strategy implementation. This problem was, for example, ranked as one of the largest obstacles to strategy execution by American managers (Hrebiniak 2005b). Another common cultural problem is the domination of the short-term orientation in a company.

Lee (2006) concluded that for anyone implementing the Balanced Scorecard, it is important to know what are the key factors associated with successful implementation and longer term sustainability. Bloomquist and Yeager (2008) agree with Aguilera and Walker (2008) that senior management support, central involvement of clinicians and some flexibility at lower levels, demonstration of empirical benefits, cascading to lower levels, ongoing communication with all staff, regular management review and monitoring, supporting information technology are the critical factors for monitoring and reporting performance in healthcare sector.

## **2.7 Effects of Successful Implementation of BSC**

The four perspectives of the BSC lay the foundation for building a framework of strategy which facilitates firms to create a clear picture of firm objectives and an understandable reference for

every level and employee within firms. More importantly, it enables firms to identify the drivers of financial performance. Specially, the use of the nonfinancial measures advocates the emphasis of long-term performance besides short-term performance (Banker, Potter & Srinivasan, 2000). The BSC motivates managers to allocate efforts and resources in non-financial perspectives which reward firms with positive outcomes such as better quality, customer satisfaction, and innovation (Said, Hassab, Elnaby & Wier, 2003). Therefore, the use of the BSC provides incentives for firms to focus on actions that lead to long-term benefits.

Prior studies provide significant evidence that the use of multiple performance measures in the BSC can have positive effects on firm performance (Banker et al. 2000; Bryant et al., 2004b; Kaplan & Norton, 2001, Said et al., 2003). Some research investigates the relation between the use of the BSC and performance from the perspective of the internal linkage among the measures in the BSC (Bryant et al., 2004; Kaplan and Norton, 2004). Kaplan and Norton (2001) point out that there exist the cause-and-effect linkages among the four BSC perspectives. In 2004, they further describe the BSC as a framework of value creation for both tangible and intangible assets.

Inamdar, Kaplan, Bower and Reynolds (2002) documented the responses of health care executives, in nine provider organizations, who had recently implemented the BSC. Inamdar, et. al, (2002) reported that executives revealed that all but one provider organization had established a mission, vision, and strategy before starting the BSC application. The motivation for adopting the BSC was seen as a “proactive response to external forces, including financial pressure, competition, consumerism, industry consolidation, regulatory reporting, information management, and new technology” (Inamdar, et. al, 2002).

The executives cited the cause-and-effect links between the four perspectives of the BSC as a major difference between the BSC and previous measurement systems. The provider organizations learn that trade-offs must be made among cost, quality, and access before balance is achieved. Previous systems narrowly analyzed functions inside the organization without relating those functions to the mission, vision, or strategy. In eight of the nine provider organizations, the BSC was initiated at the upper-management level (Inamdar, et. al, 2002). Noting that this implementation cannot be done quickly, executives were required to provide many hours convincing lower-level employees of the benefits of the BSC.

## **2.8 Challenges and Criticisms of BSC**

Although the BSC has been used successfully in many public sector organisations, Moullin et al. (2007) argue that there are some difficulties with the use of the BSC in public sector organizations. These difficulties arise especially within the structural design, language and methodology of the BSC. Cheng, Dainty, and Moore (2007) demonstrate how challenging the difficulties are which are associated with problems concerning implementation of change initiatives in an organization really are. These authors conclude that the obstacles and solutions to implementing a new performance management tool come from a lack of senior management commitment and support. They also find that employees are resistant to change and an absence of appropriate learning interventions are needed in order to smooth the introduction (Cheng et al., 2007). There may be a possibility that the reasons for implementing new performance systems and the cause of their problematic outcomes, is the same in our case analysis when it comes to the BSC. Along with the need to control costs, improve customer service, drug availability is the desire to improve the overall healthcare that was available to the citizenry.

The crisis and subsequent economic downturn has led to increasing wait times and a degradation of health care services within the public hospitals (Baker et al., 2008). There is also a heightened amount of concern due to the fact that the public's awareness has increased, and put a lot of pressure on the improvement of quality of the healthcare citizenry receive, especially the outcomes. As government organizations today face both internal and external pressure (McAdam, Hazlett, & Casey, 2005).

The idea of a causal relationship between the four perspectives is not without criticism. For instance, Nørreklit (2000) concluded in her research that a causal relationship along the lines suggested by Kaplan and Norton (1996a) is clearly not valid. She further emphasized that an evaluation system that does not integrate all relevant variables cannot be expected to show valid results. In a later article, Nørreklit (2003) used stylistic text analysis and argumentation theory to conclude that the popularity of the BSC is based on persuasive rhetoric rather than solid academic argumentation.

Another example of BSC criticism comes from Kasurinen (2002), who applied action research in the strategic business unit of a multinational Finnish-based metals group. Kasurinen claimed that the BSC concept does not pay enough explicit attention to the context of change implementation. He argued that the BSC's lack of this contextual analysis at the early stages of a project may lead to understatement of structural barriers and to only limited implementation.

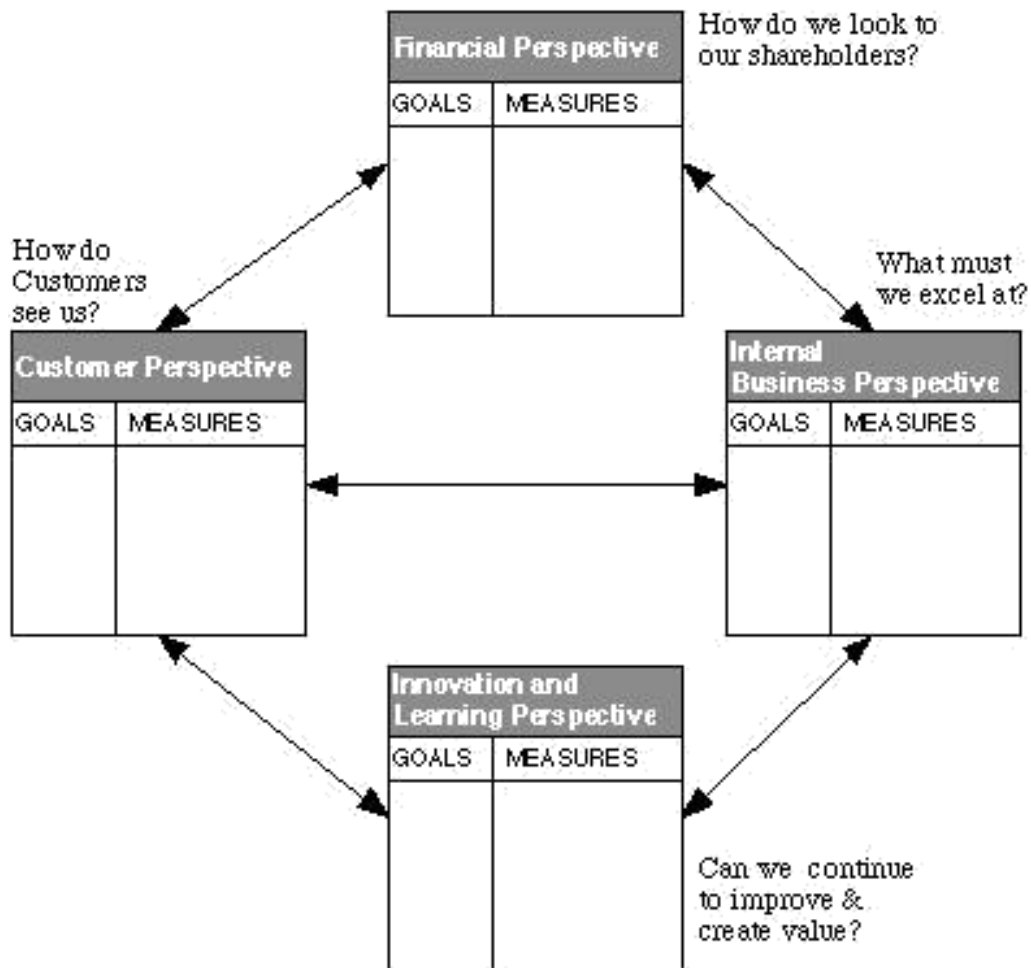
Kasurinen added that some of the advancing forces may 'push' the project in the wrong direction given that the BSC system involves many levels of organisational hierarchy and that the issues under consideration range from strategic transformation to operational improvements. He further suggested that before implementing the BSC within an organisation, it should be decided whether the primary purpose of using the BSC is as a measurement system or a management system (strategic focus).

