ASSESSMENT OF THE EFFECT OF STRATEGIC KNOWLEDGE MANAGEMENT PRACTICES ON SERVICE DELIVERY IN PRIVATE HEALTHCARE IN NAIROBI COUNTY, KENYA

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DECLARATION AND APPROVAL

Declaration

This thesis/project is my original work and has never been presented for any academic award in any institution.

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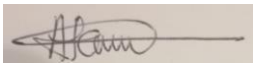
Signature:  Date: 13/11/2024

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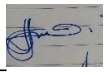
Signature: _____  Date: 13/11/2024

DEDICATION

This work is dedicated to my wife Lydia and my children Liz, Brian and Stephanie. Thank you for the endless support and encouragement.

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I am sincerely grateful to my Heavenly Father for His abundant grace and strength that sustained me throughout my academic journey. Special thanks to my Supervisor Dr. Lucy Kibe for her invaluable

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ABSTRACT

Private hospitals just like other organizations, must practice innovation in order to keep up with fast changing business dynamics and to survive turbulent economic landscape. This innovation can only be achieved when these healthcare organizations continuously learns, stores and equip its staff with knowledge. This knowledge becomes beneficial to the organization when it is shared and utilized for the overall improvement of the organization. Quality private healthcare services play a critical role in meeting the healthcare needs of populations. However, there is a gap in understanding how

knowledge management practices influence service delivery in private hospitals, particularly in Nairobi County, Kenya. This study sought to address this gap by exploring the impact that knowledge management practices such as knowledge creation, sharing, application, and storage have on service delivery in private healthcare facilities. The study was anchored on Resource-based view theory, knowledge-based view theory and Organizational Learning theory. Using a descriptive research design, data were collected from 28 level 4 private hospitals in Nairobi County through a census survey of hospital administrators. Data was collected through an online questionnaire in Qualtrics. An analysis was done using SPSS where a regression analysis was performed. The results from the analysis revealed that only knowledge application significantly impact service delivery (β= *0.964, p=0.03*). The impacts of knowledge creation (β= 0.112, *t=0.466, p=0.65*), knowledge sharing (β= -0.038, *t=0.123, p=0.903*) and knowledge storage (β=0.148, *t=0.572, p=0.573*) were found not to be significant. The study concluded that good knowledge creation, sharing and storage capabilities must be accompanied by effective application for substantive improvement in service delivery to be realized. Insights gained from this research can inform strategies for optimizing knowledge management processes to enhance healthcare service quality and efficiency in Nairobi County and beyond.

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LIST OF ABBREVIATIONS AND ACRONYMS

COVID-19	Coronavirus Disease, 2019
ICT	Information and Communications Technology
KBV	Knowledge Based View theory.
MSME	Micro, Small and Medium Enterprises
NACOSTI	National Commission for Science, Technology, and Innovation
PBV	Position Based View Theory
RBV	Resource Based View Theory
SPSS	Statistical Package for Social Sciences
SD	Standard deviation
TVET	Technical Vocational Education and Training

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In the realm of healthcare management, the role of private hospitals is undeniably significant, particularly when considering their ability to complement and sometimes even mitigate the shortcomings observed within public healthcare systems. Nazenega et al. (2017) assert this vital role, emphasizing how private healthcare institutions often step in to address the limitations stemming from funding constraints in public sectors, thereby enhancing the overall quality of healthcare services and ensuring timely access to medications and medical products for patients. This significance was glaringly evident during the peak of the COVID-19 pandemic, where public healthcare systems worldwide struggled to cope with the overwhelming influx of cases, while private facilities demonstrated resilience and adaptability in meeting the escalating healthcare demands (Oraro & Wyss, 2020). This underscores the significant role the private clinics play in the healthcare industry. The performance and impact of private healthcare institutions vary considerably across different global contexts. In many developing nations, such as India, private healthcare facilities have emerged as dominant players, catering to a substantial portion of the population's healthcare needs with efficiency and effectiveness (Reading, 2018). Similarly, in countries like the Netherlands, government initiatives mandating private health insurance coverage have led to widespread adoption, showcasing successful collaborations between public and private sectors in ensuring comprehensive healthcare provision (Schafer et al., 2020). However, experiences differ, as evidenced by China's healthcare reforms, which saw a strategic shift away from private insurance due to systemic inefficiencies and disparities in access (Blumenthal & Hsiao, 2019).

