GOVERNANCE ACCOUNTABILITY MECHANISMS AS A DETERMINANT OF DELIVERY OF QUALITY HEALTH SERVICES IN KENYATTA NATIONAL HOSPITAL, KENYA

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DECLARATION

This thesis is my original work and has not been presented for a degree or any other award in any other University.

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We confirm that the work reported in this thesis was carried out by the candidate under our supervision.

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DEDICATION

This work is dedicated to future thought leaders of Governance in Health Systems.

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ABSTRACT

Governance in essence is exercise of authority. It is about decision-making and implementation of decisions. It ensures strategic policy frameworks exist alongside effective oversight, coalition building, provision of appropriate regulations and accountability. The study set out to determine influence of governance accountability mechanisms in delivery of quality health services in Kenyatta National Hospital. Specific objectives of the study were to: i) establish the influence of professional health provider accountability mechanisms, ii) determine the influence of management accountability mechanisms, iii) determine the influence of Board of Directors accountability mechanisms, and iv) establish the influence of payer accountability mechanisms on the delivery of quality health services in Kenyatta National Hospital, Kenya. Mixed methods design involving both quantitative and qualitative methods was used. Target population comprised 4,715 employees in all Departments of the hospital. Stratified and purposive sampling was used to arrive at the sample of 369 respondents and four key informants. Structured questionnaire and key informant interview guide were used to collect data. Quantitative data was analysed using SPSS version 21. Qualitative data was analysed using thematic analysis and presented using the emerging themes. Logistic regression results indicated that professional health providers not registered with professional bodies were 0.216 times less likely to deliver quality health services as compared to those who are registered. There being consequences for breach of self-regulation was 2.086 times more likely to enhance delivery of quality health services as compared to having no consequences. Continuous professional training made application of clinical guidelines 2.157 times more likely in delivery of quality health services. The hospital not having a performance management policy was 0.340 times less likely to deliver quality services. It was 0.307 times less likely to deliver quality services if hospital did not have right people in the right job. The hospital is 0.334; 0.272; and 0.415 times less likely to deliver quality health services with a Board that has no functional finance committee, no monitored financial transactions or non-shared external audit reports with stakeholders respectively. Lack of multiplicity of payers and inability to choose payers in the hospital is 0.271 and 0.467 times less likely to enhance delivery of quality health services respectively. The study concluded that governance accountability mechanisms of various health actors is a determinant of delivery of quality health services in terms of timeliness in the hospital. The study recommended that the hospital should ensure that: i) professional health providers in the hospital are registered and licensed to practice by their professional bodies, ii) continuous professional education opportunities are made available to professional health providers and that value addition is monitored for actual improvements in professional and clinical governance accountability, iii) the hospital management reviews its service charter to ensure both internal and external customers get a clear picture of expected obligations and service standards, iv) the hospital management invest in modern technologies and infrastructure aimed at improving patients waiting time, and v) the Board makes the vision and core values of the organization understood and practised by all employees.

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ABBREVIATIONS AND ACRONYMS

CEO	Chief Executive Officer
FFS	Fee-for-Service
GOK	Government of Kenya
IOM	Institute of Medicine
IRB	Institutional Review Board
KNH	Kenyatta National Hospital
LMIC	Low- and Middle-Income Countries
MOH	Ministry of Health
NACOSTI	National Commission for Science, Technology and Innovation
NGO	Non-Governmental Organization
NHIF	National Hospital Insurance Fund
OECD	Organization for Economic Co-operation and Development
SPSS	Statistical Package for Social Scientists
SSA	Sub-Saharan Africa
SWOT	Strengths, Weakness, Opportunities and Threats
UHC	Universal Health Coverage
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Governance and Leadership is one of the building blocks of health systems. Governance is in essence the exercise of authority. It is one of the indispensable components of health systems and connotes ensuring strategic protocol frameworks exist and are connected with competent control, affiliation building, the provision of appropriate regulations and impetus, attention to system-model, and accountability (World Health Organization [WHO], 2010). Answerability is a segment of governance, and helps ensure that abuse is eradicated, assuring conformity with procedures and standards, as well as remodeling performance (Brinkerhoff, 2004). The term accountability infers to a relationship between an actor and a forum, in which the actor has a duty to clarify and to rationalize his or her actions. The forum can pose questions and pass judgment, and the actor may face ramifications (Bovens, 2007). However, the term often come to the fore only after a serious problem with service delivery failure or egregious error has occurred in healthcare in Kenya.

According to Chan et al., (2008), effective accountability structures and systems are means to actualize and make viable the assigned activities of governance, as it is an intrinsic aspect of governance. Health systems have several key objectives; the most fundamental is to enhance the health of the populace (Watkins, et al., 2018). Importantly, despite the movement towards a patient centered care, there exist dilemmas that continue to confront mainstream approaches to quality and safety of healthcare (Allen, et al., 2016). Thus, this study will seek to define the association between governance accountability and one of the key areas of healthcare goal of providing quality services.

Globally, there has been a growing pressure placed on physicians, hospitals and other healthcare stakeholders to enhance the quality of care, enhance patient safety and improve expenditures concerning service delivery, which has resulted in renewed focus on governance accountability for delivery of quality care (Bleich, et al., 2009). Governance accountability mechanisms thus have been postulated and highly prioritized to aid efforts aimed at mobilizing resources for healthcare besides growing demand for ascertaining results associated with those inputs (WHO, 2010). This emanates from the fact that accountability concerns the handling of the association between various collaborators and stakeholders (Van Belle & Mayhew, 2016). Some countries such as Switzerland, Australia, Norway, England, the Netherlands, Sweden and, Germany Smith et al., (2012), have documented governance and leadership mechanisms involving goal setting, performance monitoring, and accountability in a bid to shape and attain health care goals. Moreover, governance accountability mechanisms can be useful in curbing improper requests of tests and unnecessary procedures towards elevated financial benefit, under-the-table payments for care, staff absenteeism, and deviation of government resources for personal gain (Fisher, 2018). Additionally, substandard health services also occur frequently among healthcare providers. According to Healy (2017), in the United States, nearly a half of patients fail to receive the recommended treatment as spelt out in clinical protocols.

At the African regional level, governance accountability mechanisms have been adapted in Ghana as a mechanism that is specifically modeled to enable managers to make estimated expense and spending plan resolutions based on need rather than preceding appropriations (Hirschhorn, et al., 2013). Moreover, at the government, hospital, and health-care provider status, corruption plays a major role in health-care operations in Africa (Mostert, et al., 2015). Simultaneously, in Africa, serious resource constraints

coupled with proliferation of health system players have given rise to management problems and confusion of responsibilities, duties and roles (Van Belle & Mayhew, 2016). Consequently, governance accountability is needed in the African setting to shape the capacity of health systems to produce viable, equitable, demonstrable, stable quality health care and to survive crisis such as Ebola (Greer, et al., 2016)

In Kenya, the constitution, an act of Parliament and the national health policy framework provide an outline of the governance accountability structure of the health system. The national government oversees the technical support, policy development and leadership in the health sector, while the 47 devolved units of county governments are responsible for health services provision (Kihuba, et al., 2016). The two levels of governance share planning, budgeting, and coordination roles. This structure adopts a strategic and investment plan every five years while each health department and facility is expected to prepare its own yearly operating plans and budgets. Both private and public providers are involved in healthcare service delivery. On the public healthcare delivery, county governments are responsible for both primary care and county referrals while national government provide national referral hospitals. Health facilities at the primary level include private clinics, dispensaries, and health centers that provide preventive health services and outpatient services. A wide range of curative services are offered by county referral hospitals while highly specialized services are provided by units at the national referral hospitals. In Kenya, healthcare delivery system is organized into six tiers, the national referral hospital being at the apex (level 6). Approximately 62% of the total number of health facilities in Kenya are government owned.

Kenyatta National Hospital (KNH), which has a bed capacity of approximately 2000, is the largest teaching and national referral hospital in Kenya. The hospital has fifty wards, twenty-four outpatient clinics and twenty-four surgical theatres as well as accident and

emergency department. KNH was founded in 1901 to serve native African population by the colonial government. At the time it was called Native Civil Hospital and had a bed capacity of 40. In 1952, it was renamed King George VI Hospital, after King George VI of England. After Kenya got independence from the British in 1963, the health facility was again renamed Kenyatta National Hospital.

The main role of the Hospital is to accept and offer treatment to patients on referral from County hospitals at Level 5 and below. However, only about 4% of patients are referred to the hospital from lower tier hospitals as most of the patients are walk-in users (Ngure, 2016). The hospital changed from being directly under the ministry of health to a state corporation status in 1987 (GoK, Legal Notice No. 109 of 1987). The changes in the organization's legal status were intended to reduce bureaucracy while also making greater use of corporate governance, private sector management, financing, and service delivery ethos (Mills, 2014).

The hospital governance structure comprises a Board of Management chaired by a non-executive Chairman. The Board is composed of 10 members and Chief Executive Officer (CEO) who is the Board secretary. The Board is responsible for oversight and strategic direction of the hospital management. Functions of the Board are executed through four committees, namely: Clinical Research and Standards; Human Capital, Finance and Administration; Risk and Audit; and Corporate Strategy and Enterprise. Management team is led by the CEO who is an appointee of the Board. The CEO is responsible for the day-to-day operations of the hospital via delegated authority of the Board. To achieve the strategic goals of the hospital as set out by the Board, the CEO cascades respective responsibilities to the heads of departments and management teams who further ensure delivery of services through other ranks in the hospital as guided by the organizational structure.

Further, to enhance service delivery and improve quality of care the hospital has a number of initiatives to address its strategic objectives which include service delivery charter that is aimed at reducing waiting time of patients. The other initiative is formulation of patient centered care guidelines whose implementation is supported by quality healthcare department across the hospital. Importantly, patient safety indicators are supposed to be reported to the Board quarterly including infection prevention and control analysis on hospital acquired infections as well as medical errors which are reported and reviewed in the clinical areas.

1.2 Statement of the Problem

Governance accountability problems continue to abound both in the developed and the developing countries alike (Aiken, et al., 2018). Patient abuse, medical errors and harm to the patient, as well as failures in service delivery leading to patient dissatisfaction as well as avoidable loss of life occur. Misuse of resources and abuse of authority as was documented in the 'Francis Report' at Mid Staffordshire hospital in England have caused policymakers and other interest groups including patients and their representatives realize that hospital visit may turn to be a traumatic encounter leading to death, financial catastrophe, or disability instead of providing high quality care for their ailments (ibid).

Despite initiatives towards improving health service delivery, KNH continues to experience numerous patient complaints of unsatisfactory delivery of quality health services.

Mwanga, (2013) examined factors affecting patient satisfaction at KNH and found out that 89.9% of respondents said that the clinic was crowded and 60.7% said the toilets were dirty. In the same study, respondents rated technical quality at 64.8% while 41.6% said the doctors rarely give them advice about their medical conditions. At the same

time, 30.3% of the respondents said they neither participated nor gave their views in reaching resolutions about their treatment and care. Furthermore, but recently, KNH admitted committing a grievous mistake in a case where a major brain surgery was performed on the wrong patient (Njeru, 2018).

Together, these examples have indications of governance accountability lapses. As Christensen and Lægreid (2015), point out, hospital governance accountability mechanisms can aid achievement of multiple objectives such as reduced mortality rates, patients' waiting time, hospital acquired infections, and length of hospital stay.

This study aim to provide insights that would aid in building governance accountability capability in processes and outcomes in health care, especially with regard to people-centredness, patient safety and timely delivery of health services at KNH.

1.3 Broad Objective

To establish the influence of governance accountability mechanisms on delivery of quality health services in Kenyatta National Hospital, Kenya.

1.3.1 Specific Objectives

i. To establish the influence of professional health provider accountability mechanisms on the delivery of quality health services in Kenyatta National Hospital, Kenya.
ii. To determine the influence of management accountability mechanisms on the delivery of quality health services in Kenyatta National Hospital, Kenya.
iii. To determine the influence of board of directors' accountability mechanisms on the delivery of quality health services in Kenyatta National Hospital, Kenya.
iv. To establish the influence of payer accountability mechanisms on the delivery of quality health services in Kenyatta National Hospital, Kenya.

1.4 Research Questions

i. What is the influence of professional health provider accountability mechanisms on delivery of quality health services in Kenyatta National Hospital, Kenya?
ii. What is the influence of management accountability mechanisms on delivery of quality health services in Kenyatta National Hospital, Kenya?
iii. What is the influence of the board of directors' accountability mechanisms on delivery of quality health services in Kenyatta National Hospital, Kenya?
iv. What is the influence of the payer accountability mechanisms on delivery of quality health services in Kenyatta National Hospital, Kenya?

1.5 Justification of the Study

The essence of health coverage that is universal is to provide broad and extensive access to essential care services for health preservation without inducing financial difficulties to communities at family and individual level, which in turn leads to more fruitful and unbiased societies (WHO, et al., 2018).

However, universal health coverage should not be outlined or deliberated on, besides being enforced without an attention on quality of health services being delivered. It is imperative to ensure that care adheres to the needs and preferences of the communities and individuals as well as safety and effective standards. It should also be timely and equitable across populations (WHO, et al., 2018).

Excellence in delivery of quality health services therefore, derives and is paramount in achieving universal health coverage. Lack of delivery of quality health services must lead to questioning the need to have universal access to health care for it should never be a question of quantity of care but quality of care.