## **2.9 Empirical Studies and Research Gap**

Kaplan and Norton (1992) explained that the BSC puts strategy and vision at the centre of an organisation. Hence, members of the organisation are encouraged to work accordingly, leading to the achievement of the organisation's goals. The authors further claimed that the introduction of the BSC concept provided a breakthrough in terms of how a company look at their achievements, given that the BSC concept provides more insight and effectiveness for organisational performance, linking performance directly to organisational strategy.

With regards to the operationalization of perspectives in the BSC, (Aidemark, 2001) explained the idea that three different perspectives—customer, internal business processes and learning and growth—are of vital importance to a fourth: the financial perspective. Aidemark (2001) further described the BSC as linking customers, internal processes, employees and system performance to long-term financial success. If the first three perspectives are developed in the right direction, then the fourth overarching financial perspective follows suit. The innovation and learning perspective is intended to strengthen competence among staff members. This supports the development of internal business processes, which in turn leads to better customer relations. Growth in customer loyalty translates to financial prosperity. The BSC is, in other words, more of a strategic management system than an informational structure, and it has its greatest impact when it is used to implement strategy and to drive organisational change.





**Figure 2-1: BSC linking of performance measures**

**Source: Kaplan and Norton (1992)**

The literature reveals that there have been many studies of the BSC; they cover both the theoretical and practical aspects (Madsen & Stenheim, 2015). Hoque (2014) claimed that the BSC has generated enormous interest in the academic and industrial communities (Salterio, 2012).

However, there remain some areas and topics that have received little attention from researchers. The present literature study has identified several gaps in the literature. First, most studies reported on the practice of BSC within the public sectors of countries with advanced economies. Second, the respondents surveyed in the literature were predominantly executives. A further description of each of these research gaps is provided in this study.

## **2.10 Chapter Summary**

The purpose of this chapter was to explore and review the theoretical perspectives and practices of BSC implementation. The need to provide the public with accountable and effective results has increased pressure for the governmental sector to refine their performance

system. Management intervention has become a potential option to accelerate public-sector reform process. This chapter has enlightened on the introduction, what are health services, balance scorecard as management control system, perspectives of scorecard, factor for successful implementation of balance scorecard, and weaknesses of balance scorecard.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0 Introduction**

The objective of this chapter is to describe and discuss the methods that were used for data collection and analyses. Among the major sections of the chapter are: philosophy, approach, strategy, research methods, sampling design, population size, sample size, data collection methods, questionnaire design and administration, data analysis. In addition, an evaluation of the methods used to increase reliability and validity of data collection instrument.

### **3.1. Research Philosophy**

The research adopted the pragmatism paradigm. Collis and Hussey (2014) postulate that pragmatism research philosophy accepts concepts to be relevant only if they support action. Pragmatics “recognize that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities” (Saunders et al., 2012). Positivism and interpretivism are two extreme mutually exclusive paradigms about the nature and sources of knowledge (Saunders et al., 2012). At the same time, there is an occasional need for seasoned researchers to “modify their philosophical assumptions over time and move to a new position on the continuum” (Collis & Hussey, 2014).

According to pragmatism research philosophy, research question is the most important determinant of the research philosophy. Collis and Hussey (2014) postulate that pragmatics can combine both, positivist and interpretivism positions within the scope of a single research according to the nature of the research question. Saunders et al. (2012) concert that pragmatism is a world view or paradigm that should underpin most mixed methods research and it is a problem-oriented philosophy that takes the view that the best research methods are those that help to most effectively answer the research question. Collis and Hussey (2014) also agree that pragmatism often involves a mix of quantitative and qualitative methods used to evaluate different aspects of a research problem.

### **3.2 Study Approaches**

This study used mixed method approach. The term “mixed methods” refers to an emergent methodology of research that advances the systematic integration, or “mixing,” of quantitative and qualitative data within a single investigation or sustained program of inquiry (Creswell & Plano, 2011). The basic premise of this methodology is that such integration permits a more complete and synergistic utilization of data than do separate quantitative and qualitative data collection and analysis.

Creswell and Plano (2011) say that the main use of mixed methods is to validate findings using quantitative and qualitative data sources, use qualitative data to explore quantitative findings and develop survey instruments and lastly the approach involves community-based stakeholders. The advantages of mixed methods are that they are especially useful in understanding contradictions between quantitative results and qualitative findings (Wilson, 2010). Mixed methods give a voice to study participants and ensure that study findings are grounded in participants' experiences (Creswell & Plano, 2011). Creswell and Plano (2011) also state that mixed methods have great flexibility and are adaptable to many study designs, such as observational studies and randomized trials, to elucidate more information than can be obtained in only quantitative research.

### **3.3 Research Strategy**

The study employed the survey strategy. Fink (2003) defines a survey as a system for collecting information from or about people to describe, compare, or explain their knowledge, attitudes, and behavior. According to Fink (2003), the survey includes setting objectives for data collection, designing the study, preparing a reliable and valid survey instrument, administering the survey, managing and analyzing survey data, and reporting the results.

The strategy also allows the researcher to collect qualitative data on many types of research questions (Fink, 2003). Saunders, et al., (2007) contend that the strategy tends to be used for exploratory and descriptive research which the researcher of this study used. The advantages of surveys over other research strategies are that they allow the collection of a large amount of data from a sizeable population in a highly economical way (Sekaran & Bougie, 2013). Sekaran and Bougie (2013) further stated that often obtained by using a questionnaire administered to a sample, these data are standardized, allowing easy comparison. In addition, the survey strategy is perceived as authoritative by people in general and is both comparatively easy to explain and to understand (Saunders, et al., 2007).

### **3.4 Study Population**

The study population comprised of employees working for the hospital and clients (out-patients). KCH has a total of 249 employees comprising of 10 finance personnel, 15 administrators, 54 doctors, 105 nurses, and 65 clinical officers. On average, the hospital serves about 260 out-patients on a Daily basis. Employees were chosen because they are the suppliers of free medical services and they are key informants whereas the patients are the beneficiaries of the same service table 1 below presents target population).

**Table 3-1: Population**

<b>Population characteristics</b>	<b>Size</b>	<b>%</b>
Finance personnel	10	2
Administrators	15	3
Doctors	54	10
Clinical officers	65	13
Nurses	105	21
Patients	260	51
<b>Total</b>	<b>509</b>	<b>100</b>

### 3.5 Sampling and Sample Size

Fink (2003) asserts that once a population has been identified a decision needs to be made about whether taking a census or selecting a sample will be the more suitable option. Kamuzu Central Hospital had 239 employees. This study used census as all employees were target. The basis for choosing census is that it provides a true measure of the population (no sampling error) (Sekaran & Bougie, 2013). Again, benchmark data may be obtained for future studies, and detailed information about small sub-groups within the population is more likely to be available (Sekaran & Bougie, 2013).

The sample for out-patients was selected using systematic sampling. The systematic sampling design involves drawing every  $n$ th element in the population starting with a randomly chosen element between 1 and  $n$  (Saunders et al, 2007). Systematic sampling selects a random starting point from the population, and then a sample is taken from regular fixed intervals of the population depending on its size. The target population in this study was 260 out-patients. Therefore based on systematic sampling in this study, every fourth out-patient starting from a random number from 1 to 4 was selected out of a total population of 260. This resulted into 65 outpatients being selected to participate in the survey. Using this sampling method, a fixed starting point was identified; a constant interval was selected to facilitate participant selection.

The reasons for using a sample of 65 patients, rather than collecting data from the entire population, are self-evident. In research investigations involving several hundreds and even thousands of elements, it would be practically impossible to collect data from, or test, or examine every element. Even if it were possible, it would be prohibitive in terms of time, cost, and other human resources (Sekaran & Bougie, 2013). Study of a sample rather than the entire

population was also likely to produce more reliable results. This is mostly because fatigue is reduced and fewer errors would therefore result in collecting data, especially when a large number of elements is involved (Sekaran & Bougie, 2013). In a few cases, it was also impossible to use the entire population to gain knowledge about, or test something. Sekaran and Bougie (2013) retort that systematic samples are relatively easy to construct, execute, compare, and understand. This is particularly important for studies or surveys that operate with tight budget constraints (Sekaran & Bougie, 2013).

A total of 251 respondents (both employees (195) and patients (56)) were interviewed through questionnaires out of 314 (249 employees and 65 patients) respondents targeted. This represented 83% questionnaire return rate. It was not possible to achieve a 100% questionnaire return rate as some interviewees declined to be interviewed. According to Mugenda and Mugenda (1999), a return rate of 30%- 50% is adequate for analysis and reporting; a rate of 60% is good and a return rate of 70% and over is excellent. Based on this assertion, the questionnaire return rate was excellent. Based on this assertion, the questionnaire return rate was excellent.