Within the context of Sub-Saharan Africa, private actors play a crucial role in healthcare provision, often filling critical supply gaps and providing much-needed financial resources for the sector. A study conducted by the International Finance Corporation (2017) revealed that the private healthcare sector in the region already delivers over half of the continent's healthcare product and service needs, underscoring its indispensable role in the broader healthcare ecosystem. This overreliance on private actors is influenced by various factors, including escalating costs of healthcare service delivery, perceptions of inefficiency within public healthcare systems, and external pressures from international lenders advocating for reduced government spending on healthcare (Basu et al., 2019). Amidst these multifaceted dynamics, the significance of knowledge management emerges as a crucial factor for optimizing healthcare delivery within private hospital settings. The healthcare industry is inherently knowledge-driven, characterized by constant learning, innovation, and the dissemination of new research findings and treatment modalities (Donate & Pablo, 2019). Effective knowledge sharing among healthcare providers is paramount for delivering high-quality care, staying abreast of the latest medical advancements, and ensuring patient safety and satisfaction (Maravilhas & Martins, 2018). Leveraging sophisticated healthcare knowledge management systems enables private hospitals to streamline administrative processes, disseminate up-to-date clinical guidelines and protocols, and facilitate ongoing training and professional development for staff members (Khodakarami & Chan, 2018). By leveraging the combined knowledge of skilled healthcare professionals and promoting a culture of ongoing learning and advancement, private hospitals can address skill deficiencies, improve clinical results, and sustain a competitive advantage in a constantly evolving healthcare environment. Thus, investing in robust knowledge management infrastructure and practices is

imperative for private hospitals seeking to uphold excellence in patient care delivery and organizational performance.

Knowledge management is complex, and this complexity can be described in many ways. A starting point for identifying convolution is the presence of multiple, diverse, and interdependence agents within the hospital set up. Interdependence among multiple diverse agents produces novel outcomes particularly when the agents and forces affecting the systems are changing over time. Multiple, diverse, interdependent agents are present in healthcare organizations, most pointedly in the form of hundreds of specialized clinical healthcare professions and the administrators who attempt to help organize them into effective care delivery teams and units. The agents often diverge in their reporting and incentive structures. The specialized support and technical service workers add to the diversity of the delivery setting.

Emphasis on knowledge creation and management in healthcare facilities is one of the key factors that determine effectiveness in private healthcare delivery in the 21st Century. In order to harness knowledge and information to improve effectiveness in healthcare delivery, management must capture, manage and utilize information with rapid speed in an effort to keep pace with continually changing technology. Knowledge management is an important means by which healthcare organizations can better manage information and more importantly knowledge to achieve optimum success in healthcare delivery. Not easily defined, knowledge management embodies a plethora of categories within the private healthcare set-up.

Putting a system of multiple, diverse, interdependent agents into motion, interacting to deliver healthcare, creates a vast level of complexity. In addition, the agents themselves adapt and change over time due to self-learning and development, or new requirements from regulatory, advisory, or

legal sources, or other causes, and complexity is accelerated geometrically. Several authors have aptly summarized the resulting complexity of knowledge management in ways that help us comprehend and manage it.

Members of the larger number of other highly specialized clinical professions demand respect, a voice in decisions and some degree of autonomy in setting quality standards. Most clinical professions, with pharmacy, physical therapy, and laboratory science being examples, have proud histories and strong socialization processes into the profession. The professionals typically are licensed and regulated by state boards rather than their employer organization. A consequence is that healthcare administrators generally shy away from interference in the clinical affairs of clinical health professionals (Mosser & Begun, 2013)

Over the past two decades, numerous researchers have developed a variety of techniques, methodologies and measurement tools that have allowed them to develop, deliver, and at the same time, evaluate the effectiveness of several areas of knowledge management. The explosion of these methodologies have created abundance of new state-of-art literature related to all aspects of knowledge management.

The concept of professional bureaucracy nicely summarizes the challenge of managing healthcare delivery (Kuye & Akinwale, 2021). Organizational archetype contains five parts: a strategic apex, middle management, support staff, technical staff, and operating core comprised of clinical professionals and managing highly specialized support staff are quite different than managing workers in production line and the relevant support staff. The professional bureaucracy relies for coordination on standardization of skills, training and socialization within each of the profession. Control over work is largely entrusted to those profession.

In Kenya, the landscape of healthcare provision is undergoing significant transformation, with a growing emphasis on improving the quality of services, particularly in light of rising fatalities attributed to neglect and substandard care in medical facilities (Kioi et al., 2020). With over 4,700 healthcare institutions operating across the country, ensuring high-quality service delivery has become a paramount concern, driven by factors such as governmental policies, competitive dynamics, and increasing demands from patients and healthcare management initiatives (Kirigia et al., 2021). This heightened focus on healthcare quality is expected to further bolster the utilization of private healthcare services in Kenya, underscoring the pivotal role played by private actors in shaping health outcomes in the region (Dinda et al., 2020). Nevertheless, the private healthcare sector in Kenya encounters various obstacles that demand substantial policy revisions and proactive actions from governmental and organizational authorities to guarantee the provision of top-tier primary healthcare (Kirigia et al., 2021).