Governance accountability is about assurance and trust. If an organization states its vision or purpose as well as its mission and goals that will be attained during its existence, then its stakeholders need to have knowledge on the way it will be handled in order to remain consistent with its words and actions. Hence, the organization will lose its customers' trust if it fails to meet the expectations of what it promises (Sandra, 2016).

KNH vision is to be "A world class patient-centred specialized care hospital" with a mission statement thus "To optimize patient experience through innovative evidence based specialized healthcare, facilitate training, research and participate in national health policy formulation" The stated core values are Customer focus; Professionalism and integrity; Equity and Equality; Teamwork and team spirit; Safety.

Given the above value proposition, commitment and promise, KNH is expected to deliver the highest quality health services humanly possible. However, the hospital is often in the news for overcrowding, long patient waiting time, patient safety gaps and other health workforce issues (Merab, 2018; Owiti, 2018).

Therefore, this study set out to establish the influence of governance accountability mechanisms on delivery of quality health services in the hospital.

1.6 Limitations of the Study

The study is a one time survey whose results may have to be generalized to other healthcare settings besides KNH. Where applicable, such generalization must proceed with a lot of caution due to peculiarities of each setting. There may be possible biasness in the measure of governance accountability mechanisms due to personality of individuals exercising authority. The structured questionnaire was standardized to all respondents.

1.7 Delimitations of the Study

All the relevant actors identified did not have to respond to the study instruments, nonetheless, hospital staff members and heads of selected departments, were called upon to respond to questions regarding accountability role of each actor group.

1.8 Significance of the Study

The governance accountability mechanisms was unpacked by various key health actors whose actions or omissions impact on delivery of quality health services in respect to one level 6 hospital. KNH being the first and the largest referral hospital in Kenya, the study has described and documented governance accountability mechanisms associated with delivery of quality health services that in many cases are taken for granted.

The findings of the study will benefit the Board of management in their governance function of the hospital by providing evidence-based insights to improve governance accountability mechanisms in the hospital. The staff of the hospital are likely to benefit from the study findings that highlight gaps or opportunities for improvement in their respective governance accountability responsibilities. The study has contributed significant new knowledge to the existing body of knowledge that will not only benefit scholars but also various health care actors, policy makers and the public in general.

1.9 Assumptions of the Study

An assumption was made that governance accountability roles of key health actors is integral in understanding how governance accountability mechanisms are operationalized in a hospital setting. It was also the assumption of the researcher that the respondents were open and honest in their responses

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1.10 Operational Definition of Terms

Accountability: Refers to a relationship between a duty holder and a person or organization to whom a duty is owed. It describes the capacity to demand that a person or organization give reasons to justify their behaviour and the capacity to impose a sanction if they fail to give reasons or if their performance is poor (WHO, 2019).

Delivery of Quality Health Services: In this study it refers to three dimensions of quality health care, viz: People-centredness, Safety and Timeliness.

Determinant: A factor, circumstance that influences or determines (Forsyth, 2014).

Governance Accountability Mechanism: Refers to processes designed to ensure that decisions and actions of duty holders account for the interests of the citizens (WHO, 2018).

Governance: Refer to the structure of decision-making and policy implementation in a system (Greer, et al., 2016). It is characterised by its pattern and routine rather than dependence on charisma or leadership.

Health actor: These are the individuals or organizations with stake for healthcare service provision, including health workers, hospital management and board, and payers. A more exhaustive list would include Ministry of Health, NGOs, professional associations, health authorities, and media. However, these actors are not included in the present study since they are involved with accountability in a lagged manner, such as after a complaint has been filed and determined as in the case of NGOs.

Hospital Board Accountability Mechanism: The body responsible for the overall leadership, vision and oversight of the hospital management. The study considers two components of Board governance accountability: Goal Setting and Financial Oversight.

Hospital Management Accountability Mechanism: Refers to the team led by the CEO and responsible for daily operations of the hospital. For this study two domains of hospital management governance accountability are considered viz: Quality Monitoring and Targets Monitoring.

Payers Accountability Mechanism: Refers to all third parties that pay for services through pre-arranged plans with service users and providers. These are the entities that purchase on behalf of the patient healthcare services and include; National Hospital Insurance Fund, private insurers and employer purchasers. This study considers two domains of governance accountability pertaining to payers thus: Performance-based Contracting and Market Competition.

Professional Provider: In this study refers to the clinical and technical staff providing services to patients and includes physicians, nurses, pharmacists and all other clinical staff who interact with the patients in the hospital. Professional governance accountability mechanisms considered for the study are: Peer Review and Continuous Professional Education.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Existing related literature is presented in this chapter, organized as per the study objectives. In addition, the section presents the theories that underpin this study.

2.2 Governance Accountability Mechanisms Influencing Delivery of Quality Health Services

Quality in health care is the extent to which services provided to communities and individuals escalates the probabilities on anticipated positive deired results on health. The desired results are steadly dependant on prevailing professional awareness (Institute of Medicine, 2018). Hence, the quality of health care is measurable. The measurement should be based on health improvements instead of expanding health service inputs with no regard to desires of service consumers and the populace.

There is an increased recognition across the world that quality health services should be effective, safe, and patient-focused, even though multiple quality aspects have been illustrated over decades. Additionally, in order to grasp the benefits and realize the gains in health services, quality health care should be prompt, unbiased and unified (WHO, 2018).

2.2.1 People-Centeredness

The extent of demands and preferences of health service by consumers are methodicaly intergrated into health care services and are not the same between diferrent countries. High-revenue generating countries have health systems which have measures and institutions to monitor patient knowhow and impressions on their specific medical states and general health. With people-focused care having been found to be different between

countries due to notion and attitude, most service consumers in OECD countries report an effective experience in view of time spent with the service provider, easy-to-understand clarifications, chance to raise concerns, and engagement in their care (Health at a glance, 2015). Attention to polite, caring and otherwise people-focused care is not as frequent in low- and middle-revenue countries. For example, in research on respectful care in maternity health, women face poor engagements with providers of health care and not included in health care decision-making or do not get information about the details of their care (Asefa &, Bekele, 2015,; Rosen et al., 2015).

As the Institute of Medicine (IOM) has surmised, patient-centeredness is a critical element of health care quality (Price, et al, 2015). Therefore, based on this, those charged with management and administrative roles need responsibility structures and systems to ensure that they accomplish their designated tasks, while complying with national principles, legislations, financial operations, ethical requirements and ensuring that the interests of their service users are well catered for (Chan, et al., 2018).

Kenyatta National Hospital expresses the purpose for it's very existence in the Vision of the organization thus: "A world class patient-centred specialized care hospital". One of the hospital's core values is customer focus. The hospital service delivery model is thus organized around the patient. Management has developed a number of tools that communicate this stated commitment including patient centred care guidelines of 2016 (Strategic plan 2013-2018; 2018-2023). However, there exists no studies carried out in KNH for literature review to inform governance accountability on performance milestones or opportunities for improvement in people-centredness.

2.2.2 Safety

Among the contributors of the global disease load is inflicted injury to patients, and the majority of this falls on middle and low revenue nations (Slawomirski, et al., 2017). The main origin of injuries include diagnostic flaws and treatment on basic health care, wrong-site surgery in hospital care, adverse events in long-term care, constraint injury and hospital-acquired infections (Levinson, 2014). The level of harmful events in health care services is high (Slawomirski et al., 2017). There are additional costs that result from reduced trust in the health system and loss of productivity, besides the costs that are directed in treating adverse events. Safety failures can be attributed to fraction of approximately 15% of expenditures in hospitals and activity in OECD countries. Regardless of these,many adverse events, about 83% can be prevented as evidence suggest that more than one in three adverse events in middle and low revenue countries occur in non-complex circumstances (Wilson et al., 2012). The cost of prevention has been further surpassed by the costs of safety failures hence elevating patient safety in Medicare hospitals in the United States, which has been shown to have saved an estimated US$ 28 billion due to elevated safety measures for patients between 2010 and 2015.

In KNH, safety of patients and staff is treated with priority. The hospital has committed to a safety policy that is aimed at avoidance and prevention of medical errors, patient injuries and adverse events that have been experienced in the past (Njeru, 2018). Recording medical errors data has been prioritized in the strategic plan (2018-2023) with the aim of ensuring minimal occurrence.

2.2.3 Timeliness

Satisfaction among service users can be predicted by waiting times for elective and emergency procedures (Bar-dayan, 2002). Delays that are encountered when receiving the necessary care may result in preventable deaths in emergency situations (Calvello et al., 2015). Regardless of all these, there is a variation in waiting times across OECD countries with regard to health services that are offered. For example, the waiting time for hip replacement in the Netherlands in 2015 was around 42 days, but Estonia had waiting time of 290 days, while Poland and Chile had over 400 days of waiting time. Finland and New Zealand have shown trends in waiting time reductions, with relative stability rates in many countries, such as Northern Ireland, United Kingdom and Denmark since 2008 (Health at a glance, 2017). Across low- and middle-revenue countries, there has been less work done in correlating health service delays. Waiting times are relatively long as shown by empirical research from individual countries. For example, a median of 213 minutes were required for laboratory results, 10 minutes was required for triage, and 178 minutes for attendance by a doctor in a section that deals with emergency cases in Barbados (Banerjea & Carter, 2006). Also, a waiting time of between 60 and 120 minutes was required by 74% of health care service consumers to get hospital registration and be attended to by a service provider for outpatient services in Nigeria (Oche & Adamu, 2013).

The KNH customer service delivery charter as clear commitments as to the expected services, patient responsibilities and waiting time for each service. However, patients turnaround times are longer than promised in the charter leading to congestion and lack of patient satisfaction (Mwanga, 2013). Further, the strategic plan of the hospital (2018-2023) SWOT analysis acknowledges poor time management as one of its weaknesses with a resultant strategic impact of low productivity.

2.3 Professional Provider Accountability Mechanisms Influencing Delivery of Quality Health Services

Professionalism is a requirement in the sustenance of the doctor-patient relationship and the trust of the public in the medical profession (Cohen, 2006). Lapses in professional conduct and unnecessary variation in professional performance may hamper achievement of patient safety (Swiggart, et al., 2016). For instance, Institute of Medicine (IOM) released a report 'To err is human' which showed that, annually, deaths of between 44,000 and 98,000 patients arising from medical errors occur in the United States alone (Pronovost, et al., 2016). In order to accord wide models of governance accountability, there is need to treat health care professionals, such as physicians, as one team of actors amongst several cadres and establishing measures of performances that are collective which ensures that sets of multiple negotiations are informed. However, this might not confer main roles of clinical decisions and professional expertise to contribute to the proper health care delivery to the community (Tuohy, 2003). Approaches that promote provider responsibility comprise professional accountability, reinforced ethical codes, professional standards and peer reviews in addition to other corrective actions (Van Belle & Mayhem, 2016).

2.3.1 Peer Review

Single disciplines and scholastic programmes are used for the assessment and provide official approval to training curriculums and form the basis of peer review, which is also extended to clinical services (Shaw, 2001). Accountability in clinical governance implies that health specialists must endeavour to advance the quality of health care and also demonstrate their actions towards this end (Leape & Fromson, 2006). An organisation-wide approach through clinical governance should be utilized by service providers

involved in a patient's care through continuous state of the art healthcare quality (Veenstra, et al., 2017). The central aim of clinical governance is to make sure that professionals are answerable for each other's performance. Membership in a professional body allows one to register as a professional in a certain field and therefore subject to self-regulation within the profession requiring conformity with certain standards and performance (Kuhlmann & Judith, 2008). In turn, the professional body has the exclusive jurisdiction to register the professionals and to pull them out from the register when their conduct has brought the profession into conflict through disciplinary procedures. Professional bodies are entities that have been constituted legally and it is a requirement for clinicians to register as members (Kuhlmann & Judith, 2008). They oversee and accredit training of specialists as their core mandate for the management of specialist practice and knowledge and ensuring that medical ethics are up to date. As stipulated by professional entities according to Bovens (2007), there are stipulated codes that ensure that members are governed by acceptable conduct. These regulations are overseen and implemented on the basis of peer review by professional supervisory bodies. Professional services are different from other services due to the fact that there is a common association with attributes such as autonomy, altruism, customer participation, specialist knowledge, self-regulation and customization (Jaakkola & Halinen, 2006). For there to be ethical competence, there needs to be an efficient ethical decision-making model one uses, a broad understanding of the values affecting practice, and moral reasoning mechanism that is post-conventional, in addition to the understanding of the code of ethics (Falender & Shafranske, 2007). Thus, it is a requirement that health providers exhibit a competent way of meeting their professional obligation as a requirement of professional ethics. However, psychology bears a particular responsibility for elevating ethics within its sphere of influence due to extreme emphasis on "worst-

case scenarios" involving legal violations or lapses in ethical standards. This may obfuscate the perspective that "professional conduct always involves ethics". Since its inception in 2002, the Kenya Health Workforce Information System (KHWIS) promotes data capture on relicensing, pre-service education, training, registration and, in-service specialties and upgrades, Continuing Professional Development (CPD), and deployment status of various clinicians in Kenya (Waters, et al., 2013).

In Kenya, the main professional bodies in health care include the Pharmacy and Poisons Board (PPB), the Kenya Medical Practitioners and Dentists Board (KMPDB), the Nursing Council of Kenya (NCK), the Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB) and the Clinical Officers Council (COC) (Waters, et al., 2013).