### **3.6 Data Collection**

#### **3.6.1 Data Sources**

Data were collected using both primary and secondary sources. Primary data was gathered for the research from the actual site of occurrence of events. This ensured that the exact and first hand data for the study was obtained. The types of information such as the performance of the FHS of both doctors and patients are best obtained by talking to them. Secondary data were used in this research. Secondary data is data gathered through existing sources (Robson, 2002). That is, they are data that already exist and do not have to be collected by the researcher. Secondary data reviewed included hospital financial statements, notices, correspondence, diaries, transcripts of speeches and administrative, public records books, journal and magazine articles and newspapers.

#### **3.6.2 Instruments**

Primary data was collected using a questionnaire. This instrument is chosen because it is quick, cheaper than face-to-face interview and provides moderately high measurement validity (Saunders et al., 2009). The questionnaire adopted a 5-point Likert Scale to measure the rating (Saunders et al., 2009). Two sets of questionnaires were used in the research. One questionnaire was for employees (doctors, clinicians, administrators, finance personnel, medical assistants and nurses. What necessitated the split of the questionnaire was the fact that employees would

have information relating to financial, learning and growth, and internal perspectives of Kamuzu Central Hospital. For this reason, out-patients' questionnaire had one perspectives of the balanced scorecard model unlike four perspectives that the employees reviewed.

The questionnaires were physically dropped at each prospective employee's workstation. Telephone calls and physical visits by the researcher were used in order to increase the questionnaire return rate. Questionnaires were physically administered to out-patients at Kamuzu Central Hospital.

### **3.6.3 Validity of Research Instrument**

Validity tests were carried out to check the ability of the research instrument to measure the variables that were intended to measure. Both face validity and content validity were employed. Face validity involves an analysis of whether the instrument appears to be on a valid scale and contained the important items to be measured (Sekeran & Bougie, 2013). Sekeran and Bougie (2013) define content validity on the other hand, evaluates the degree to which a test appears to measure a concept analysis of the items in order to ensure an adequate coverage of the scope of study by the measuring instrument. To achieve this, the questionnaire for health professionals were given to 10 health cadres who have been treating patients at KCH and the questionnaire for patients was given to 15 outpatients who have been receiving treatment at KCH in order to review the content and appropriateness of the questions in relation to the stated objectives of the study.

### **3.6.4 Reliability of the Instruments**

Mugenda and Mugenda (2003) define reliability as a measure of the degree to which a research instrument yields consistent results after repeated trial. The questionnaires were divided into two respectively equivalent halves and then a correlation coefficient for the two halves computed using the Spearman Brown Prophecy formula. The coefficient was showing the degree to which the two halves of the test provide the same results and hence describe the internal consistency of the test. Correlation analysis is used to describe the strength and direction of the linear relationship between two variables (Pallant, 2007; 2013). In other words to strengthen the validity of the study correlation analysis is used to examine the correlation between answers to questions which should correlate.

Despite the fact that correlation analysis is designed for interval and ratio data, correlation analysis is still very much useable for ordinal data if the data collected is treated as interval data. The Pearson correlation coefficient has values between -1 and +1 whereas +1 indicates a perfect relationship between the variables, 0 indicates no relationship between the variables,

and -1 indicates a perfect negative relationship i.e. if one variable increases the other one decreases. Coefficients under 0.29 are seen as weak correlation, coefficients between 0.3 and 0.49 are considered moderate correlation, and everything above 0.5 is considered strong correlation (Pallant, 2013). The coefficient in this study was 0.62. Therefore, there was strong relationship between the variables.

Reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the “goodness” of a measure (Sekeran & Bougie, 2013). They further say that the ability of a measure to remain the same over time – despite uncontrollable testing conditions or the state of respondents themselves – is an indicative of its stability and low vulnerability to the changes in the situation.

### **3.6.5 Threats to Reliability**

Robson (2002) assess that there may be four threats to reliability namely subject error, subject (participant) bias, observer error and observer bias. One of the threats to reliability in this research was subject or participant bias. This is one of more prevalent factors that shape participant responses are that of social desirability. Participants often want to present the best versions of themselves, or at least a version that is socially acceptable. It can therefore be difficult for participants to truly open up when it comes to sensitive topics. This bias was reduced by assuring the participants that their data was confidential and information given would not be shared.

### **3.7 Data Analysis**

The study used qualitative and quantitative methods to report the findings. The quantitative phase helped the researcher to generate descriptive and inferential statistics necessary to make deductions on the analysis of the performance of government hospitals. Descriptive statistics is the term given to the analysis of data that helps describe, show or summarize data in a meaningful way such that, for example, patterns might emerge from the data (Sekeran & Bougie, 2013). Sekeran and Bougie (2013), however, note that descriptive statistics do not, allow us to make conclusions beyond the data we have analysed or reach conclusions regarding any hypotheses we might have made. They are simply a way to describe our data. Descriptive statistics are very important because if we simply presented our raw data it would be hard to visualize what the data was showing, especially if there was a lot of it (Collis & Hussey, 2014). Descriptive statistics therefore enables us to present the data in a more meaningful way, which allows simpler interpretation of the data. After a careful review and cleaning of the collected data, the closed ended questions were coded and entered into a codebook from where they were



keyed into a computer using the Statistical Package for Social Science (SPSS) Version 16. Analysis was carried out by typical statistical functions in the SPSS software. Functions used for analysis in this study were frequencies, charts and cross tabulations. Frequency tables and bar graphs incorporating percentages were used in ranking particular practices or approaches adopted by public hospitals in their day to day businesses.

Inferential statistics are techniques that allow the researcher to use these samples to make generalizations about the populations from which the samples were drawn. It is, therefore, important that the sample accurately represents the population. Inferential statistics arise out of the fact that sampling naturally incurs sampling error and thus a sample is not expected to perfectly represent the population (Saunders et al., 2009). Quantitative analysis used inferential statistics namely analysis of variance (ANOVA) and Spearman's rank correlation coefficient to calculate scores on Likert scale. The scores on the Likert scale were used to measure the performance of public hospitals. Cross tabulations were used to determine relationships between variables like availability of drugs, customer satisfaction, high quality services, functional equipment, motivated health personnel and adequate funding.

The qualitative phase helped to fill in the gaps and provided additional information on measures on output like quality of free health services, access to free health services, increased coverage of free services and categories of people who access free services. Qualitative data from open-ended responses was analysed through content analysis.

### **3.8 Ethical Issues**

Research that involves human subjects which requires consideration regarding ethical issues, for example protecting the rights of the participants (Polit & Cheryl, 2008). Primary approval or permission to conduct the research study was sought from KCH. Informed consent was obtained from the participants in the survey questionnaire. Confidentiality was maintained in managing high level or any related management data. The same was assured on the survey as personal names were not be affixed to the survey. Confidentiality, however, may not be assured for the interviews, in which key stakeholders might be identified by virtue of their positions, not by their names.

### **3.9 Chapter Summary**

This chapter has detailed the research methodology that was used in the study. Highlights have been made on the sampling methods, the population and the sample size. The chapter has also highlighted the data collection method that was used through the questionnaires on purposive selected respondents and randomly selected respondents.



## CHAPTER FOUR: RESULTS AND DISCUSSION

### 4.1 Introduction

This chapter presents the findings of the study based on the data collected. The analysis for employees and patients were done separately. The responses were compiled into frequencies and some were converted into percentages and presented in graphic and tabular forms; this was to facilitate easy analysis. The analysis was done based on each question asked by the researcher in the interview guide. However, the findings and interpretations were done on the basis of study objectives.

### 4.2 Demographic Characteristics of the Respondents (employees)

The study sought to determine gender of the respondents, age range of respondents, qualifications of the respondents, and experience of respondents, marital status, income, and number of dependents. These characteristics were important because they enhanced reliability and gave the basic understanding of the respondents who took part in the study. Table 4.1 below presents the findings.

**Table 4-1: Demographic characteristics of employees**

Characteristics	Variables	Frequency	Column (N %)
Gender	Male	80	41
	Female	115	59
Age range	< 25 years (youth)	47	24
	25 < 35 years (middle aged)	77	39
	35 < 45 (aged)	54	28
	>=45 and above (very aged)	17	9
Qualifications	Masters	26	13
	Undergraduate degree	60	31
	College diploma	80	41
	Other	29	15

Based on the results of the survey, it is clear that females dominated the study, comprising about 59 percent (n=115) of the sample whereas males were 41 percent (n=80). Even though the study could not achieve a 50/50 percent gender representation, the views of both genders were well represented in this study.