Private hospitals in Kenya vary in structure, scope of services, and capacity, catering to the diverse healthcare needs of the population. Typically, private hospitals are equipped with modern facilities and advanced medical technologies, providing a wide range of outpatient and inpatient services across various medical specialties. In urban centers like Nairobi County, private hospitals often serve as vital healthcare hubs, offering comprehensive healthcare solutions to residents and visitors alike. Some examples of level 4 private hospitals in Nairobi County include Penda Health, Komarock Modern Healthcare, Radiant Group of Hospitals, St. Patrick Healthcare Center among others.

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1.1.1 Concept of Private Healthcare Delivery

Primary health care systems are considered to be the first line of defense for populations especially in the face of changing health needs as was evidenced by the COVID-19 pandemic (Dinda et al., 2020). As a concept, delivery of quality healthcare is both multidimensional and complex at best. Nezenega et al. (2017) suggest that ensuring the delivery of quality healthcare involves continuously attracting patients with efficient and effective healthcare services that adhere to the latest standards and guidelines, catering to patient needs while also satisfying providers. Additionally, Magaka and Muturi (2019) argue that quality healthcare delivery is defined by attributes such as timeliness, availability, affordability, confidentiality, accessibility, and responsiveness, among others. It could be argued that effective service delivery is a fundamental aspect of any functional healthcare system. Accordingly, there are five pillars which have been identified to form the cornerstone of primary health care and they include first-contact care, comprehensiveness, continuity, person-centeredness and coordination (Nwankwo et al., 2018; Ramachandran & Cram, 2020). These elements when taken together form the building blocks for high-performing health care systems which are intended to deliver quality health care services to patients and improve their outcomes while achieving all this in affordable cost (Uchendu et al., 2020). Furthermore, Kithinji (2019) notes that enhancing service provision, particularly emphasizing high-quality primary healthcare, is essential for achieving sustainable development goals and universal health coverage (UHC). It's also important to highlight that enhancing service delivery effectiveness necessitates a combination of skilled and suitably qualified staff, proper infrastructure, adequate supplies, equipment, and medications. Although all of the resources enumerated are necessary, they are not sufficient enough to ensure that there is the delivery of quality health care service. In addition to the provision of the resources listed above, there

is need for continuous monitoring, evaluation and improvement of key domains of service to ensure that the provided resources translate into actual performance.

Improving healthcare quality in Africa is crucial due to the rising fatalities linked to neglect and substandard services in medical facilities (Kioi et al., 2020). In Kenya, where there are more than 4,700 healthcare institutions, ensuring high-quality service delivery has become a key focus. Factors such as governmental policies aimed at public health facilities, competitive dynamics, and demands from patients or healthcare management initiatives contribute to this emphasis (Kirigia et al., 2021).

Therefore, the utilization of private healthcare services within the nation is anticipated to further rise. This surge is poised to amplify the role undertaken by these private entities considerably in service provision, thus shaping health outcomes within the area (Dinda et al., 2020). The private healthcare sector in Kenya confronts numerous hurdles that demand substantial reforms and interventions from policymakers and organizational leaders to ensure the delivery of superior primary care (Kirigia et al., 2021). Kenya mirrors many Low and Middle-Income Countries (LMICs) in encountering a scarcity of data regarding the performance of crucial aspects of high-quality primary care within the service delivery sphere, particularly in the private sector.

1.1.2 Concept of Knowledge Management

According to philosophers, ‘knowledge is nothing natural’. On the other hand, historians gives a different perspective that knowledge is the basis of human evolution since its very beginning thousands of years ago. The discussion of knowledge has a very long tradition spanning back from the 5th century B.C when Philosopher Socrates dealt with the question of limits of knowledge (Nelson, 2015). The importance of knowledge for the competitiveness of companies, organizations and even economies is widely accepted these days. Any publication on knowledge management however, will need clear clarification of the term knowledge.