2.3.2 Continuous Professional Education (CPE)

Aptitude is the basis of an individual's capability in performing definitive duties competently, including: knowhow and relevant training; thoughtful analytical and capabilities expertise; and effective working due to relative values (Mannion, et al., 2017). The emergence of CPE courses have offered a brief and non-stigmatizing mediation to address problematic behaviours among physicians and this has been considered as unique and effective (Samenow, et al., 2008). For a successful incorporation of public health and safety, there is need to have mandatory licensing and registration programmes to ensure provision of minimal standards of competence by health providers and provider institutions. In order to establish safety within public health, there is need to have inspectorates to accomplish this (Shaw, 2001). However, for the maintenance and attainment of skills necessary to provide exceptional quality health

care services, there should be active participation in continuous clinical competency programmes.

Through CPE, organisations have been able to keep their health care professional providers knowledge and skill base updated which in turn has been used to develop and update clinical practice guidelines (CPGs). These are assertions that are methodically developed to aide in the practitioner-patient outcome about convenient health care for definitive clinical situations (Elshaug, et al., 2017). Reduction in unnecessary and inappropriate services can be achieved as a result of developing guideline recommendations through evidence-based process that is structured and having accurate applications by clinicians, which leads to improved outcomes, and potentially reduces net spending. For there to be an accurate record to whom care is being delivered and the way of delivery, it requires process accountability which should demonstrate that appropriate systems are being used (Allen, 2000). Constrains always arise for health professionals, and these can take the form of guidelines, protocols, prescriptive advice or standards to limit variation in therapeutic diagnostics and practice resulting in well-developed standards of care (Bryceland & Stam, 2005).

2.4 Hospital Management Accountability Mechanisms Influencing Delivery of Quality Health Services

Management and supervision are the processes of achieving prearranged objectives through various resources such as financial, technical and human (Bradley, et al., 2015). It is a cross-cutting necessity and responsibility in accomplishing all World Health Organization (WHO) health systems strengthening building blocks. Management systems have long been recognised as a driver of organizational conduct and capacity, including patient satisfaction and safety (Agarwal, et al., 2016). However, it has often

remained opaque how the hospital management can ensure that their management practices are made accountable to their stakeholders, particularly in terms of delivery of quality of services. Strengthened management empower attainment of broad outcomes with finite capabilities, hence investment in management capability may be viewed as a main vantage-point in a grand strategy (Bradley et al., 2015). According to Tsai et al., (2015), domains of management related to hospitals' performance include operations, monitoring, targets, and human resources.

2.4.1 Quality Monitoring

Monitoring involves assessing how well do things go on in the hospital and use of this for continuous quality improvement (Bloom & Van Reenen, 2010). The determination of change based on the input data show a well organised system on how organizations conduct performance control and audit (McConnell, et al., 2016). Lean operations to drive continuous advancement and performance discussions in order to establish a close relationship is attained by the use of visual tools to display frequent 'obstacles' within data. Organizations are allowed to manage their units from multiple contexts by adaptation of management tools which establish the targets that have roots in the 'balanced scorecard' approach (McConnell et al., 2016). Standards against which institutions or entities may be certificated by accredited auditors are provided by the International Organization for Standardization (ISO). Applications of these have been shown in health care, generally to quality systems in clinical departments and specifically to laboratory and radiology systems, and many more (Shaw, 2001). Setting aggressive goals and communicating them clearly to the staff, tracking performance on a frequent basis and displaying data in a visual manner and the use of standardization in care are used as high management quality practices (McConnell et al., 2016).

2.4.2 Performance Targets

The indirect control of any complex system that is necessary for governance within institutions such as a hospital is achieved through set targets and measured performance indicators. Accordingly, the desired results are ahead of time in measurable form; there is a mechanism for actual improved performance by obtaining feedback and measuring performance against specification (Bevan & Hood, 2006). Based on the performance, rewards or sanctions can be awarded including bonuses, reprimand, contract renewal, among others, depending on the performance against targets. In order to ensure that organizational resources are allocated appropriately and employee efforts are aligned so as to achieve all institutional aims, organizational objectives must be set (McConnell et al., 2016). Expectations for interactions with other organizations, tasks, persons responsible, time lines, frequency of reporting to the leader, description of final product, and resources to be provided to the organization are specifications of performance objectivity (Chan, et al., 2018). Conducting financial audits, evaluating the quality of services, and verification of completed activities can be used as mechanisms for external assessments.

Institutional audits and performance reviews, community control and enhanced transparency, and using staff incentives to engage in dialogue with service end users can be entailed within policies that promote enhanced governance accountability. This ensures that the organizational responsiveness to its stakeholders and thus improving organizational performance (Van Belle & Mayhew, 2016). In this regard, leaders formulate policies, patient safety, waste disposal, safe handling of medications and adverse events reporting mandated through laws and regulations so that these practices can be carried out appropriately (Chan, et al., 2018).

2.5 Hospital Board Accountability Mechanisms Influencing Delivery of Quality Health Services

Governance and leadership provided by hospital impact various key attributes of hospital performance such as patient safety and staff attitudes, and current wrongdoings related to poor quality health charge have shed light on such linkages (Mannion, et al., 2017).

In such schemes, it might be misunderstood that government is one among other networks that are in complex connection with a variety of economic and social sectors as well as at different hierarchy with linkages from the localised to the globalised. For service providers to be held accountable by the state (requiring long-term relationships and trust) or outsourcing (requiring provision of detailed information and verification), aside from following the chain of command, is limited (Tuohy, 2003). Public interest must be safeguarded through the political approach so as to enhance the trust of citizens towards institutions which have been mandated with certain means and responsibilities (Van Belle & Mayhew, 2016). Public investigation and public redress mechanisms are common means that are involved in public decision-making, and are used as a measure between the health system players and those processes that involve agreed responsibilities and roles.

2.5.1 Goal Setting

The Board's work is settting goals and objectives that are well articultated for the hospital (Swiggart, et al., 2016). According to Mannion, et al., (2017) an outstanding and prosperous Board is one that is able to make deliberations on corporate strategy that ensures organisational success and monitoring in an efficient and effective approach. This can be viewed both politically and technically by establishing major elements of stewadrdship through choosing criteria for setting priorities (Murray & Frenk, 2000). It

has been inferred that governance accountability mechanisms help attain three aims of controlling the abuse and misuse of authority and resources, providing the appropriate use of authority and resources and gaining knowledge and feedback by supporting improved management and service delivery (Brinkerhoff, 2004).

In order to ensure conformity, the Board enforces agreed upon contracts, through imposition of sanctions or the provision of rewards for performance (WHO, 2010). The idea is to have improvement in quality through use of set service standards, monitoring of achievements and imposition of contractual penalties (Allen, et al., 2016). According to Ebrahim (2003), governance accountability mechanisms should have enough inducements to facilitate conformity but should also be backed up by sanctions for non-conformity such as loss of funding. To facilitate conformity, the most widely used tools of accountabilty such as reports and disclouser statements should be put to use. According to Touhy (2003), three things are required for conformity: information provision, responsibility identification, and sanctions availability. As Aveling, et al., (2016) proposes, to be held liable, an actor must know of the standards she/he is expected to meet, be charged with obligation for meeting those standards, and have acceptable indipendence and capacity in his/her choice of actions, and avenue to resources, to be able to comply. The behaviour and performance of the agent being evaluated against predetermined standards by the principal and where misdeeds are sanctioned is a process within a principal-agent relationship which therefore, defines governance accountability (Allen, 2000). However, it is notable that sanctions play a big role in aligning performance monitoring, priority setting and governance accountability (Smith, et al., 2012).

2.5.2 Financial Oversight

Mechanisms may be developed by the Board whereby external auditors verify what activities were completed, evaluate the quality of services, or conduct financial audits. Regulations, policies and laws can be enacted by the leadership regarding patient safety in order to authorize practices such as adverse event reporting, safe handling of medications, or waste disposal (Chan, et al., 2018). Governance ccountability mechanisms, such as annual project reports and financial records are used not only by funders to keep track of hospital spending but also to publicize the projects and programs where expenditures are incurred (Ebrahim, 2003). An example would be in response to alleged financial misappropriation by hospital executives, there is need for greater clarification in health care public reporting. Fiscal instruments provide a clearer identification of responsibility and a relatively stronger set of sanctions and cannot be interchanged with non-fiscal instruments (Tuohy, 2003). Policies to enhance community control and transparency, performance reviews, use of staff incentives to engage in dialogue with service users and organisational audits can be used as measures to enhance governance accountability (Van Belle & Mayhew, 2016). Leaders with poor performance can be motivated to improve their indicators through public reporting (Chan, et al., 2018).

2.6 Payers Accountability Mechanisms Influencing Delivery of Quality Health Services

According to Brinkerhoff (2004), supply information, assessment of demand capacity and exercised sanctions and oversight should be an identifiable linkage among health sector players through a defined framework. This is also to be found in relation to payer-provider relationship. The physicians must be given the authority by the patients, through

delegation of authority to decide as the patient would have decided, given the same level of expertise. This is due to the fact that patients cannot specify and enforce contracts as is common in other types of agency relationships, otherwise lack of the appropriate information might lead to uncertain outcomes of health care (Tuohy, 2003).

2.6.1 Performance-Based Contracting

Performance-based contracting aims to incentivise improvement of hospital efficiency, as well as risk selection on patients, improve matching between providers and patients, and prevent gaming on reporting (Lu & Donaldson, 2000). Imposition of contractual sanctions, monitoring of performance and use of service specifications improves quality (Allen, et al., 2016). Third party service payers ensure efficiency in delivery of services through contracting. The challenge, then, is to make sure that the contracts are executed properly, and that to attain policy objectives there shoud be an incentive of proper payment mechanisms either before or upon completion so as to ensure the proper execution of contracts (Greer, et al., 2016).

2.6.2 Market Competition

In order to avoid taking business elsewhere, providers need to improve prices, responsiveness and quality through pressure that is exerted by insurers and patients under the guise of choice for the market based systems. Additionally, professional provider accountability to oversight, or mechanisms of payment designed to improve quality and ensure control and minimum standards can be done as direct incentives through managerial control (Smith, et al., 2012). Lower investment ininformation technology, personnel, and other key contributors to quality care may lead to degrading a hospital's financial health as a result of less or minimal revenue (Manary, et al., 2015). Less or minimal focus in the creation of public and democratic values and more focus on

financial performance are mechanisms that create accountability in the market arena (Jaakkola & Halinen, 2006). However, a close scrutiny of public service activities through democratic means, legislative committees, parliamentary debates and administrative tribunals which are the common conventional and traditional modes pose a chalenge on the transition to business-like models.

2.7 Theoretical Framework

This sub-section outlines the theoretical framework underpinning the study as well as the conceptual framework.

2.7.1 Agency Theory

The organizational economics and management literature as a theoretical framework for structuring and managing contract relationships and to explain the behaviours of principal and agent which is known as Agency theory, also referred to as the principal-agent model (Van Slyke, 2006).The focus of this theory is mostly on accountability mechanisms focusing on the exploitation of asymmetric information by the agent which may be as a result of not resolving opportunistic behaviour. Health care professionals as agents acting on behave of the patient, can seek to pursue their own interests rather than meeting the professional mission or broader organizational purpose unless monitored (Mannion et al., 2017). Consequently, the hospital management and the hospital Boards are imposed as instruments for evaluating and monitoring medical staff to account for their performance or actions. Clinicians, acting as agents of the patient, have obligations to provide best possible care at reasonable costs and are therefore individually accountable in that role. This study also included the role played by third party payers in the provider-user relationship with the implication that payers act as agents of the user and therefore are themselves accountable actors. Important to the agency theory