Results obtained from investigation on respondent's age range indicated that 25 years to 35 years age bracket (n = 77; 39 percent) dominated the study followed by 36 years to 45 years age category (n = 56; 28 percent) and then followed by 18 years to 25 years age bracket (n=47; 24 percent). There were few employees in 46 and above bracket (n = 17; 9 percent). This gives an indication that there are very few employees at Kamuzu Central Hospital who are very aged.

Results obtained from investigation on respondent's educational qualification show that most of the respondents [41% (n=80)] held college diploma certificates, [31% (n=60)] held undergraduate degree, [15% (n=29)] of the respondents held other educational qualifications and lastly another [13% (n=26)] of the respondents indicated that they held master degree qualifications. This implies that majority of the responded were well educated and that they were in a position to respond to research questions with ease.

#### 4.2.1 Demographic Characteristics of Customers

The study sought to determine gender of the respondents and age range of customers. Figure 4-2 presents the findings.

**Table 4-2: Demographic characteristics of customers**

Characteristics	Variables	Frequency	Column (N %)
Gender	Male	25	45
	Female	31	55
Age range	18 < 24 years (youth)	13	23
	25 < 35 years (middle aged)	25	45
	36 < 45 years (aged)	12	21
	>=46 and above ( very aged)	6	11

Based on the results of the survey it is clear that females dominated the study, comprising about 55 percent (n=31) of the sample whereas males were 45 percent (n=26). This is not surprising for women to dominate survey in the health sector (specifically survey targeting patients) as women tend to take care of the sick (elderly, children) as per our tradition.

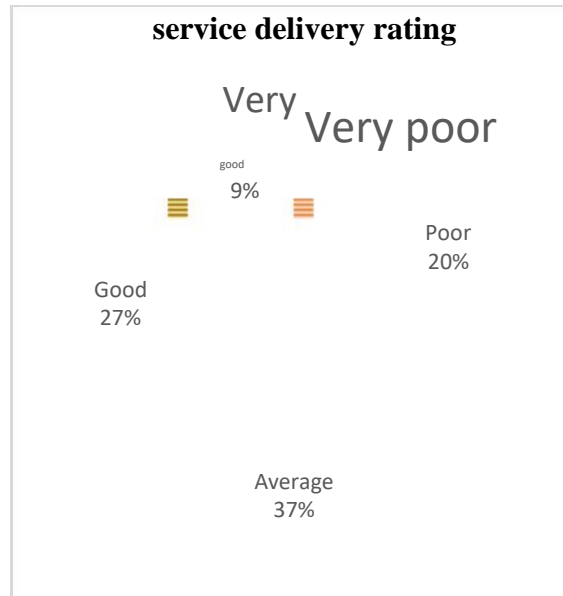
The results further indicated that 25 years to 35 years age bracket (n = 45; 25 percent) dominated the study followed by 18 years to 24 years age category (n = 23; 13 percent) and then followed by 36 years to 45 years age bracket (n=12; 21 percent). There were few

customers in 46 and above bracket (n = 6; 11 percent). This gives an indication that most of the patients tend to fall into the category of 25 to 35 years age bracket.

#### 4.3.1 Customer Rating of Service Delivery at Kamuzu Central Hospital

The study sought to establish rating of service delivery by patients at Kamuzu Central Hospital.

Figure 4-1 below presents the findings.



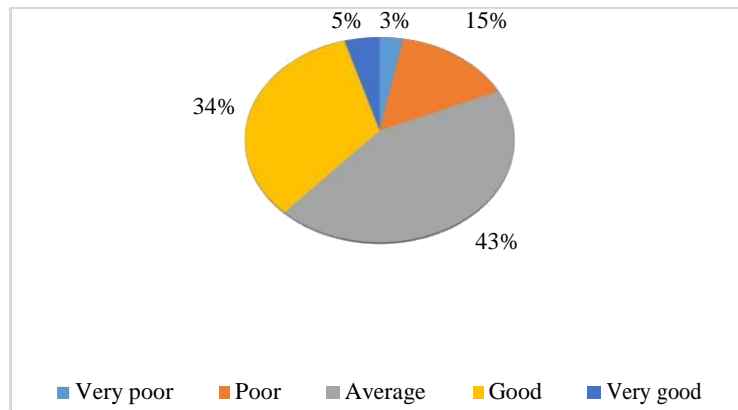
**Figure 4-1: Service delivery**

Results from the investigations indicated that 37% of the respondents rated service delivery as average, 27% of respondents rated service delivery as good followed by 20% of respondents who rated service delivery as poor followed by 9% of respondents who rated service delivery as very good and lastly 7% of respondents rated service delivery at Kamuzu Central Hospital as very poor. The findings are in line with Cranage (2004) who stated that a customer is satisfied as long as their expectations are meet or exceeded by the service provider. Therefore each company is working toward keeping happy customers by focusing on their customer's real problem

#### 4.3.2 Quality of Service

The study sought to establish patients 'views on the quality of service provided by hospital.

Figure 4-2 below presents the findings.

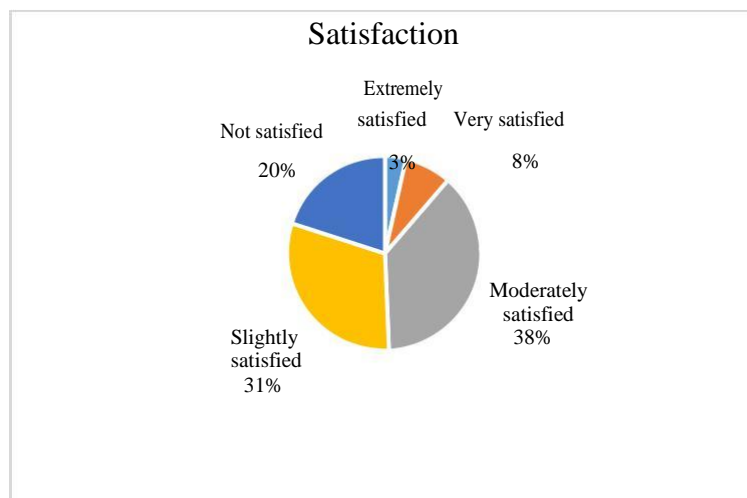


**Figure 4-2: Quality of service**

Results from the investigations indicated that 43% of respondents rated the quality of service at the facility as average, 34% of the respondents rated the quality of service as good, 15% of respondents rated the quality of service as poor. This is followed by 5% of respondents who rated the quality of service as very good and lastly 3% rated the quality of service as very poor.

#### 4.3.3 Levels of Satisfaction

The study sought to establish how patients were satisfied with the quality of service the hospital offer to the public.

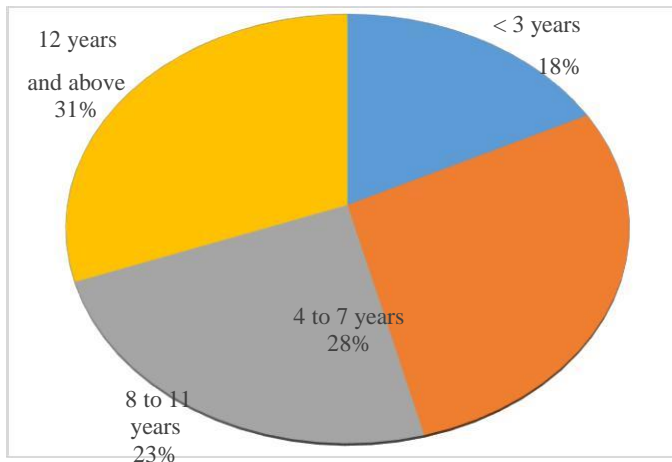


**Figure 4-3: Satisfaction**

Results from the investigations indicated that 38% of respondents were moderately satisfied, 31% of respondents were slightly satisfied followed by 20% of respondents said that they were not satisfied with quality of service. This is followed by 8% of respondents who said they were very satisfied and lastly they were extremely satisfied. The findings are in agreement with Aga and Safakli (2007) who suggest that service quality positively impact customer satisfaction, and the service of a firm has a positive effect on customer satisfaction.

#### 4.4 Length of Service

The study sought to determine how long has the respondents worked with the hospital. Figure 4-4 below presents the findings of the investigations.