The most common association with the term knowledge is scientific knowledge. This includes knowledge which stems from academic research facilities such as universities and institutes of academic research. This knowledge is developed using by using scientific methodologies and standards. It is usually tested and validated by the scientific community. It is explicitly described in research papers, reports and books. Nearly the same association is linked with the knowledge produced produced by the research and development departments of companies. Their knowledge is however embedded into products and services. The other association with the term knowledge is the knowledge an experienced person possesses. For example, when experienced lathe operators hear the 'right sound' and feel the 'good vibrations' of the machine, they know that the process is going right. Similarly, the same observation is quoted from a worker at a paper mill 'We know the paper is right when it smells right'. However, you do not find this kind of knowledge in craft work settings, you also find it in in high tech chip production environments as well as in social settings, like schools and hospitals

In organizational setup, employees often produce knowledge which can either be shared to others- explicit knowledge or retained in the hands of the expert- tacit knowledge. The process by which knowledge is acquired, applied and stored for intellectual capital is what has come to be known as knowledge management (Becerra-Fernandez & Sabherwal, 2019). Additionally, Berraies and Chaher (2018) have defined knowledge management as the process of knowledge creation, sharing, retrieval and application to unique organizational circumstances with the aim of enabling the firm to competitively and sustainably operate in its industry. Another definition has been presented by Kim et al (2018) who assert that knowledge management encompasses a conscious process of structuring, retaining and sharing knowledge and experiences of employees found within an organization. A more

concise definition has been fronted by Liebowitz and Frank (2021), where they define it as a discipline that is at the forefront of promoting an integrated approach to the identification, capturing, retrieving, evaluating and sharing of an enterprise's informational assets. The assets in this context refer to documents, databases, procedures, policies and the expertise and experiences of employees which had not been captured previously.

In general, scholars have implemented the concept of knowledge management in a variety of ways. For instance, Esterhuizen et al., (2019) and Alegre et al., (2019) view it through the knowledge sharing lens, Liebowitz and Frank, (2021), and Chung et al., (2018) view it through the knowledge creation lens, while Iyer, Sharp & Brush, (2017) and Esterhuizen et al., (2019) look at it via the knowledge storage lens and finally, Berraies and Chaher, (2018); and Liebowitz and Frank (2016) consider it through the knowledge application domain. Liebowitz and Frank (2021) argue that knowledge creation involves making available and enhancing the knowledge generated by individuals and integrating it into the organization's knowledge framework. This domain is important as it explains the source or origin of knowledge in organizational setups and further points or hints to the destination and utility of the generated knowledge. The second domain which relates to knowledge sharing as proposed by Chung et al (2018) considers the transfer of explicit or documented knowledge and tacit or undocumented knowledge from one person to another or from an entity to another. The greatest challenge that organizations face is in their bid to ensure that both tacit and explicit knowledge are captured and shared within the organization.

The third domain which entails knowledge application looks at how knowledge can be translated or converted from theory to practice (Esterhuizen et al., 2019). Knowledge is totally useless unless it can be converted and used to enrich the organization and its people thereby making the organization

more competitive. The fourth and final domain entails knowledge storage as proposed by Alegre et al. (2019). Knowledge storage ensures that the knowledge collected, shared, and applied is stored in a central location where it can be accessed by members within the organization and be used to help them carry out their daily tasks. Considering the definitions of the various domains of knowledge management, it is prudent to assert that for this study, the applied concept of knowledge management encompasses all four domains: creation, sharing, application, and storage. A detailed discussion of the four domains ensues.

Knowledge creation has been defined variously by different authors. First up is Chung et al. (2018) who defined it as the formation of new or novel concepts and notions that often occur as a result of interactions between explicit and tacit knowledge. Secondly, Liebowitz and Frank (2021) define knowledge creation as the continuous or enduring process of combining, transferring and converting different kinds if knowledge that happen as users interact with each other, practice and learn. Thirdly, Berraies and Chaher (2018) describe knowledge creation as involving two primary levels: individual interactions and group-to-organization exchanges, facilitating the generation of both tacit and explicit knowledge. Becerra-Fernandes and Sabherwal (2019) further assert that knowledge primarily emerges through practice, interaction, and collaboration, as various kinds of knowledge are exchanged and transformed. Additionally, they emphasize that knowledge creation benefits from data, which can enhance decision-making and contribute to the formation of new insights.

The concept of knowledge sharing is also interpreted in different ways. Esterhuizen et al. (2019) view it as the act of disseminating both tacit and explicit knowledge from one individual to another within an organization. Conversely, Chiu and Chen (2016) see knowledge sharing as the dissemination of newly acquired information from diverse sources, which then aids in generating fresh knowledge,

improving comprehension, and refining existing information. Berraies and Chaher (2018) suggest that knowledge sharing can occur through either push or pull mechanisms. The pull happens when a knowledge worker actively involves self in seeking out knowledge from sources that include library sources, collaborations with coworkers and seeking out an expert. Conversely, knowledge push happens when knowledge is pushed to the knowledge worker via means such as unsolicited publications and newsletters.