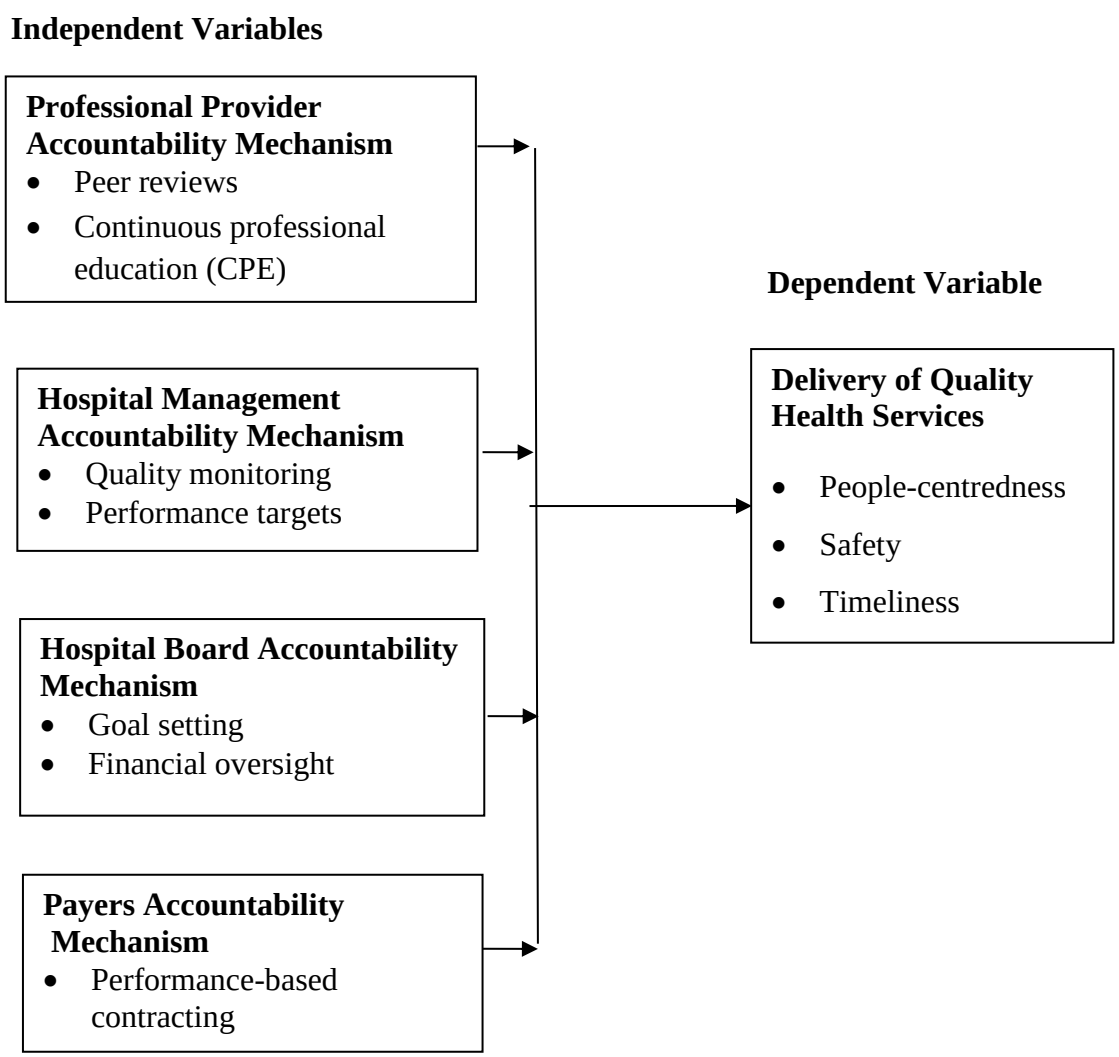
argument is the issue of uncertainty and the costs associated with measuring agent behavior and the outcomes produced. Unobservable behavior of the agent due to adverse selection and moral hazard can be corrected to eliminate inefficiencies that can arise from such behavior. It is also vital to align the actions of the agent with the goals of the principal by ensuring introduction of penalties, information systems and incentives, stringent reporting procedures, and employment of monitoring mechanisms that eventually constitute the accountability mechanisms. Accountability is strongly anchored on the ability of the principal to punish and hold the agent to account for any shortcomings (Aveling, et al., 2016).

2.8 Conceptual Framework

The layout of the conceptual framework shows the relationship between independent and dependent variables. The independent variables adapted in this study are professional health provider, hospital management, hospital Board and payers accountability mechanisms; while the dependent variable is delivery of quality health services. This is presented below in Figure 2.1

Figure 2.1

Conceptual Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Information regarding the location of the study, target population, research design, variables, sample size and sampling technique in addition to instrumentation, data collection methods and analysis of data procedures are provided in this chapter.

3.2 Research Design

This was a cross-sectional descriptive study that used mixed methods of both qualitative and quantitative approaches. Quantitative data collected via a structured questionnaire was used to obtain information from various health actors in the hospital. This was to enable collection of data without manipulating the research context where the researcher has no control of variables (Mugenda &, Mugenda, 2003). The qualitative aspect of the research used open-ended questions constructed in form of a Key Informant Interview Guide to collect responses from purposively selected Key Informants.

3.3 Study Location

The study was conducted in KNH. The hospital is situated in Nairobi County, Kenya. KNH is the largest referral and teaching hospital in Kenya, consequently, it provides a fertile ground to learn about health governance accountability at one setting that is a microcosm of best practice in Kenya. The specific location of the hospital is the area to the immediate left of Upper Hill in Nairobi the capital city of Kenya. It is about 3.5 Kilometres to the west of the central business district and occupies an area measuring 45.7 acres. The geographical coordinates of the hospital location are: 1.3013^{o}S, 36.8070^{o}E.

3.4 Target Population

Target population is the entire aggregation of a group of individuals or objects that have similar characteristics or meet set criteria of the study (Mugenda & Mugenda, 2003).The target population of the study comprised all employees in KNH, estimated at 4700 and distributed unevenly among various professional cadres of clinical, non-clinical and management staff.

3.5 Inclusion and Exclusion Criteria

Inclusion criteria refers to the characteristics that respondents or the study subject must possess if they are to be included in the study. On the other hand, exclusion criteria refer to the characteristics that would disqualify a prospective respondent from inclusion in the study.

3.5.1 Inclusion Criteria

Data was collected during the day working hours between 8.00 am and 5.00 pm. The study respondents included the following: Those who have direct contact or interaction with patients (nurses, medical officers). Those who may not have direct contact or interaction with patients but their work directly affects patient care (pharmacy, laboratory, X-ray, radiology) and supervisors, managers and administrators.

3.5.2 Exclusion Criteria

The study excluded consultant physicians, staff on leave and interns. The study also excluded any staff who had worked in the hospital for less than 12 months.

3.6 Sampling

3.6.1 Sampling Size Determination

Stratified sampling technique was used to select respondents for the study. To determine the sample size, Yamane (1967) formula was applied as follows:

$$n = \frac{N}{1 + N(e)^2} = \frac{4715}{1+4715(0.05)^2}$$

Where: $= \frac{4715}{12.7875}$

n= Sample size $= 368.7$

N= Target Population

e = Level of significance, taken at α = 0.05

n = 368.7

Hence, rounding up to nearest whole number yields the sample size, n =369. In addition, 4 key informants comprising heads of departments were selected purposively due to their expected knowledge and experience in the key areas of study.

3.6.2 Sampling Procedure

To get the respondents to participate the researcher applied stratified sampling technique. Each department was treated as a stratum and its actual percentage representation in the target population was calculated from the existing human resource records. The size of each stratum in the sample was taken in percentage proportion to its size in the population. Therefore, each department was proportionately represented by a number of staff that was calculated as follows:

s = 369/N x Y

Where

369 = total sample size

N = total population

y = total staff in department

s = sample size of each department

Random sampling by balloting was then finally used to get specific individuals for department sample (s).

Purposive sampling was used to select 4 key informants from the heads of departments under the study, namely: Head of Department (HOD) Clinical Services; HOD Quality Health Care; HOD Corporate Services and HOD Nursing Services.

3.7 Instrumentation

Two instruments, a questionnaire (Appendix III) and a key informant interview guide (Appendix IV) was used to collect data. The questionnaire was hand delivered to the respondents to fill in the presence of the researcher or the research assistant in order to answer any concerns. The questionnaire had two sections with section A dealing with demographics and section B focussing on study variables in form of different types of questions. Key informant interview guide was used for face-to-face interviews with 4 heads of department who were purposively selected due to their expected wealth of experience and knowledge about the hospital departments they led.

3.8 Pre-testing

The research instruments were pre-tested at The National Spinal Injury Hospital Nairobi County. This is a national referral hospital that shares similar governance structures with

KNH. Pre-test was to enable the researcher to thoroughly revise questions asked on each of the study variables in the questionnaire for purposes of clarity and understanding by the respondents. The pre-test sample was 10% of the target population (Mugenda & Mugenda, 2003), for the total health workers population was not large hence may yield a sample size of less than 30 respondents.

3.9 Validity and Reliability

3.9.1 Validity

This refers to how well a test measures what it is supposed to measure (Phelan & Wren, 2006). For this study validity of data collection instruments was established through pre-testing at the National Spinal Injury Hospital, in Nairobi County. Review of the questionnaire was carried out to assess the clarity, understanding and interpretation of both the instructions and questions.

3.9.2 Reliability

This refers to the degree to which an assessment tool produces repeatable and consistent results (Phelan & Wren, 2006). In order to ensure reliability, the respondents were subjected to the same set of questions within their work environment. This was enhanced further by methodological triangulation where both qualitative and quantitative data collection methods were used. Cronbach's Alpha was used to measure the internal consistency of the study instruments. According to Cronbach (1951), there is internal consistency of study items when the Alpha value lies between 0.70 and 1.0.

3.10 Methods of Data Collection

The researcher and his research assistants hand delivered the questionnaire to respondents to fill. They remained around to answer any questions as the respondents

filled the questionnaire from one department to another. Each questionnaire did not take more than 20minutes to complete. It took 10 days to have all the questionnaires filled.

Key Informant interview guide was used for audio interviews with the 4 heads of selected departments. Interview appointments were requested via email or telephone two weeks before. The researcher explained the objectives of the study to the respondents. The researcher conducted the interview by telephone and recorded responses on an audio recording device. The interview did not take more 35minutes.

3.11 Variables and their Measurements

Dependent variable (outcome variable) for this study was the delivery of quality health services. It was measured under three quality healthcare indicators viz: people-centredness, safety and timeliness.

Independent variables (predictor variables) for this study were:

i. Professional Provider Accountability Mechanism – this was measured under the following indicators; Peer review and continuous professional education.

ii. Hospital Management Accountability Mechanism - this was measured under the following indicators; quality monitoring and performance targets.

iii. Hospital Board Accountability Mechanism - this was measured under the following indicators; goal setting and financial oversight.

iv. Payers Accountability Mechanism - this was measured under the following indicators; Performance-based contracting and market competition.

3.12 Data Analysis

Descriptive analyses was performed by use of SPSS version 21 to establish the distributional properties of the data. Descriptive statistics such as percentages and frequencies were used to summarize demographic data. Logistic regression method was used because the dependent variable was categorical and binary in nature. The outcome is binary or dichotomous hence possibly Yes or No. These will contain data coded as Yes=0 and No=1.

Logistic regression established the best fitting model that could describe the relationship between the binary characteristics of the dependent variable (outcome or response variable) and the independent (explanatory or predictor) variables. This analysis generated the coefficients, standard errors, odds ratio and significance levels of a formula to predict a logit transformation of the probability of presence of the characteristic of interest.

Logistic regression is expressed as:

$$f(p) = \frac{1}{1+e^{-p}} \text{.....1}$$

Equation 1 can be simplified as:

$\text{logit}(p) = b_o + b_1X_1 + b_2X_2 + b_3X_3 + \ldots\ldots + b_nX_n$……..2

where:

p = probability of presence of the characteristic of interest

b_0 = representation of the reference group

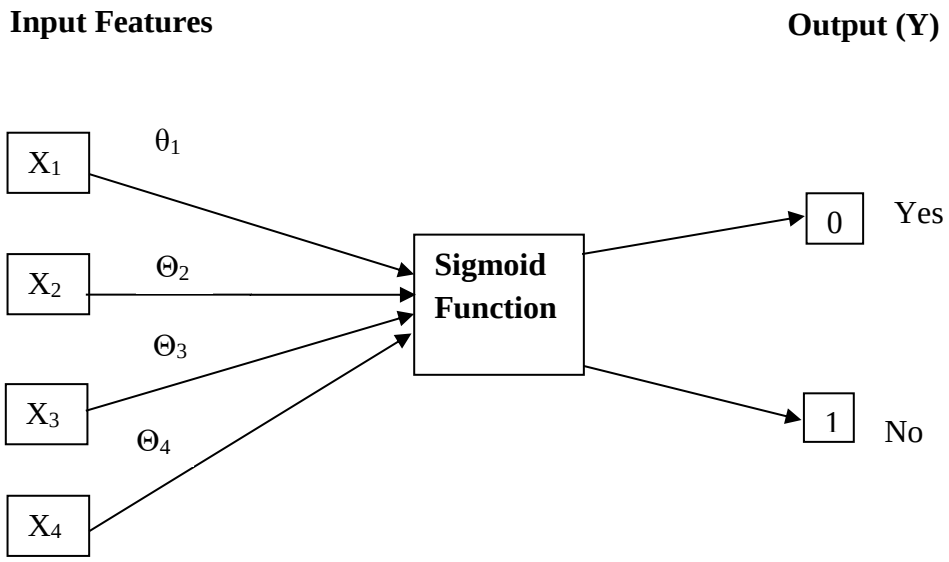
b_1 = the regression coefficients associated with the reference group

$X_{1}\ldots_{n}$ = explanatory variables

Logistic Regression Model for data analysis was as follows:

Figure 3.1

Logistic Regression Model



3.13 Ethical Considerations

Ethical clearance was sought from the Kenya Methodist University (KeMU) and upon clearance a permit to carry out research was gotten from NACOSTI. Further authorization was sought from the UoN-KNH Ethical Review Committee upon which data was collected from the staff. Ethical considerations also included: informed consent, confidentiality, autonomy, privacy and no harm. Refer to Appendices I & II for the Informed Consents.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, data analysis results are presented and discussed in line with the specific objectives of the study. Quantitative data for the research was collected from Kenyatta National Hospital management, clinical and non-clinical staff totalling 369 in number using a structured questionnaire. Research assistants who had been trained for the purpose administered the questionnaire directly to the respondents. Qualitative data was collected using a key informant interview guide from 4 heads of departments. Quantitative data was analysed using logistic regression to ascertain existence of any statistically significant relationship between the study variables. Qualitative data was analysed using emerging themes. Descriptive analysis is discussed beginning section 4.4 while inferential analysis is presented and discussed from section 4.10 of this chapter.

4.2 Reliability Pre-test Results

The reliability of the research instruments was tested by computing the Cronbach's Alpha Coefficient for each of the study variables. The results are presented in Table 4.1 below.