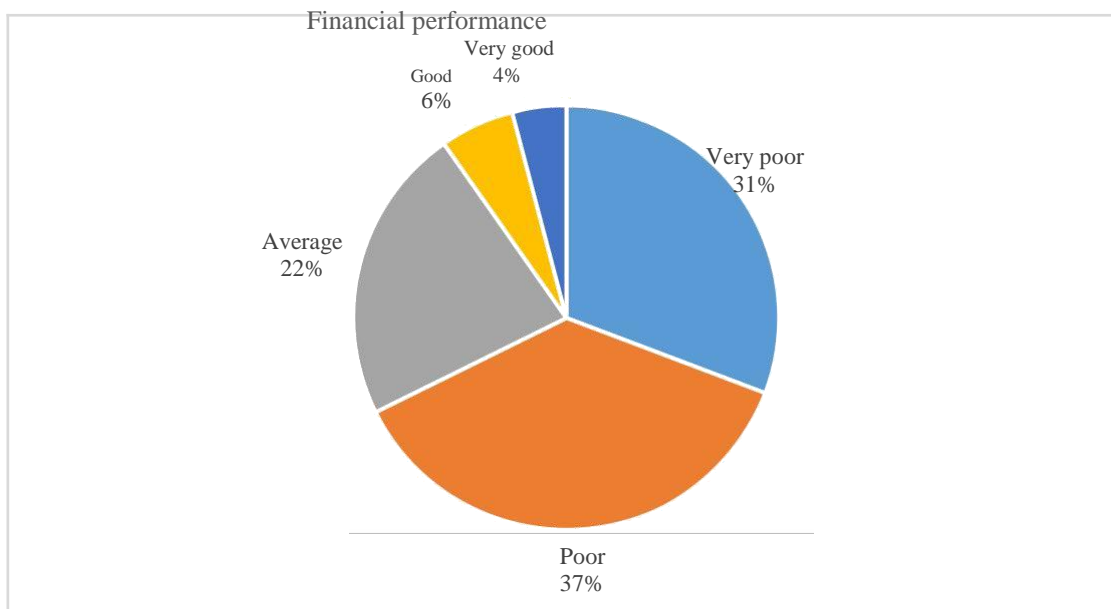


**Figure 4-4: Length of service**

The study sought to establish the respondent's period of service in the organization. The study revealed that most of the respondents [31% (n=66)] had served for a period of between 12 years and above, 28% (n=61) had served for 4 to 7 years, 23% (n=50) had served for 8 to 11 years, and 18% (n= 38) had served for less than 3 years. This implies that the majority of the respondents had worked with the organization for a considerable period of time, and that they were in a better position to give credible information relating to this research.

#### 4.5 Rating of Financial Performance

Employees were asked to rate the financial performance of the hospital. Figure 4.5 below presents the findings.



**Figure 4-5: Financial performance**

The results from the investigations show that 37% of the respondents indicated that financial performance of the facility is poor, 31% rated it as very poor while 22% rated it as average. Six percent of the respondents rated financial performance as good and lastly 4% rated financial performance as very good. The findings corroborate with Bai, Hsu and Krishan (2014) argue that financial performance increases availability of internal funding and raises the ability to raise external capital. Similarly the findings are in agreement with Akinleye, McNutt, Lazariu and McLaughlin (2019) concluded that hospitals under financial pressure may struggle to maintain quality and patient safety and have worse patient outcomes relative to well-resourced hospitals

#### 4.6 Rating of Importance of Funding in terms of Service Delivery

Employees were asked to rate how important is funding in terms of service delivery. Table 4-3 below presents findings.

**Table 4-3: Importance of funding**

Rating	Frequency	Percent	Valid percent	Cumulative frequency
Unimportant	2	1	1	1
Of little importance	5	3	3	4
Moderately important	11	6	6	10
Important	30	15	15	25
Very important	147	75	75	100
	<b>195</b>	<b>100</b>	<b>100</b>	



The results in table 4-3 show that the overwhelming majority of respondents (75%) indicated that funding is very important in service delivery. This is followed by 15% of the respondents who rated funding as important in service delivery. Six percent of the respondents rated funding as moderately important, 3% rated it as of little important and lastly 1% of the respondents rated it as unimportant. The findings resonate well with Akinleye, McNutt, Lazariu and McLaughlin (2019) who retorted that strong financial performance is associated with improved patient reported experience of care, the strongest component distinguishing quality and safety. These findings suggest that financially stable hospitals are better able to maintain highly reliable systems and provide ongoing resources for quality improvement.

#### 4.7 Improvement of Service Quality

The study sought to establish whether service quality has improved at Kamuzu Central Hospital. Table 4-4 below presents the findings of the study.

**Table 4-4: Improvement of service quality**

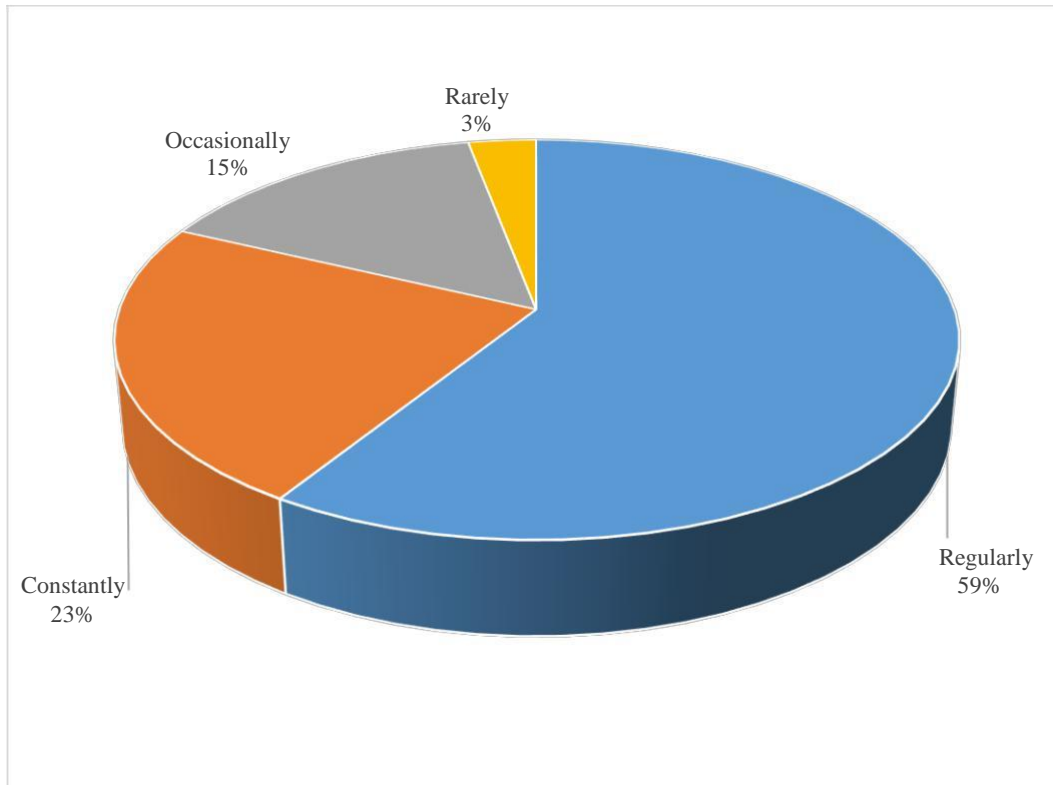
<b>Rate</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid percent</b>	<b>Cumulative frequency</b>
Agree strongly	15	8	8	8
Agree slightly	20	10	10	18
Neutral	69	35	35	53
Disagree slightly	40	21	21	74
Disagree very much	51	26	26	100
	<b>195</b>	<b>100</b>	<b>100</b>	

Results from the survey indicated that 35% of the respondents were neutral on improved service delivery, 26% disagreed very much that service delivery has improved, 26% disagreed slightly 10% agreed slightly that service delivery has improved and 8% agreed strongly. The findings of the study contradicts with findings of Cronin and Taylor (1992) and Parasuraman, Zeithaml and Berry (1985). According to Cronin and Taylor (1992), service quality is a multi-dimensional construct commonly based on customer judgements about service supplier and customer interactions and service itself. Similarly, Parasuraman et al., (1985) say that service quality is seen as the difference between customers' expectations and perceptions of service with the view of building a competitive advantage. This indicates that delivering quality service

means conforming to customer expectations on a consistent basis and could be assessed by probing whether perceived service delivery meets, exceeds or fails to meet customer expectations.

#### 4.8 Frequency of Receiving Customer Complaints

The study sought to know how often the hospital receive customer complaints. Figure 4-6 below presents the findings.