Table 4.1

Cronbach's Alpha Reliability Coefficients

Variable	No. of Items(N)	Cronbach'sAlpha Coefficient
Professional provider accountability mechanisms	9	0.852
Hospital management accountability mechanisms	10	0.715
Hospital Board accountability mechanisms	8	0.846
Payer accountability mechanisms	8	0.748
Delivery of quality services	12	0.946

Cronbach's Alpha Coefficients for the variables ranged between 0.715 for hospital management accountability mechanisms and 0.946 for delivery of quality services. According to Cronbach (1951), there is internal consistency of study items when the Alpha value lies between 0.70 and 1.0.

4.3 Participation Rate and Enrolment of the Participants

A total of 369 questionnaires were distributed to the respondents in all departments. On verification, only 360 questionnaires were found to have been successfully filled with 9 having been incomplete hence rejected. Therefore, the response rate was 97.6% as indicated in Appendix V (on page 87). The high response rate was possible because the questionnaires were administered directly to the respondents and filled while the research assistants waited.

4.4 Demographic Characteristics of the Respondents

The socio-demographic characteristics of respondents are presented in Table 4.2 on the next page. Socio-demographic characteristics tabulated include gender, age, education and work experience of the respondents in this hospital-wide study. More than half of the respondents were male 201 (55.8%) while the rest 159 (44.2%) were female. This is an indication of gender disparity where male employees are more than the female employees. This observation is consistent with gender distribution of employees in most sectors in the country given that more males graduate and get employed in various professions than females. Most of the respondents 161 (44.7%) were aged between 25-34 years. In addition, 139 (38.6%) were aged between 35-44 years. Together, these two age groups between 25-44years make up 300 (83.3%) of the respondents. These results imply that majority of the employees at KNH are young people offering healthcare services.

Table 4.2

Demographic Characteristics of the Respondents

Variable	Frequency	Percent
Professional Cadre		
Management staff	42	11.7
Non-Clinical staff	104	28.9
Clinical staff	214	59.4
Gender		
Male	201	55.8
Female	159	44.2
Age		
< 25 years	9	2.5
25-34 years	161	44.7
35-44 years	139	38.6
45-54 years	45	12.5
> 55 years	6	1.7
Education Level		
Certificate	55	15.3
Diploma	140	38.9
Degree	142	39.4
Masters	23	6.4
Years of Experience		
< 3 years	55	15.3
3-9 years	189	52.5
10-15 years	89	24.7
16-19 years	7	1.9
20-24 years	17	4.7
>25 years	3	0.8

The level of education achieved by the respondents was considered an important indicator of the employees capacity for effective and efficient delivery of quality services. The majority of respondents 142 (39.4%) were undergraduate degrees followed closely by diploma holders who were 140 (38.9%). Respondents with the specialist degrees at masters level were 23 (6.4%). The results are an indication of highly trained pool of health workers at the hospital. This observation is inconsistent with distribution of health workers in most of health facilities in the country where majority of health workers are certificate and diploma holders. This phenomenon could be attributable to

the fact that KNH is a level 6 teaching and referral hospital hence attracting and retaining highly trained health workforce. Work experience of the respondents is an indicator of employees' ability to perform their duties effectively and efficiently having been used to laid down procedures, guidelines, policies and protocols. More than half of the respondents 189 (52.5%) had worked for the hospital for between 3-9 years at KNH.

4.5 Responses on Delivery of Quality Health Services in KNH

The aim of this study was to assess the influence of governance accountability mechanisms on delivery of quality health services in KNH. Delivery of quality health services was measured using three indicators, people-centredness, safety and timeliness of services (Table 4.3 on the next page). The respondents were asked what their understanding of people centredness was. Half, 189 (52.5%) said people-centredness was listening and answering to patients' questions and concerns, 82 (22.8%) said it was core in developing care management plan with patient involvement. Majority of the respondents 294 (81.7%), and 320 (88.9%) said that the hospital has mechanisms to break language barrier between patient and service provider, and safety measures are adhered to in delivery of health services respectively. These results are similar to results found by Price et al., (2015) who concluded that patient-centredness is a critical element of healthcare policy.

These results are further supported by Chan et al., (2018) who said that those charged with the responsibility for healthcare delivery need accountability mechanisms to ensure that ethical standards and the interests of the service users are well taken care of.

Table 4.3

Responses on Delivery of Quality Health Services in KNH (N=360)

Variable	Frequency	Percent
What do you understand by people-Centred		
Respect for patient preferences and needs	79	21.9
Listening and answering to patients questions and concerns	189	52.5
Core developing care management plan with patient involvement	82	22.8
None of the above	10	2.8
There are mechanisms in the hospital to break language barrier between patient and service provider?		
Yes	294	81.7
No	66	18.3
Safety measures are adhered to in delivery of health services at KNH		
Yes	320	88.9
No	40	11.1
Emergencies are always acted upon as quickly as possible		
True	286	79.4
False	74	20.6
All interventions are always designed to minimize medical errors		
True	269	74.7
False	91	25.3
There are clear guidelines to prevent hospital acquired infections		
True	266	73.9
False	94	26.1
Thorough review of medications in use by the patient is carried out to prevent interactions with new medication		
True	170	47.2
False	190	52.8
Services at KNH are delivered on time		
Yes	293	81.4
No	67	18.6
Delays in providing services are kept to a minimum		
True	291	80.8
False	69	19.2
An efficient flow system for scheduling patients is in place		
True	291	80.8
False	69	19.2
Patients are not notified of projected waiting time		
True	205	56.9
False	155	43.1
Situations requiring urgent interventions are not acted upon as quickly as possible		
True	88	24.4
False	272	75.6

On timeliness of delivery of health services, majority of the respondents 293 (81.4%) said that services are delivered on time and that there is efficient flow system for

scheduling patients 291 (80.9%). However, over half of the respondents 205 (56.9%) agreed that patients are not notified of projected waiting time. Asked the reasons for delayed services most of the key informants said it was due to inadequate workforce and hospital bureaucracies. For instance, key informant A said "*You know KNH is an old hospital with aging infrastructure and lacks modern equipment besides inadequate staff."*

These results are similar to a study where waiting time of between 60 and 120 minutes was required by 74% of health care service consumers to get hospital registration and be attended to by a service provider for outpatient services in Nigeria (Oche & Adamu, 2013).

Whereas, delivery of quality health services is expected to be people-centred, safe and timely amongst other parameters the respondents in this study indicated that some of the parameters of delivery of quality health services were missing in KNH. For instance, only 79 (21.9%) agreed that people-centredness was about respect for patient preferences and needs yet patient preferences and needs are central to people-centred care. It was also observed that only 82 (22.8%) agreed that people-centredness was about engaging patients in their care management plan. Thus, this demonstrates lack of people-centred care and by extension compromised delivery of quality health services in KNH. These results align with Asefa and Bekele, (2015), who observed patients face poor engagements with providers of care and are not included inhealth care decision-making or do not get information about the details of their care.

4.6 Governance Accountability Mechanisms of Professional Providers

The first objective in this study was to determine the influence of governance accountability mechanisms of professional health providers on delivery of quality health services. The results are shown in table 4.4 on page 43. Majority of the professional

health providers 299 (83.1%) are registered members of their respective professional bodies. They are self-regulated via certification and practise licenses. However, half of the respondents 184 (51.1%) indicate that there are no consequences for breach of self-regulation rules. Asked what types of consequences are faced only 51 (14.17%) respondents stated that "*They are de-registered besides other disciplinary measures."* This in effect renders peer review mechanisms on self-regulation inconsequential and of no effect hence a likelihood of exposing patients to unethical practises by professional health providers

Peer reviews was considered vital in ensuring professional conduct and ethics in the delivery of quality health services. Professional bodies ensure adherence to laid down codes of conduct and are responsible for monitoring and evaluation of its members for self-regulation. Therefore, registration and licensing of members are key indicators of professionalism and the likelihood of adherence to laid down codes of conducts and ethics and by extension delivery of quality health services. Majority of the respondents as indicated above said they were members of their respective bodies who are self-regulated by certification and licensure. By this measure therefore, health providers in KNH deliver quality health services. Van Belle and Mayhew (2016) stated that approaches that promote provider responsibility comprising professional accountability reinforced ethical codes, professional standards and peer reviews in addition to other corrective actions. It is further observed that although the majority of respondents 274 (76.1%) get opportunities for CPE such opportunities do not make a difference in terms of value addition to the professional provider because the majority 343 (95.3%) said CPE trainings did not make a difference. Continuous Professional Education keep health providers updated in terms of knowledge and skills hence improved clinical practice

guidelines. It is therefore, expected that CPE assist health professional provider deliver quality health services.

Table 4.4

Responses on Governance Accountability Mechanisms of Professional Providers (N=360)

Variable	Frequency	Percent
Are you a registered member of a professional body?		
Yes	299	83.1
No	61	16.9
Self-regulated by Certification		
Yes	331	91.9
No	29	8.1
Self-regulated by accreditation of training schools or colleges		
Yes	307	85.3
No	53	14.7
Self-regulated by issuance of practice license		
Yes	277	76.9
No	83	23.1
Are there consequences of a member of your profession who breaches self-regulation		
Yes	176	48.9
No	184	51.1
Do you get opportunities for Continuous Professional Education (CPE)?		
Yes	274	76.1
No	86	23.9
CPE Trainings improved my clinical knowledge base		
Yes	92	25.6
No	268	74.4
CPE Trainings improved my clinical skills		
Yes	174	48.3
No	186	51.7
CPE Trainings enabled me to use clinical guidelines accurately		
Yes	125	34.7
No	235	65.3
CPE Trainings enabled me interact better with patients		
Yes	80	22.2
No	280	77.8
CPE Trainings did not make a difference		
Yes	17	4.7
No	343	95.3

As observed above, majority of respondents agreed that opportunities for CPEs were available. However, the trainings did not seem to make a difference to the majority of professional health provider in terms of improvement in their clinical knowledge base and clinical skills.

These results are in conflict with Elshaug et al., (2017) who established that through CPE organisations have been able to keep their health care professional providers knowledge and skill base updated which in turn has been used to develop and update clinical practice guidelines (CPGs).

4.7 Governance Accountability Mechanisms of Hospital Management

Quality healthcare policy is a core indicator of the hospitals intend to deliver quality health services to its patients. It is therefore, expected that if the guidelines of the policy are implemented by professional health providers, patients would receive quality health services in the hospital. Responses on healthcare policy are presented on table 4.5 below.

Table 4.5

Responses on Hospital Management Mechanisms: Healthcare Policy (N=360)

Variable	N	%
Is there a hospital quality healthcare policy		
Yes	11	86.4
No	49	13.6
How helpful has the policy been in your healthcare decision-making?		
Extremely helpful	120	33.3
Very helpful	153	42.5
Somewhat helpful	69	19.2
Not so helpful	12	3.3
Not at all helpful	6	1.7

The majority of the respondents 311 (86.4%) said that the hospital had a quality healthcare policy. The policy was said to be extremely helpful and very helpful in making decisions on healthcare by 120 (33.3%) and 153 (42.5%) of the respondents respectively. From the responses, majority of respondents agreed that the policy was helpful. Therefore, it can be concluded that the hospital policy on quality healthcare indeed was instrumental in shaping and guiding healthcare decisions that eventually impacted positively on delivery of quality health services in the hospital.

These results support Agarwal et al., (2016) who established that management systems are a driver of organizational conduct and capacity, including patient satisfaction and safety.

Management of an organization is responsible for establishing and ensuring standards and quality of services offered to its customers. Various quality management tools are employed including service charters. Service charters are public documents addressed at external stakeholders setting out information on services provided, expected standards of service and procedures on how to make complaints or suggestions for improvement by customers. Responses on hospital service charter are presented in table 4.6 on page 46.

Majority of the respondents 325 (90.3%) said the hospital had a service charter. However, 287 (79.7%) of the respondents said the service charter is not displayed in prominent easy to see places. In addition, 207 (57.5%) respondents said that the service charter has not helped improve delivery of quality services in KNH. A further 76.9% (277) of the respondents said the hospital charter does not clearly state expected performance indicators of the hospital. Another 89.4% (322) of the respondents indicated that the service charter does not direct stakeholders on feedback mechanisms. Respondents confirmed that KNH has a customer service charter; however, it seems the

customer service charter has not been put to good use in achieving the institutions promise to its customers.

Table 4.6

Responses on Hospital Management Mechanisms: Hospital Service Charter(N=360)

Variable	N	%
Does KNH have a hospital Service Charter (SC)?		
Yes	325	90.3
No	35	9.7
Is Service Charter displayed in prominent places?		
Yes	73	20.3
No	287	79.7
Hospital SC has helped improve delivery of quality services		
Yes	153	42.5
No	207	57.5
Hospital SC enables patients understand services being offered		
Yes	188	52.2
No	172	47.8
Hospital SC states clearly expected performance indicators of the hospital		
Yes	83	23.1
No	277	76.9
Hospital SC directs stakeholders on feedback mechanisms		
Yes	38	10.6
No	322	89.4
Identified service delivery gaps are addressed urgently		
Always	127	35.3
Often	141	39.2
Sometimes	71	19.7
Rarely	17	4.7
Never	4	1.1
Does the hospital have a performance management policy?		
Yes	308	85.6
No	51	14.2
Missing system	1	0.3
Does the hospital have right people in the right job at the right time?		
Yes	297	82.5
No	63	17.5
What are the provisions of performance management policy?		
Agreement between staff and managers	140	38.9
Set performance target timelines	115	31.9
Rewards for exceeding performance targets	75	20.8
Sanctions for missing performance targets	25	6.9
None of the above	5	1.4

The respondents said it did not help improve quality of service, it does not state clearly the expected performance of the hospital as well as it lacks feedback procedures for the hospital stakeholders. Customers of the hospital miss the opportunity to interact with the service charter for it is not displayed in prominent easy to see places. Therefore, it can be concluded that the responses are serious indictment of the supposedly positive impact a service charter should have in delivery of quality health services in KNH. This contradicts Bevan and Hood (2006) who said management quality tools are measures of performance against the given specification and provide feedback on actual performance to improve quality of services.

4.8 Governance Accountability Mechanisms of the Hospital Board

The hospital board's first and foremost responsibility is to set goals, policies and direction for the organization. An effective Board is expected to be an important indicator of delivery of quality health services in the hospital. The effectiveness of the Board can be measured from its sound policies, and its oversight functions that are carried through its functional committees. Responses on hospital Board are presented in Table 4.7 on the next page. Majority of the respondents 318 (88.3%) agreed that the hospital had a strategic plan covering the period 2019-2023. Only 94 (26.1%) somewhat agreed that individuals working in the hospital understood their roles as well as organizational goals. The majority 319 (88.6%) of the respondents said the hospital Board had a functional finance committee and 335 (93.1%) also agreed that financial transactions were monitored. In addition, 288 (80%) of the respondents agreed that external auditor's reports were shared with staff and other stakeholders. It was further observed that only 155 (43.1%) were able to state the hospital vision correctly thus "A world class patient-centred specialized care hospital" while more than a half 205 (56.9%) stated it incorrectly or did not know.

Table 4.7

Responses on Hospital Board Accountability Mechanisms

Variable	Frequency	Percent
When do you practice the core values of the hospital in delivery of services		
Always	202	56.1
Often	38	10.6
Sometimes	104	28.9
Rarely	9	2.5
Never	7	1.9
Does KNH have a strategic plan?		
Yes	318	88.3
No	42	11.7
What period does it cover?		
2013-2018	20	5.6
2012-2019	49	13.6
2019-2023	240	66.7
2018-2021	51	14.2
Individuals understand their role in the organization goals as well as departmental goals		
Strongly disagree	23	6.4
Disagree	6	1.7
Somewhat disagree	70	19.4
Neither agree nor disagree	11	3.1
Somewhat agree	94	26.1
Agree	93	25.8
Strongly agree	63	17.5
Does the board of the hospital have a functional finance committee?		
Yes	319	88.6
No	41	11.4
Are financial transactions of the hospital monitored by the Board?		
Yes	335	93.1
No	25	6.9
Frequency of Internal audit		
Every month	12	3.3
Quarterly	69	19.2
Half yearly	64	17.8
Yearly	197	54.7
Never	6	1.7
Don’t know	12	3.3
External Auditor's Reports are shared with staff and other stakeholders		
Yes	288	80
No	72	20

From the above responses, KNH Board has in place a strategic plan as well as a functional finance committee. The finance committee of the Board is responsible for oversight of financial functions, which respondents agreed are monitored regularly through internal and external audit reports that are shared with staff and other stakeholders. These responses confirmed financial oversight by the hospital Board.

Prudent utilization of funds is likely to ensure delivery of quality services in the hospital. However, it was observed that individuals working in the hospital did not clearly understand their role in the organizational goals as well as departmental goals. This may lead to lack of delivery of quality health services in the hospital. This observation contradicts Swiggart et al., (2016) who established that the Board's work is settting goals and objectivesthat are well articultated for the hospital. According to Mannion et al., (2017) a successful Board should be able to make deliberations on corporate strategy that ensure organisational success and monitoring in an efficient and effective approach.

4.9 Governance Accountability Mechanisms of Payers

Third party payers pay for patient bills hence enabling individuals to access healthcare services. Individuals who are covered by an insurance tend to access health related care, products and services more than those who pay for the same from their pockets. Therefore, if a third payer is responsible for the patient's bill there is an increased likelihood that the patient will access quality health services in the hospital. Responses on payer accountabilities are presented in Table 4.8 on the next page. Majority of the respondents 286 (79.4%) said there is a multiplicity of competing health insurance payers in KNH. However, the National Insurance Fund pays for less than half of the hospital patient bills as per 161 respondents (44.7%). Further, 221 respondents (61.4%)

said health insurance companies pay for all health conditions of patients in the hospital irrespective of the condition in question.

Table 4.8

Responses on Payers Accountability Mechanisms

Variable	Frequency	Percent
Who pays for the hospital bills for majority of patients		
Individual patients out of pocket payment	46	12.8
Relatives of patients out of pocket payment	123	34.2
National Insurance Fund payments	161	44.7
Private insurance payment	20	5.6
Others	10	2.8
What informs insurance authorization for patient's treatment or admission in the hospital		
Severity of ailment	43	11.9
Pre-existing ailments	102	28.3
Incentives for reduced health service expenses	94	26.1
Expected length of hospital stay	80	22.2
Do not know	41	11.4
What conditions are paid for by health insurance companies		
Non-communicable conditions	27	7.5
Communicable conditions	17	4.7
Chronic conditions	66	18.3
All conditions	221	61.4
Do not know	29	8.1
Is there a multiplicity of competing health insurance payers in the hospital?		
Yes	286	79.4
No	74	20.6
Do patients have the ability to choose their insurance payers?		
Yes	308	85.6
No	52	14.4
Advantages of third party payers		
Patients risks are reduced	75	20.8
Patients easily access their health information	185	51.4
Health insurance systems are transparent	83	23.1
None of the above	17	4.7

The responses above however, indicate that a big number 38.6% of the patients in KNH pay for their bills out of pocket hence a likelihood of inability to pay or risk of not accessing healthcare services in the hospital. According to Brinkerhoff (2004), supply information, assessment of demand capacity and exercised sanctions as well as oversight

should be an identifiable linkage among health sector players through a defined framework for payer-provider relationships.

4.10 Logistic Regression Analysis

This research study was to establish the influence of Governance Accountability Mechanisms on the delivery of quality health services in KNH, Kenya. The independent variables were the Professional Provider Accountability Mechanisms, Management Accountability Mechanisms, Board of Management Accountability Mechanisms and Payer Accountability Mechanisms. The dependent variable was delivery of quality health services in KNH under three parameters namely; safety, timeliness and people-centredness. Logistic regression method was used to analyse the dataset that comprised the independent variables to determine the dependent variable (outcome). The independent variables were measured in form of ordinal, nominal and interval data. The outcome was a binary or dichotomous variable with only two possible outcomes (Yes or No). The outcome data was thus coded as Yes=0 and No=1.

Logistic regression was hence used to establish the best fitting model that could describe the relationship between the independent variables and the binary characteristics of the dependent variable. The results indicated that there was a statistically significant relationship between the independent variables and delivery of quality health services parameter of timeliness. The following logistic regression output tables illustrate the results of the association of relationship between the independent variables and delivery of quality health services in KNH as per the study objectives.

The results indicate that a statistically and significant relationship exist between Governance Accountability Mechanisms of Professional Provider and the delivery of health services at the Kenyatta National Hospital (Table 4.9 below). Health providers

who are not registered with a professional body are 0.216 times less likely to deliver quality health services on time as compared to those members who are registered with a professional body. The results were significant at 95% confidence interval. These findings agree with those of Mwanga, (2013) who examined factors affecting patient satisfaction at KNH and established that 89.9% of respondents said the clinic was crowded.

Table 4.9

Relationship between Governance Accountability Mechanisms of Professional Health Provider and Delivery of Quality Health Services

Variables Governance Accountability Mechanism of Professional Health Provider	B	S.E.	P – value	Odds Ratio
Registered member of professional body				
Registered (reference)	-	-	-	1.000
Not Registered	-1.534	0.288	0.000	0.216
Consequences for breaching self-Regulation rules				
No Consequences (reference)	-	-	-	1.000
There are Consequences	0.735	0.290	0.011	2.086
CPE Opportunities:				
There are CPE Opportunities(reference)	-	-	-	1.000
No CPE opportunities	-1.215	0.293	0.000	0.297
Clinical Guidelines				
CPE training did not make me apply clinical guidelines accurately (reference)	-	-	-	1.000
CPE training made me apply clinical guidelines accurately	0.769	0.266	0.004	2.157

The results further indicated that breach of self-regulation rules is significantly associated with the delivery of quality health services in the Kenyatta National Hospital. Professional providers who breached self-regulation rules are 2.086 times more likely to face consequences for their actions. These findings are in line with those of Levinson, (2014) who established that the main origin of injuries include diagnostic flaws and treatmenton basic health care, wrong-site surgery in hospital care, adverse events in

long-term care, constraint injury and hospital-acquired infections. The results indicate that there is a significant relationship between availability of continuous professional education opportunities and delivery of quality health services at Kenyatta National Hospital. Lack of CPE opportunities is 0.297 times less likely to enhance delivery of quality health services on time at Kenyatta National Hospital. These findings are consistent with Bryceland and Stam, (2005) who established that constrains always arise for health professions, and these can take the form of guidelines, protocols, forms of prescriptive advice or standards to limit variation in therapeutic diagnostics and practice resulting in well-developed standards of care.

CPE training made professional health provider apply clinical guidelines 2.157 times more likely to deliver quality health services on time as compared to those providers who did not undertake the training in KNH. This indicates a statistically significant relationship between CPE trainings and the timely delivery of quality health services in KNH. These results align with those of Elshaug, et al., (2017) who established that clinical practice guidelines are assertions that are methodically developed to guide in the practitioner-patient decisions about convenient health care for definitive clinical situations.

The results indicate that there is a statistically significant association between governance accountability of hospital management and delivery of quality health services in KNH (Table 4.10 on next the page). The hospital having no performance management policy is 0.340 times less likely to deliver quality health services on time as compared to having a hospital performance management policy.

These findings are consistent with those of Agarwal et al., (2016) who established that management practices are recognized drivers of organizational performance and productivity.

Table 4.10

Relationship between Governance Accountability Mechanisms of Hospital Management and Delivery of Quality Health Services

Variables Governance Accountability Mechanism of Hospital Management	B	S.E.	P – value	Odds Ratio
Hospital performance Management Policy				
Hospital has a performance Management Policy (reference)	-	-	-	1.000
Hospital does not have performance Management Policy	-1.078	0.406	0.008	0.340
Right people in the right Job				
There are right people in Right jobs (reference)	-	-	-	1.000
No right people in right jobs	-1.180	0.382	0.002	0.307

Further, the results indicated that having the right people in the right job at the right time had a statistically significant relationship with the delivery of quality health services in KNH. Not having the right people in the right job was 0.307 less likely to deliver quality health services on time as compared to having the right people in the right jobs in KNH. These findings are consistent with those of Tsai et al., (2015) who established that domains of management responsible for hospitals performance include operations, monitoring, targets and human resources.

There is a statistically significant relationship between Governance Accountability Mechanisms of hospital Board and delivery of quality health services in KNH (Table

4.11 on next page). The hospital having no functional finance committee of the Board is 0.334 times less likely to deliver quality health services on time as compared to having a functional finance committee of the Board. These results agree with Mannion et al., (2017) who established that a successful Board is one that is able to make decisions on corporate strategy in an efficient and effective manner through major elements of stewardship.

Table 4.11

Relationship between Governance Accountability Mechanisms of Hospital Board and Delivery of Quality Health Services

Variables Governance Accountability Mechanism of Hospital Board	B	S.E.	P – value	Odds Ratio
Functional Finance Committee				
There is a functional finance committee (reference)	-	-	-	1.000
No functional finance committee	-1.097	0.391	0.005	0.334
Financial Transactions Monitoring				
Financial transactions are monitored (reference)	-	-	-	1.000
Financial transactions not monitored	-1.301	0.467	0.005	0.272
External Audit Reports				
Audit reports shared (reference)	-	-	-	1.000
Audit reports not shared	-0.879	0.328	0.007	0.415

The results also indicate that monitoring of financial transactions by the Board is significantly associated with the delivery of quality health services in KNH. Lack of monitoring of financial transactions by the Board was found to be 0.272 times less likely to enhance delivery of quality health services on time as compared to monitoring of financial transactions by the Board. The findings are in line with Van Belle & Mayhew,

(2016) who established that measures to enhance accountability entail policies to improve transparency and control by means of verification and monitoring.

The findings further indicated that sharing external audit reports with staff and other stakeholders is significantly associated with the delivery of quality health services in KNH. Lack of sharing of external audit reports with stakeholders is 0.415 less likely to lead to delivery of quality health services on time as compared to sharing the external audit reports with stakeholders. These results are consistent with Chan et al., (2018) who established that public reporting of audit results can motivate leaders with poor performance to improve.

The results indicate that a statistically significant relationship exist between Governance Accountability Mechanisms of Payers and delivery of quality health services in KNH (Table 4.12 below). Lack of multiplicity of health insurance payers in the hospital is 0.271 times less likely to deliver quality health services on time as compared to availability of multiplicity of health insurance payers in the hospital. These findings agree with Smith et al., (2012) who established that accountability of insurance providers for professional oversight and control is key in market-based competition.

Table 4.12

Relationship between Governance Accountability Mechanism of Payers and Delivery of Quality Health Services

Variables Governance Accountability Mechanism of Payers	B	S.E.	P – value	Odds Ratio
Multiplicity of Payers				
There are multiplicity of Insurance payers (reference)	-	-	-	1.000
No multiplicity of insurance Payers	-1.306	0.314	0.000	0.271
Insurance Payer Choices				
Ability to choose payer (reference)	-	-	-	1.000
No ability to choose payer	-0.762	0.358	0.033	0.467

The results also indicate that lack of choice for insurance payers is significantly associated with the delivery of quality health services in KNH. Lack of choices of insurance payers is 0.467 times less likely to deliver quality health services on time as compared to ability to choose from different insurance payers.