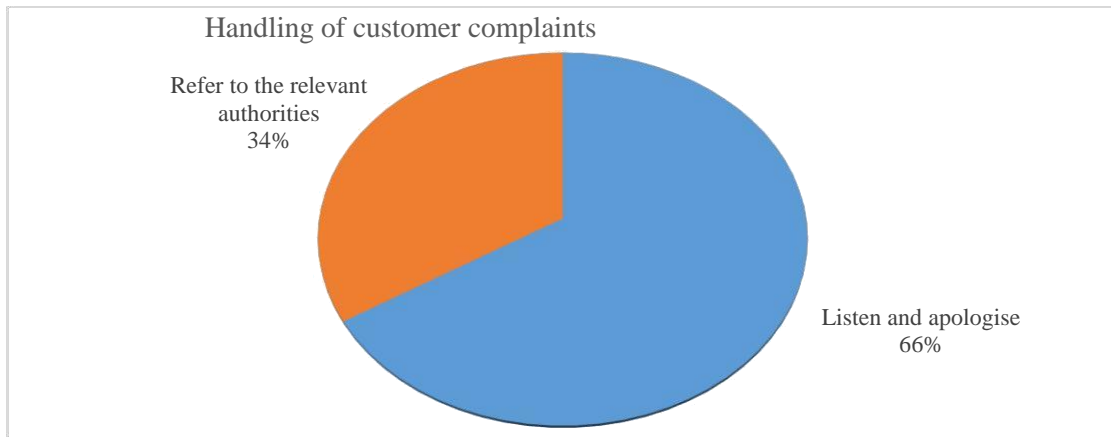


**Figure 4-6: Frequency of complaints**

Results from the survey showed that 59% of the respondents receive customers' complaints regularly, 23% receive constantly, 15% receive occasionally and 3% rarely receive complaints.

#### 4.9 Handling of Patients' Complaints

The study sought to establish how employees handle patients' complaints. Figure 4.4 below presents the results.



**Figure 4-7: Handling of customer complaints**

Results from the investigations indicated that 66% of respondents said that they handle complaints by listening to the complaints and apologize whereas 34% of the respondents they handle complaints by referring to relevant authorities since they do not have power to handle such complaints. A complaint is an expression of discontent by a customer/consumer, addressed to a service provider, third parties or consumer protection agencies in the event of service failure (Ateke, Asiegbu & Nwulu, 2015). Customers complain when they experience a service performance that falls below their expectation, and the consequent dissatisfaction they feel. Thus, dissatisfied customers are more likely to complain than satisfied ones (Keiningham, Frennea, Aksoy, & Mittal, 2015). The findings are in contrasts with Stephens & Gwinner, (1998) who note that some dissatisfied customers do not lodge formal complaint because (1) they regard it as an action that does not worth the efforts (2) they do not believe that they will get restitution (3) they consider it unpleasant (4) they do not know how and to whom to lodge their complaints (5) they want to avoid conflict, especially if it involves people who they know and will have to cooperate with again.

#### **4.10 Rating of Internal Processes Performance towards Customer Satisfaction**

The study sought to rate the internal processes performance towards customer satisfaction. Table 4-5 below presents the findings.

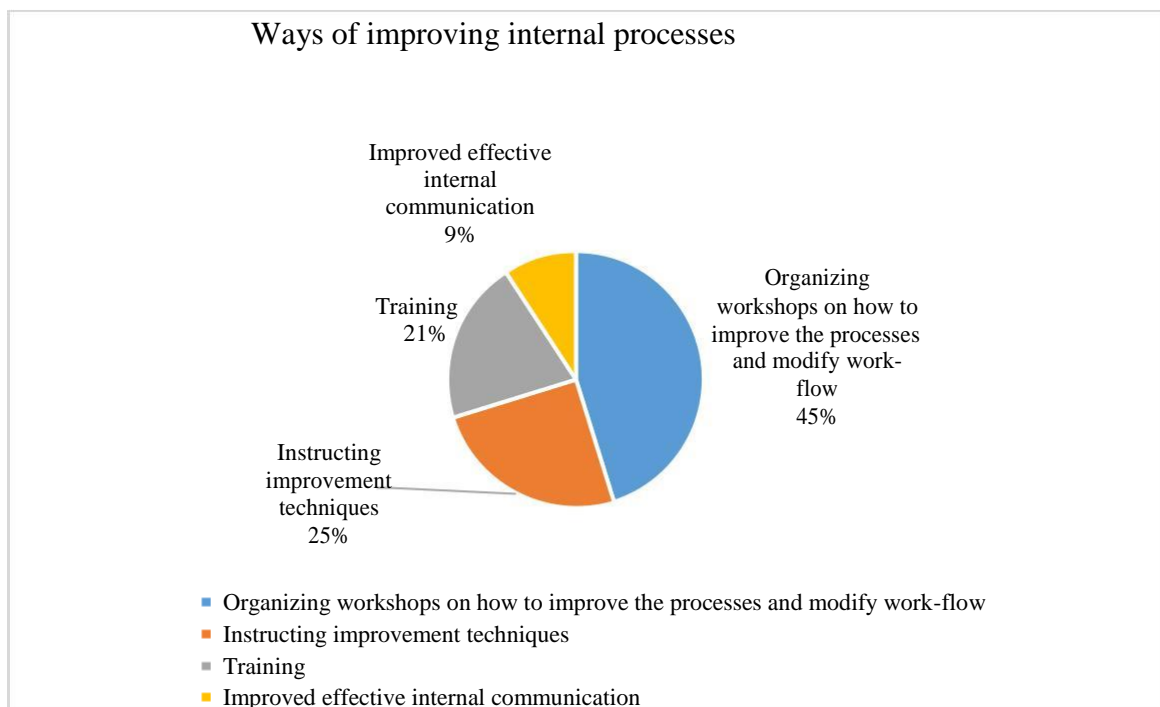
**Table 4-5: Internal process towards customer satisfaction**

Rating	Frequency	Percent	Valid percent	Cumulative frequency
Very poor	9	5	5	5
Poor	21	11	11	16
Average	56	29	29	45
Good	67	34	34	79
Very good	42	21	21	100
	<b>195</b>	<b>100</b>	<b>100</b>	

Results from the investigations indicated that 34% of the respondents rated Kamuzu Central Hospital’s internal processes performance towards customer satisfaction as good, 29% rated them as average, 21% rated them as very good, 11% rated them as poor and finally 5% rated them as very poor.

#### 4.11 Suggestions for Improving the Institution’s Internal Processes

The study sought to establish ways on how Kamuzu Central Hospital’s management can improve internal processes. Figure 4-8 presents the findings.



**Figure 4-8: Ways of improving internal process**

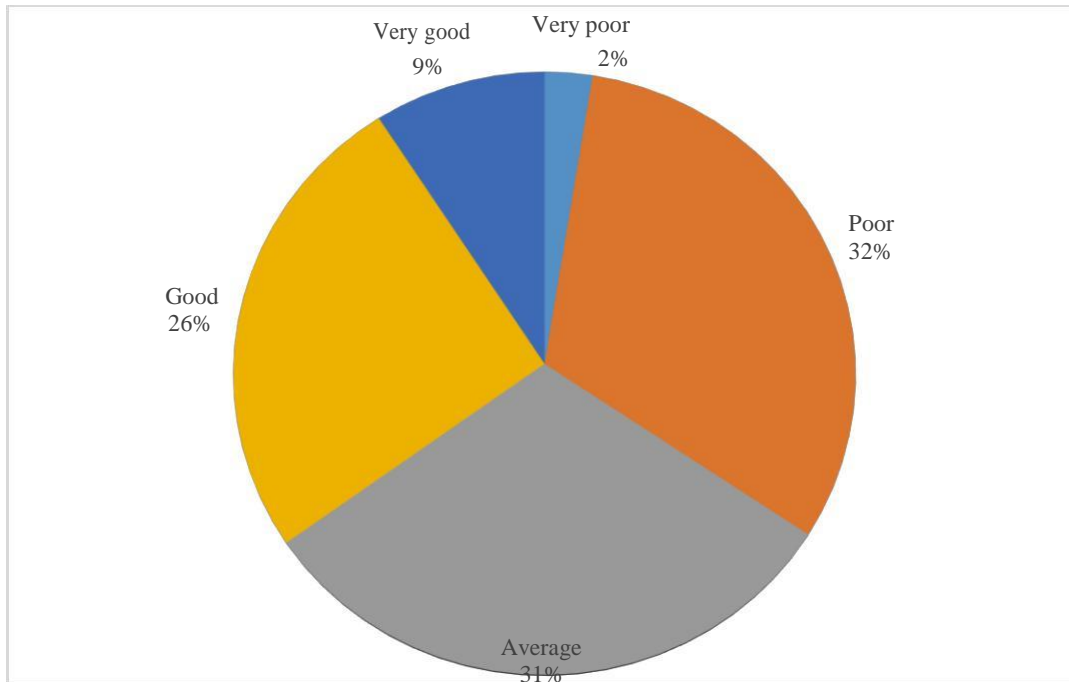
Results from the investigations indicated 45% of respondents said that organizing workshops on how to improve processes and modify the workflow is one of the ways of improving

processes, 25% of respondents said instructing improvement techniques. Twenty one percent of respondents indicated that training is important component in improving internal processes and lastly 9% of respondents said that improved effective internal communication is one of the ways of improving communication. The findings are corroborating with Stern, (2006), who notes that as the key to performance, organizations must increase predictability, increase process control, institutionalize best practices, and focus on execution.