These findings are in line with Smith et al., (2012) who established that sanctions play a big role in aligning performance monitoring, priority setting and accountability.

Table 4.13

Multivariate Logistic Regression: Hosmer and Lemeshow Test

Step	Chi-Square	df	Sig.
5	7.736	4	0.102

Hosmer- Lemeshow Test for goodness of fit results indicate that the logistic regression model used for the analysis was a good fit and thus adequately described the data ($p>0.05$), table 4.13 above.

Multivariate logistic regression results are presented in table 4.14 (on next page). The results indicate a statistically significant association exist between all the independent variables and delivery of quality health services ($p<0.05$) except for the Board function of monitoring financial transactions ($p>0.05$).

Table 4.14

Multivariate Regression Results: Relationship between Governance Accountability Mechanisms and Delivery of Quality Health Services

Variables Governance Accountability Mechanism on delivery of quality health services	B	S.E.	P – value	Odds Ratio
Consequences for breaching self-regulation rules				
No Consequences (reference)	-	-	-	1.000
There are Consequences	0.859	0.323	0.008	2.360
Hospital performance Management Policy				
Hospital has a performance Management Policy (reference)	-	-	-	1.000
Hospital does not have performance Management Policy	-1.002	0.439	0.022	0.367
Right people in the right job				
There are right people in right Jobs (reference)	-	-	-	1.000
No right people in right jobs	-0.985	0.388	0.011	0.373
Hospital Strategic Plan				
There is a strategic plan (reference)	-	-	-	1.000
No strategic plan	-1.417	0.635	0.026	0.242
Financial Transactions Monitoring				
Financial transactions are monitored (reference)	-	-	-	1.000
Financial transactions not monitored	-0.849	0.512	0.097	0.428

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the major findings of this research study are summarized as well as the conclusions and recommendations.

5.2 Summary

The broad objective of this research study was to establish the influence of governance accountability mechanisms on delivery of quality health services in Kenyatta National Hospital. It was a cross-sectional descriptive study that used mixed methods of both qualitative and quantitative approaches. The target population comprised all clinical, non-clinical and management staff in KNH, estimated at 4700. A population sample of 369 respondents was drawn and structured questionnaires were used to collect data. Qualitative data was collected using key informant interview guides and analysed using thematic analysis as per the emerging themes. Quantitative data was analysed by use of SPSS logistic regression and correlation analysis used to establish statistically significant association or influence of governance accountability mechanisms on delivery of quality health services in KNH. The data analysis was interpreted as per the conclusions below.

5.3 Conclusion

The first research question was to establish the influence of professional health provider accountability mechanisms on delivery of quality health services in KNH. The analysis results indicated a statistically significant relationship existed between governance accountability mechanism of professional health provider and delivery of quality health services in KNH. Professional health providers who are registered with professional

bodies were self-regulated and more likely to deliver quality health services on time than those who are not registered.

The results further indicated a significant relationship between continuous professional education for professional health providers and delivery of quality health services on time as compared to lack of CPE trainings. Therefore, the results suggest existence of significant influence of professional health provider accountability mechanisms on delivery of quality health services in KNH.

The second research question was what is the influence of hospital management accountability mechanism on delivery of quality health services in KNH. The results indicated there was a statistically significant relationship between governance accountability mechanism of hospital management and delivery of quality health services. The hospital having a performance management policy and the right people in the right job was likely to deliver quality health services on time. Therefore, there exist influence of governance accountability mechanisms of hospital management on delivery of quality health services.

The third research question was what is the influence of governance accountability mechanism of hospital Board on delivery of quality health services in KNH. The results indicated existence of a significant relationship between governance accountability mechanisms of hospital board and delivery of quality health services. The hospital is likely to deliver quality health services on time where the Board has a functional finance committee, monitored financial transactions and shared external audit reports with stakeholders.

Finally, the fourth research question for this study was what is the influence of the payer accountability mechanisms on delivery of quality health services in KNH. The results

indicated that there existed a statistically significant relationship between governance accountability mechanism of payers on delivery of quality health services in KNH. Availability of multiplicity of health insurance payers in the hospital and ability to choose payers was more likely to enhance delivery of quality health services on time in KNH.

The study, therefore, established that governance accountability mechanisms is a key determinant of delivery of quality health services in Kenyatta National Hospital in Kenya.

5.4 Recommendations

Governance is the glue that holds together all the other health systems pillars and therefore responsible for the processes of decision-making and implementation as well as the influence on effectiveness and efficiency of quality health services delivery. Hence, it is necessary that stakeholders in health care understand and strengthen governance accountability mechanisms responsible for delivery of quality health services.

In particular, this study recommends that:

i) Kenyatta National Hospital should ensure professional health providers in the hospital are registered and licenced to practice by their professional bodies without exception.

ii) The hospital should ensure continuous professional education opportunities are available to professional health providers and monitor CPEs value addition for actual improvements in professional and clinical governance accountability.

iii) The hospital management should review its service charter to ensure both internal and external customers have a clear picture of expected obligations and service standards.

iv) The hospital management should invest in modern technologies and infrastructure aimed at improving patients waiting time amongst other hospital experiences.

v) The hospital Board of Management should ensure that the Vision and Core Values of the organization are understood and practised by all employees.

5.5 Suggestions for Further Studies

There is the need for further research in health systems governance accountability mechanisms to enhance delivery of quality health services especially in terms of safety and people-centredness.

Further research is necessary to help understand the role played by professional bodies in enhancing delivery of quality health services.

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Appendix I: Informed Consent

Kenya Methodist University

P. 0 Box 267-60200

MERU, Kenya

RE: INFORMED CONSENT

Dear Respondent,

My name is **LUMBI WA M'NABEA**. I am a Master of Science in Health Systems Management (Msc.HSM) student from Kenya Methodist University. I am conducting a study titled: **GOVERNANCE ACCOUNTABILITY MECHANISMS AS A DETERMINANT OF DELIVEY OF QUALITY HEALTH SERVICES IN KENYATTA NATIONAL HOSPITAL, KENYA.**

The findings will be utilized to strengthen the health systems in Kenya and other Low-in-come countries in Africa. As a result, countries, communities and individuals will benefit from improved quality of healthcare services. This research proposal is critical to strengthening health systems as it will generate new knowledge in this area that will inform decision makers to make decisions that are research based.

Procedure to be followed

Participation in this study will require that I ask you some questions and also access all the hospital's/Institution's departments to address the six pillars of the health system. I will record the information from you in a questionnaire checklist.

You have the right to refuse participation in this study. You will not be penalized nor victimized for not joining the study and your decision will not be used against you nor affect you at your place of employment.

Please remember that participation in the study is voluntary. You may ask questions related to the study at any time. You may refuse to respond to any questions and you

may stop an interview at any time. You may also stop being in the study at any time without any consequences to the services you are rendering.

Discomforts and risks

Some of the questions you will be asked are on intimate subject and may be embarrassing or make you uncomfortable. If this happens; you may refuse to answer if you choose. You may also stop the interview at any time. The interview may take about 40 minutes to complete.

Benefits

If you participate in this study you will help us to strengthen the health systems in Kenya and other Low-in- come countries in Africa. As a result, countries, communities and individuals will benefit from improved quality of healthcare services. This research is critical to strengthening the health systems as it will generate new knowledge in this area that will inform decision makers to make decisions that are research based.

Rewards

There is no reward for anyone who chooses to participate in the study other than words of heartfelt appreciation.

Confidentiality

The interviews will be conducted in a private setting within the hospital. Your name will not be recorded on the questionnaire and the questionnaires will be kept in a safe place at the University.

Contact Information

If you have any questions you may contact the following:

1. **Dr. Wanja Mwaura-T, PhD.** Department of Health Systems Management of Kenya Methodist University, Nairobi campus. Contact Telephone: 0726678020

2. **Dr. Kezia Njoroge, PhD.** Department of Health Systems Management of Kenya Methodist University, Nairobi campus. Contact Telephone: 0738970746
3. **Prof. M.L. Chindia, Secretary KNH-UoN ERC,** Contact Telephone 2726300 Ext 44102 or email: uonknh_erc@uonbi.ac.ke

Participant's Statement

The above statement regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will not be victimized at my place of work whether I decide to leave the study or not and my decision will not affect the way I am treated at my work place.

Name of Participant……Date…….Signature…….

Investigator's Statement

I, the undersigned, have explained to the volunteer in a language s/he understands the procedures to be followed in the study and the risks and the benefits involved.

Name of Interviewer……Date…… Signature……..

Appendix II: Informed Consent for Key Informants

Kenya Methodist University

P. 0 Box 267-60200

MERU, Kenya

RE: INFORMED CONSENT

Dear Key Informant,

My name is **LUMBI WA M'NABEA**. I am a Master of Science in Health Systems Management (Msc.HSM) student from Kenya Methodist University. I am conducting a study titled: **GOVERNANCE ACCOUNTABILITY MECHANISMS AS A DETERMINANT OF DELIVEY OF QUALITY HEALTH SERVICES IN KENYATTA NATIONAL HOSPITAL, KENYA.**

The findings will be utilized to strengthen the health systems in Kenya and other Low-in-come countries in Africa. As a result, countries, communities and individuals will benefit from improved quality of healthcare services. This research proposal is critical to strengthening health systems as it will generate new knowledge in this area that will inform decision makers to make decisions that are research based.

Procedure to be followed

Participation in this study will require that I ask you some questions and also access all the hospital's/Institution's departments to address the six pillars of the health system. I will interview you in a face-to-face interaction using a Key Informant Interview Guide questions. Your responses will be written down or audio recorded to ensure accuracy of information received.

You have the right to refuse participation in this study. You will not be penalized nor victimized for not joining the study and your decision will not be used against you nor affect you at your place of employment.

Please remember that participation in the study is voluntary. You may ask questions related to the study at any time. You may refuse to respond to any questions and you may stop an interview at any time. You may also stop being in the study at any time without any consequences to the services you are rendering.

Discomforts and risks

Some of the questions you will be asked are on intimate subject and may be embarrassing or make you uncomfortable. If this happens; you may refuse to answer if you choose. You may also stop the interview at any time. The interview may take about 40 minutes to complete.

Benefits

If you participate in this study you will help us to strengthen the health systems in Kenya and other Low-in- come countries in Africa. As a result, countries, communities and individuals will benefit from improved quality of healthcare services. This research is critical to strengthening the health systems as it will generate new knowledge in this area that will inform decision makers to make decisions that are research based.

Rewards

There is no reward for anyone who chooses to participate in the study other than words of heartfelt appreciation.

Confidentiality

The interviews will be conducted in a private setting within the hospital. Your name will not be recorded on the questionnaire and the questionnaires will be kept in a safe place at the University.

Contact Information

If you have any questions you may contact the following:

1. **Dr. Wanja Mwaura-T, PhD.** Department of Health Systems Management of Kenya Methodist University, Nairobi campus. Contact Telephone: 0726678020
2. **Dr. Kezia Njoroge, PhD.** Department of Health Systems Management of Kenya Methodist University, Nairobi campus. Contact Telephone: 0738970746
3. **Prof. M.L. Chindia, Secretary KNH-UoN ERC,** Contact Telephone 2726300 Ext 44102 or email: uonknh_erc@uonbi.ac.ke

Participant's Statement

The above statement regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will not be victimized at my place of work whether I decide to leave the study or not and my decision will not affect the way I am treated at my work place.

Name of Key Informant……Signature…….Date…….

Investigator's Statement

I, the undersigned, have explained to the volunteer in a language s/he understands the procedures to be followed in the study and the risks and the benefits involved.

Name of Interviewer……Signature……..Date……..

Appendix III: Questionnaire

A. Background Information

Instructions:

Please fill in the following:

1. Your professional cadre ----------

2. Your years of service ----------

4. Your age in years ----------

Kindly tick as appropriate [√]

4. Sex

a) Male [ ]

b) Female [ ]

5. Highest level of education attained

a) Certificate [ ]

b) Diploma [ ]

c) Degree [ ]

d) Masters [ ]

B: Governance Accountability Mechanisms of Professional Provider Influencing Delivery of Quality Health Services

i) Peer Review (PR)

1. Are you a registered member of your professional body?

Yes [ ] No [ ]

If No. Why? _____

2. Your profession is self-regulated by:

a. Certification on entry Yes [ ] No [ ]

b. Accreditation of training schools or colleges Yes [ ] No [ ]

c. Issuance of practise license Yes [ ] No [ ]

d. Others specify_____

3. Are there consequences of a member of your profession who breaches self-regulation rules?

Yes [ ] No [ ]

If Yes, go to question 4.

4. Please describe a few consequences

a._____

b. _____

c. _____

d. _____

ii) Continuous Professional Education (CPE)

5. Do you get opportunities for Continuous Professional Education (CPE)?

Yes [ ] No [ ]

If Yes, go to question 6.

6. How would you describe CPE trainings already undertaken? Tick as appropriate[√]

a. Improved my clinical knowledge base [ ]

b. Improved my clinical skills [ ]

c. Enabled me to use clinical guidelines accurately [ ]

d. Enabled me interact better with patients [ ]

e. Did not make a difference [ ]

C: Governance Accountability Mechanisms of Hospital Management Influencing Delivery of Quality Health Services

i) Quality Monitoring (QM)

7. Is there a hospital quality healthcare policy? Tick [√] Yes or No

Yes [ ] No [ ]

If Yes, go to question 8.