#### 4.12 Learning and Growth Perspective

The study sought to establish the rating of learning and growth perspective of the hospital.

Figure 4-9 below presents the findings.



**Figure 4-9: Learning and growth**

Results from the investigations showed that 32% of respondents rated learning and growth perspective as poor followed by 31% of respondents who rated learning and growth perspective as average. This is followed by 26% of respondents who rated learning and growth perspective as good followed by 9% of respondents who rated learning and growth perspective as very good and lastly 2% of respondents rated learning and growth perspective as very poor.

#### 4.13 Performance to Output

The study sought to establish the rating of the hospital's performance to its output. Table 4.6 below presents the findings.

**Table 4-6: Rating of performance to output.**

Rating	Frequency	Percent	Valid percent	Cumulative frequency
Very poor	11	6	6	6
Poor	18	9	9	15
Average	71	36	36	51
Good	55	28	28	79
Very good	40	21	21	100
	<b>195</b>	<b>100</b>	<b>100</b>	

Results from the investigations indicated that majority of respondents represented by 36% rated the hospital's performance to output as average, 28% of respondents rated the hospital's performance to output as good, 21% of respondents rated the hospital's performance to output as very good. This is followed by 9% of respondents who rated the hospital's performance to output as poor and lastly 6% of respondents rated the hospital's performance to output as very poor.

#### 4.14 Discussions

This study examined the performance of government hospitals that provide free health services using Balance Scorecard (BSC) Model. The first specific research objective was to establish whether customers are satisfied with the provision of the health facility's services. The other specific objective was to investigate whether financial, internal processes, innovation and learning affect performance of the hospital.

##### 4.14.1 Discussion on Performance of Kamuzu Central Hospital from Perspectives of BSC Model

The respondents were requested to measure the performance of the college based on a scale of 1 to 5, with average scores below 3 meaning poor performance, average score of 3 denoting average performance while scores above 3 indicate good performance. Table 4.7 presents Overall Performance of the hospital from all four perspectives of BSC model.

**Table 4 -7: Overall Performance of the hospital from all four perspectives of BSC model**

Perspectives	*FP	*Admin	Doctors	*CO	Nurses	Customer	Mean Score
Financial Perspective	1.3	1.5	2.1	2.5	2.5	N/A	2.0
Customer Perspective	2.1	2.4	3.2	3.4	3.0	4	3.0
Internal Process	2.8	3.0	4.1	3.8	3.0	N/A	3.4
Learning and Growth	2.8	2.9	3.8	3.9	4.0	N/A	3.5
Mean Score	2.2	2.4	3.2	3.3	3.1	4	3.0

*\*FP- Finance Personnel, \*Admin- Administrators and \*CO- Clinical Officers*

The results of the investigations indicate that the overall mean score for the respondents on the financial perspective was 2.0. This means that the respondents (employees) rated or

Kamuzu Central Hospital performance from the financial perspective as poor. The findings agree with Chimtengo, Mkandawire and Hanif (2017) who established that if an institution has performed poorly under the financial perspective, it is more likely that it will perform poorly overall. Although the overall rating is 2.0, there is a wide range of perspective among the respondents from 1.3 up to 2.5. Interestingly, respondents (doctors, nurses and clinical officers) from technical departments rated the performance of Kamuzu Central Hospital higher (2.5) than respondents from Finance Department and Administration Departments (1.3) and (1.5) respectively.

The overall mean score for the respondents on the customer perspective was 3.0. This means that the respondents viewed Kamuzu Central Hospital performance from the customer perspective as average. While the overall rating is 3.0, there is a wide range of perspective among the respondents from 2.1 to 4.0. Customers rated the performance from customer perspective of Kamuzu Central Hospital as 4. This finding concurs with Kotler (2002) who asserts that the organization's task is to determine the needs, wants, and interests of target markets and to deliver the desired satisfactions more effectively and efficiently than competitors in a way that preserves or enhances the consumer's and the society's well-being. Clinical officers rated the performance as 3.4, doctors rated 3.2, nurses rated 3 and respondents from the finance and administration rated Kamuzu Central Hospital performance 2.1 and 2.4 respectively.

On the internal processes perspective, the results of the investigations indicate that the overall mean score for the respondents was 3.4, which mean that the respondents viewed the Kamuzu Central Hospital performance from the internal processes perspective as good. The range of perspective among respondents is from 2.8 to 4.1.

The results also indicate that the overall mean score for the respondents under learning and growth perspective was 3.5. This means the respondents viewed the polytechnic performance from this perspective as above average (good) which is higher than another perspective under consideration. Though the overall rating is 3.5, there is a wide range of perspective among the respondents from 2.8 to 4.0. Surprisingly, respondents from technical departments rated the performance of Kamuzu Central Hospital higher (nurses rated 4, clinical officers rated 3.9, and doctors rated 3.8) than Administrators rated performance as 2.9 and finance personnel rated performance as 2.8.

The overall results of the study on performance of Kamuzu Central Hospital from all the four perspectives of the BSC show that the overall mean score for the respondents was 3.0. This 41



means the respondents viewed the Kamuzu Central Hospital overall performance from all the four perspectives of the BSC as average. Even though the overall mean score was 3, there is a wide range of perspectives among the respondents on the performance of the hospital from 2.2 to 4.0. It is very interesting to note that customers rated the performance of the hospital higher

(4) than employees (finance personnel (2.2), administrators (2.4), doctors (3.2), clinical officers (3.3) and nurses). These findings are in contrast to what WHO (2004) which established that many low-income countries are still facing acute shortages of essential medicines because of the limited supply of affordable medicines and inadequate logistical systems to deliver them, and a continuing shortage of new products to meet developing country's health needs.

Almost every organization claims to have company objectives, mission and vision mentioned on their respective business profiles. When most organizations talk about business objectives in their management meetings, the focus is usually on the financial aspects of the company. Vitale, Mavrinac & Hauler, (1994) purport that the focus comes naturally as first aim of every 'Profit Maximizing' organization is to sustain itself. But dominance of profitability in management strategy as the only objective sidelines other if not equally but very important objectives (Vitale, Mavrinac & Hauler, 1994).

#### 4.14.2 Kamuzu Central Hospital's Performance Based on Output Performance Measures

The respondents were also requested to rate the performance of the hospital based on the output performance measures. The results have been shown in Table 4-8 below.

**Table 4 -8: Performance of the hospital based output measures**

Variable	FP	Admin	Doctors	CO	Nurses	Mean Score
Mean Score	2.6	2.9	3.4	3.4	3.5	3.2

*\*FP- Finance Personnel, \*Admin- Administrators and \*CO- Clinical Officers*

The results of the findings show that the overall mean score for all the respondents was 3.2. This means the respondents viewed performance of the hospital based on output measures as good. Although the overall rating is 3.2, there is a wide range of perspective among the respondents from 2.6 to 3.5. Nurses, doctors, clinical officers rated the performance of the institution higher (3.5), (3.4) and (3.4) respectively and administrators and finance people rated the hospital lower (2.9) and (2.8) respectively. These findings are not surprising as the interview was focusing on performance. This is because staff would always need to demonstrate that they are performing despite the conditions or environment they are operating.

#### **4.14.3 Spearman's Rank Correlation of the Balanced Scorecard Perspectives to Output Performance Measures**

Table 4-9 below shows the results of the correlation between financial, customer, internal processes and innovation and learning (independent variable) and performance measures (dependent variables).