8. How helpful has the policy been in your healthcare decision-making?

a. Extremely helpful [ ]

b. Very helpful [ ]

c. Somewhat helpful [ ]

d. Not so helpful [ ]

e. Not at all helpful [ ]

9. Does KNH have a hospital service charter? Tick [√] Yes or No

Yes [ ] No [ ]

10. What purpose does the hospital service charter serve? Tick as appropriate [√]

a. Is displayed in open prominent places in the hospital [ ]

b. Has helped improve delivery of quality services [ ]

c. Enables patients to easily understand services being offered at the hospital [ ]

d. States clearly expected performance indicators of the hospital [ ]

e. Directs stakeholders on feedback mechanisms [ ]

11.

Please indicate your preferred answer to the following statement:

Identified service delivery gaps are addressed urgently. Tick as appropriate [√]

a. Always [ ]

b. Often [ ]

c. Sometimes [ ]

d. Rarely [ ]

e. Never [ ]

ii) Performance Management (PM)

12. Does the hospital have a performance management policy? Tick [√] Yes or No

Yes [ ] No [ ]

If yes, then question 13.

13. Does the hospital have the right people in the right job at the right time?

Tick [√] Yes or No

Yes [ ] No [ ]

14. What are the provisions of performance management policy? Tick as appropriate [√]

a. Agreement between staff and managers on performance targets [ ]

b. Set performance target timelines [ ]

c. Rewards for exceeding performance targets [ ]

d. Sanctions for missing performance targets [ ]

e. None of the above [ ]

D: Governance Accountability Mechanisms of Hospital Board Influencing Delivery of Quality Health Service

i) Goal Setting (GS)

15. What is the KNH Vision _____

_____

16. When do you practise the core values of the hospital in delivery of services? Tick as appropriate [√]

a. Always [ ] b. Often [ ]

c. Sometimes [ ] d. Rarely [ ]

e. Never [ ]

17. Does KNH have a strategic plan? Tick [√] Yes or No

Yes [ ] No [ ]

If yes, go to question 18.

18. What period does it cover? Tick as appropriate [√]

a. 2013 - 2018 [ ]

b. 2012 - 2019 [ ]

c. 2019 - 2023 [ ]

d. 2018 - 2021 [ ]

19. Individuals understand their role in the organization goals as well as departmental goals.

Tick as appropriate [√]

a. Strongly disagree [ ] b. Disagree [ ]

c. Somewhat disagree [ ] d. Neither agree nor disagree [ ]

e. Somewhat agree [ ] f. Agree [ ]

g. Strongly agree [ ]

ii) Financial Oversight (FO)

20. Does the management Board of the hospital have a functional finance committee?

Yes [ ] No [ ]

21. Are financial transactions of the hospital monitored by the Board of management?

Yes [ ] No [ ]

22. How often is internal audit conducted in the hospital? Tick as appropriate [√]

a. Every Month	[ ]	b. Quarterly	[ ]
c. Half yearly	[ ]	d. Yearly	[ ]
e. Never	[ ]	f. Do not know	[ ]

23.Are external audit reports shared with staff and other stakeholders?

Yes [ ] No [ ]

E: Governance Accountability Mechanisms of Payers Influencing Delivery of Quality

Health Services

i) Performance Based Contracting (PBC)

24. Who pays for the hospital bills for majority of patients? Tick as appropriate [√]

a. Individual patients out of pocket payments [ ]

b. Relatives of patients out of pocket payments [ ]

c. National Insurance Fund payments [ ]

d. Private Insurance payment [ ]

e. Others [ ]

25. What informs insurance authorization for patient's treatment or admission in the hospital?

Tick as appropriate [√]

a. Severity of ailment [ ]

b. Pre-existing ailments [ ]

c. Incentives for reduced health service expenses [ ]

d. Expected length of hospital stay [ ]

e. Do not know [ ]

26. What types of conditions are paid for by health insurance companies? Tick as appropriate [√]

a. Non-communicable conditions [ ] b. Communicable conditions [ ]

c. Chronic conditions [ ] d. All conditions [ ]

e. Do not know [ ]

ii) Market Competition (MC)

27. Is there a multiplicity of competing health insurance payers in the hospital?

Yes [ ] No [ ]

28. Do patients have the ability to choose their insurance payers? Tick [√] Yes or No

Yes [ ] No [ ]

Please give your reasons for the answer above_____

_____

29. What is the advantage of third party payers? Tick as appropriate [√]

a. Patients risks arereduced [ ]

b. Patients easily access their health information [ ]

c. Health insurances systems are transparent [ ]

d. None of the above [ ]

F: Governance Accountability Mechanisms affecting Delivery of Quality Health Services

i) People Centeredness

30. What do you understand by people-centred care? Tick as appropriate [√]

a. Respect for patient preferences and needs [ ]

b. Listening and answering to patients questions and concerns [ ]

c. Core developing care management plan with patient involvement [ ]

d. None of the above [ ]

31. Are there mechanisms in the hospital to break language barrier between patient and service provider? Tick [√] Yes or No

Yes [ ] No [ ]

ii) Safety

32. Do you think safety measures are adhered to in delivery of health services at KNH?

Yes [ ] No [ ]

What in your opinion represents KNH situation? Please indicate ***True or False***

33. Situations requiring urgent attention are always acted upon as quickly as possible_____

34. All interventions are always designed to minimize medical errors_____

35. There are clear guidelines to prevent hospital acquired infections always_____

36. Thorough review of medications in use by the patient is carried out to prevent interactions with new medications_____

iii) Timeliness

37. Do you think services at KNH are delivered on time? Tick [√] Yes or No

Yes [ ] No [ ]

38. If your answer is NO to above question, what do you think are the main causes of delayed services at KNH?

i)_____

ii) _____

iii) _____

iv) _____

Are the following statements True or False in regard to timely delivery of health service at KNH? Tick [√] True or False

39. Delays in providing services are kept to a minimum.

True[ ] False [ ]

40. An efficient flow system for scheduling patients is in place.

True[ ] False [ ]

41. Patients are not notified of projected waiting time.

True[ ] False [ ]

42. Situations requiring urgent interventions are not acted on as quickly as possible.

True[ ] False [ ]

Appendix IV: Key Informant Interview Guide

1. Tell me about yourself and how long you have been with the hospital?
    a. What services do you provide?
    b. Have you worked in any other area of the organization?
    c. In your opinion, what is the patients' experience in the hospital?
2. Please tell me what works well in your service area in terms of delivery of quality health service.
3. What indicators are you aware of/are in use for delivery of quality health services?
4. What gaps have you identified in delivery of quality health services in KNH?
5. In your opinion, what is the reason these gaps have not been addressed?
6. In your opinion, do you think patients in KNH are attended to on timely basis?
7. What gaps or areas of improvement have you observed in service delivery timeliness?
8. In your opinion, what is the reason that these gaps have not been addressed?
9. To what extent are you aware of the hospital system in your area of service conducting activities related to enforcing regulations that protect health and ensure safety?
10. What gaps or areas for improvement have you observed in regard to ensuring safety?
11. In your opinion what is the reason that these gaps have not been addressed.

12. In your opinion, do you think patients get engaged in decisions concerning their treatment?

13. What gaps or areas for improvement have you observed in your area of service in regard to patient-centeredness?

14. What in your opinion is the reason that these gaps have not been addressed?

Appendix V: Response Rate

Respondent's Department	Sample Size	Achieved Response	Response rate (%)
Accident & Emergency	14	11	78.57
Administration	15	15	100
Anesthesia & ICU	14	14	100
Biomedical Engineering	3	3	100
Cancer Treatment Centre	3	3	100
Catering	16	16	100
Chaplaincy	1	1	100
CSSD & TSSU	7	7	100
Dentistry	4	4	100
Exchange	3	3	100
Finance	11	11	100
Health Information	17	16	94.12
Human Resource	6	6	100
Lab. Medicine	14	14	100
Laundry	8	8	100
Maintenance	10	10	100
Med.Soc.Work	3	3	100
Medicine	29	29	100
Nutrition	4	4	100
Occ. Therapy	3	3	100
Orthopaedic	12	12	100
Paediatric	26	26	100
Pharmacy	7	7	100
Physiotherapy	5	5	100
Private Wing	15	15	100
Public Health	25	24	96
Radiology	5	4	80
Renal Unit	5	5	100
Reproductive Health	17	17	100
RID	3	2	66.67
Security and safety services	12	12	100
Supplies Chain	6	6	100
Surgery	29	29	100
Theatre	14	13	92.86
Transport	3	3	100
Total	**369**	**360**	**97.83**

Appendix VI: Ethical Clearance From KeMU

KENYA METHODIST UNIVERSITY
P. O. BOX 267 MERU - 60200, KENYA
TEL: 254-064-30301/31229/30367/31171
FAX: 254-64-30162
EMAIL: INFO@KEMU.AC.KE

7TH JUNE, 2019

KeMU/SERC/HSM/54/2019

Lumbi Wa M'nabea
HSM-3-0421-1/2018

Kenya Methodist University

Dear Lumbi,

SUBJECT: ETHICAL CLEARANCE OF A MASTERS' DEGREE RESEARCH THESIS

Your request for ethical clearance for your **Masters' Degree Research Thesis** titled **"Governance Accountability Mechanisms as a Determinant of Delivery of Quality Health Services in Kenyatta National Hospital, Kenya."** has been provisionally granted to you in accordance with the content of your research thesis subject to tabling it in the full Board of Scientific and Ethics Review Committee (SERC) for ratification.

As Principal Investigator, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the thesis.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the SERC for re-review and approval **prior** to the activation of the changes. The Thesis number assigned to the thesis should be cited in any correspondence.
3. Adverse events should be reported to the SERC. New information that becomes available which could change the risk: benefit ratio must be submitted promptly for SERC review. The SERC and outside agencies must review the information to determine if the protocol should be modified, discontinued, or continued as originally approved.

4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by subjects and/or witnesses should be retained on file. The SERC may conduct audits of all study records, and consent documentation may be part of such audits.
5. SERC regulations require review of an approved study not less than once per 12-month period. **Therefore, a continuing review application must be submitted to the SERC in order to continue the study beyond the approved period.** Failure to submit a continuing review application in a timely fashion will result in termination of the study, at which point new participants may not be enrolled and currently enrolled participants must be taken off the study.

Please note that any substantial changes on the scope of your research will require an approval.

Thank You,

Dr. A. Wamachi
Chair, SERC
Dean, RD&PGS

Appendix VII: Ethical Clearance From KNH / UoN

UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
P O BOX 19676 Code 00202
Telegrams: varsity
Tel:(254-020) 2726300 Ext 44355

KNH-UON ERC
Email: uonknh_erc@uonbi.ac.ke
Website: http://www.erc.uonbi.ac.ke
Facebook: https://www.facebook.com/uonknh.erc
Twitter: @UONKNH_ERC https://twitter.com/UONKNH_ERC

KENYATTA NATIONAL HOSPITAL
P O BOX 20723 Code 00202
Tel: 726300-9
Fax: 725272
Telegrams: MEDSUP, Nairobi

Ref: KNH-ERC/A/76

21st February 2020

APPROVED
21 FEB 2020
KNH/UoN-ERC

Lumbi Wa M'nabea
Reg. No.HSM-3-0421-1/2018
Dept. of Health Systems Management
Kenya Methodist University

Dear Mr. Lumbi

RESEARCH PROPOSAL - GOVERNANCE ACCOUNTABILITY MECHANISMS AS A DETERMINANT OF DELIVERY OF QUALITY HEALTH SERVICES IN KENYATTA NATIONAL HOSPITAL, KENYA (P857/10/2019)

This is to inform you that the KNH- UoN Ethics & Research Committee (KNH- UoN ERC) has reviewed and **approved** your above research proposal. The approval period is 21st February 2020 – 20th February 2021.

This approval is subject to compliance with the following requirements:

a. Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b. All changes (amendments, deviations, violations etc.) are submitted for review and approval by KNH-UoN ERC before implementation.
c. Death and life threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH-UoN ERC within 72 hours of notification.
d. Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH- UoN ERC within 72 hours.
e. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
f. Submission of an *executive summary* report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/ or plagiarism.

Protect to discover

For more details consult the KNH- UoN ERC website **http://www.erc.uonbi.ac.ke**

Yours sincerely,

PROF. M. L. CHINDIA
SECRETARY, KNH-UoN ERC

c.c. The Principal, College of Health Sciences, UoN
The Director, CS, KNH
The Chairperson, KNH- UoN ERC
The Assistant Director, Health Information, KNH
Supervisors: Dr. Wanja Mwaura-Tenambergen, Kenya Methodist University
Dr. Kezia Njoroge, Kenya Methodist University

Appendix VIII: Research Permit from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P O Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/49999/31284** Date: **1st August, 2019**

Lumbi Wa Mnabea
Kenya Methodist University
P.O. Box 267- 60200
MERU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Governance accountability mechanisms as a determinant of delivery of quality health services in Kenyatta National Hospital Kenya."*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **25th July, 2020.**

You are advised to report to **the County Commissioner, the County Director of Health Services, and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

DR. STEPHEN K. KIBIRU
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

5/8/2019

The County Director of Education
Nairobi County.

The County Director of Health Services
Nairobi County.