**Table 4-9: Correction of BSC model perspectives to performance measures**

<b>Perspectives</b>	<b>Performance measures</b>	<b>Sign. (2. tailed)</b>	<b>N</b>
Financial Perspective	0.166	0.882	34
Customer Perspective	0.278	0.141	74
Internal Process	0.477	0.004	33
Learning and Growth	0.611	0.001	77

(\*\*Correlation is significant at the .01 level for the variables above in table 10 (2-tailed))

From financial perspective, the results indicate that there was a weak correlation between the financial perspective and the performance measures; however, this correlation was not statistically significant  $r(34) = 0.166, p > 0.05$ .

Besides that the study shows that there was a weak correlation between customers' perspective and performance measures, and this correlation is not statistically significant  $r(74) = 0.278, p > 0.05$ .

However, the findings of the investigations established that there was a strong correlation between internal processes of KCH and the performance measures, and this correlation was statistically significant  $r(33) = 0.477, p < 0.05$ .

Similarly, the results show that there was also a strong correlation between innovation and learning and performance measures and the correlation was statistically significant  $r(77) = 0.611, p < 0.05$ . From the foregoing reasoning, it can therefore be deduced that the learning and growth perspective affects the performance of a company positively. In other words, there is a positive correlation between the hospital's performance and its learning and growth perspective

But this study has produced exciting results based BSC model perspectives. The results of this research study show that the performance of Kamuzu Central Hospital is highly dependent on the financial perspective, customers' perspective, internal processes perspective, innovation and learning perspective as there was positive correlation between each perspective and the performance measures. However, the strength of the correlation are different. The findings are line with findings of Lin, Yu and Zhang (2014) who assessed the performance of Chinese

hospitals by using BSC. Lin et al., (2014) found that there was positive correlation between each perspective and the performance measures.

These authors established that the hospitals that adopted BSC achieved better organizational performance and individual satisfaction, compared to those who did not. They also assert that hospitals that utilize more performance measures in their BSC outperforms those that use less performance measures, this is evident in both organizational performance and individual satisfaction. Malina & Selto (2001) conclude that the more close the links of non-financial performance measures to the incentive rewards, the better the organization performance and individual satisfaction.

#### **4.14 Chapter Summary**

This chapter has presented the findings of the survey whereby a number of issues were revealed. Some of the notable issues identified were that most of the research respondents were middle aged and female employees dominated the study. The results of this research study established that the performance of Kamuzu Central Hospital is highly dependent on the financial perspective, customers' perspective, internal processes perspective, innovation and learning perspective as there was positive correlation between each perspective and the performance measures.

## **CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

The results of the research led to the conclusions and recommendations discussed in the following sub-sections.

### **5.2 Summary of Key Findings**

The performance of the Kamuzu Central Hospital has been measured using the balanced scorecard model. The study has revealed that the financial performance of the hospital is poor. However, the performance of the hospital had been rated as average on the basis of the output performance measures. The study has also established that there was a weak relationship between the financial and customer factors to the performance measures, there was a strong relationship between internal processes and innovation and learning on one hand and performance measures on the other.

### **5.3 Conclusions**

The study had the following specific research objectives:

The first objective was to analyze consumer consumer's rating of the quality of health care service delivery and their levels of satisfaction. The hospital has systems in place which help in measuring of how well it identifies the customers' future needs, increase in creativity and unexpected ideas, measures the quality, time cycle measurement, measures cost, and measures post sales services among others. It can be concluded that the study has established that customers are satisfied with services provided by Kamuzu Central Hospital.

The second objective was to investigate whether there is a relationship between financial, internal processes, innovation and learning perspectives and performance of the hospital. It can be concluded that the finances do indeed improve performance of the institutions but not entirely as there are other factors which also play a part. It can also be concluded that increased internal process increases employee retention, employee training, employee skills, system availability and "front line" customer information, team members cooperation maximization, team members are focused on helping one another succeed, cross organizational team occur - more open channels of communications, and enthusiastic people resulting in improved. It can be concluded that this investigation provides empirical evidence that institutions' performance is positively associated with company's innovation and learning perspectives.

## **5.4 Recommendations**

Based on the results of this research study, it is recommended that Kamuzu Central Hospital should introduce fund raising system that can be used to fund internal processes and innovation and learning processes within the hospital. These processes are fundamental in the training of the employees like nurses, clinicians, doctors, among others.

It is recommended that it should construct sufficient structures so that it is able to open specialized departments which could be responsible to handle complicated cases which are always referred abroad.

It is further recommended that Kamuzu Central Hospital must design specialized trainings for its staff.

## **5.5 Areas for Further Research**

The second suggestion regards the scope of the research setting. The findings of this research are based on the study of BSC implementation in the health industry. There is a need for further research to expand the setting to public-sector organizations across Malawi or to perform a comparative study of public-sector organizations in Southern Africa. Such research would increase the generalizability of the results. The results of a comparative study would make an immense contribution to our knowledge about BSC implementation within public-sector organizations in Southern African countries

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## **Appendix 1: Introductory Letter**

My name is Dr Etete May Nkura and I am currently studying with **The Malawi Polytechnic**, a constituent College of the University of Malawi pursuing Executive Master of Business Administration.

In order to fulfill the requirements of the course, I am doing a research on “Assessing the performance of government hospitals that provide free health services – the case of Kamuzu Central Hospital using Balance Scorecard Model.”

Attached are some questions that I am requesting responses from you. I would like to assure you that the information which you will provide will be strictly confidential and will not be referred to by name in the final report.

The questions should take you about twenty minutes to complete. If you have any question, please contact me on **+265 993 219 424**

Finally, I would like to thank you sincerely for taking your time to help me.

Yours faithfully,

**Dr. Etete May Nkura**

## Appendix 2. Questionnaire for Employees

Designation: \_\_\_\_\_

Assessing the performance of government hospitals that provide free health services – the case of Kamuzu Central Hospital using Balance Scorecard Model.

### SECTION A: GENERAL INFORMATION

NOTE: Tick what is applicable

#### PART (A): Demography

##### 1) Gender:

A: Male [1]

B: Female [2]

##### 2) Age range:

A: 18 to 24 (Youth) [ 1]

B: 25 to 35 (Middle aged) [ 2]

C: 36 to 45 (Aged) [ 3]

D: 46 and above (Very Aged) [ 4]

##### 3) Highest level education

A: Master's Degree [ 1]

B: Undergraduate Degree [ 2]

C: College Diploma [ 3]

D: Other (specify.....) [ 4]

#### PART B: Detailed questions

4) How long have you been working at Kamuzu Central Hospital?

A: Less than three years [ 1]

B: 4 to 7 years [ 2]

C: 8 to 11 year [ 3]

D: 12 years and above [ 4]

5) How do you rate the financial performance of Kamuzu Central Hospital?



- A. Very poor
- B. Poor
- C. Average
- D. Good
- E. Very good

6) How important is funding in terms of service delivery?

- A. Unimportant
- B. Of little importance
- C. Moderately important
- D. Important
- E. Very important

7) Service quality has improved at Kamuzu Central Hospital

- A. Agree strongly
- B. Agree slightly
- C. Neutral
- D. Disagree Slightly
- E. Disagree very much

8) How often do you receive customer complains at your institution?

- A. Never
- B. Rarely
- C. Occasionally
- D. Regularly
- E. Constantly

9) How do you handle customer complaints?

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10) How do you rate Kamuzu Central Hospital's internal processes performance towards customer?

Satisfaction?

Very poor

Poor

Average

Good

Very good

How can Kamuzu Central Hospital's management improve the institution's internal processes?

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How do you rate learning and growth perspective at your institution?

Very poor

Poor

Average

Good

Very good

13) How do you rate Kamuzu Central Hospital's performance to its output?

A. Very poor

B. Poor

C. Average

D. Good

E. Very good

*Thank you very much for participating in this survey*

### **Appendix 3. Questionnaire for out-patients (Customers)**

#### **PART (A): Demography**

##### **1) Gender:**

A: Male [1]

B: Female [2]

##### **2) Age range:**

A: 18 to 24 (Youth)

[ 1]

B: 25 to 35 (Middle aged)

[ 2]

C: 36 to 45 (Aged)

[ 3]

D: 46 and above (Very Aged)

[ 4]

#### **Detailed questions**

3) How do you rate service delivery at Kamuzu Central Hospital?

A. Very poor

B. Poor

C. Average

D. Good

E. Very good

4) Please rate the quality of service provided the hospital

A. Very poor

B. Poor

C. Average

D. Good

E. Very good

5) How satisfied are you with the quality of service the hospital offers to the public?

A. Extremely satisfied

B. Very satisfied

C. Moderately satisfied

D. Slightly satisfied

E. Not satisfied

*Thank you very much for participating in this survey*