Next is the concept of knowledge application, which like the other two has also been defined and described variously. Khodakarami and Chan (2018) describe knowledge application as the incorporation of knowledge into a company's products and services. This perspective is consistent with Maravilhas and Martins (2016), who interpret the concept as the ability to transfer and apply knowledge across various contexts. Knowledge application is critical as it underscores the main reason why knowledge is created or acquired in the first place. When done correctly, the end result of knowledge application can include a boost in problem-solving techniques and improvement in decision-making capacities. Applied knowledge can also help in creation of models that would ultimately ease the work done by members of the organization. As thus, Donate and de Pablo (2019) posit that the right application of unique organizational insights gathered from the process of knowledge application hold the promise of boosting the overall performance and productivity of an organization.

The final domain, which is knowledge storage has also been defined and described by different authors. First, Kim et al, (2018) defines it as the process of organizational memory formation where knowledge is stored both formally (in physical memory systems) and informally (as rules, values and beliefs) and are then associated or tied to the culture and organizational structure. Second, Khuram

(2019) defines it as the process by which knowledge is held for later retrieval and use. This stored knowledge, which is often called organizational memory, often include knowledge that employees recall as well as the knowledge that is often embedded the systems and structures of an organization. According to Meihami and Meihami (2019), the complex procedure of knowledge storage involves utilizing technical infrastructure, such as modern informational hardware and software, as well as human processes to identify, code, and index organizational knowledge for subsequent retrieval and utilization.

1.1.3 Private Healthcare Facilities in Nairobi County

Over the last 20 years, the private health sector in Kenya has grown significantly. Therefore, any meaningful strategy to improve healthcare outcomes in Kenya must look beyond the public sector and consider the potential of the non-profit and commercial health sector as well. The government understands this and private health sector is clearly envisioned in vision 2030 plan for growth in all areas which includes health. The government's development partners-both bilateral and multilateralare also aware of how large a role commercial health providers play in the health system. As a result, there is an important need to understand the characteristics of the private health sector as well as to identify appropriate and effective ways of knowledge management in this very important sector of the Kenyan economy.

Nairobi, being the fastest-growing and largest city in Kenya, is home to approximately 4.4 million people. Within Nairobi, numerous private healthcare organizations cater to the community (Momanyi et al., 2020). These facilities provide a range of primary healthcare services, encompassing preventive and treatment services, health promotion, and ambulatory care for individuals across all age groups in urban, semi-urban, and peri-urban areas (Chege, 2020). The majority of these facilities operate

during the week and maintain convenient hours for the population. Staff members typically include receptionists, registered nurses, laboratory technicians, radiographers, and pharmacy technicians, among others. Additionally, these facilities are equipped with pharmacies and laboratories and may facilitate referrals to specialist clinics at tertiary hospitals (Momanyi et al., 2020).

1.2 Problem Statement

The provision of private healthcare services plays a crucial role in both developing and developed economies. This is because private healthcare providers frequently contribute to addressing the deficiencies observed in public health facilities. The importance of these private actors was brought to the fore during the COVID-19 pandemic even as they raised to the occasion to ease the pressure public health facilities were under. The private actors were able to provide PPEs, medicines, equipment and vaccines needed to fight the virus. Therefore, it can be asserted that a function private healthcare sector is critical in any a country as this can help ease the disease burden in public health facilities while at the same time rendering quality healthcare and support services to the citizenry.

Since the healthcare industry is widely considered to be a knowledge-driven industry, advancements within the industry in terms of research and innovation are norms. These innovations and discoveries are critical and as thus it is important for the knowledge generated from these processes to be captured and shared across the sector to inform practice, processes and procedures. In Kenya, the government acknowledges the significant contribution of private healthcare organizations, recognizing them as instrumental contributors to achieving and realizing the health pillar of Vision 2030. Maina (2015) asserts that about 43% of Kenya's healthcare sector is controlled by facilities in the private sector while over 47% of the populace do seek out the services of these private healthcare organizations. Korir et al. (2021) also note that the most private hospitals are situated in urban and periurban areas,

with a significant concentration in Nairobi County. However, despite of the significant contributions that these organizations are making in terms of addressing the health needs of the citizens, Korir et al. (2021) opines that there has been a steady decrease in the annual growth rate of these facilities from 2.6%, 2.3%, and 1.9% between 2017, 2018 and 2019.

Nevertheless, there persists a substantial gap in the local context's knowledge base as to how private healthcare entities strategically implement the aforementioned knowledge management practices and how the same influences their delivery of healthcare for desirable healthcare performance. The existing studies focused more on industrial contexts rather than on healthcare. For instance, studies by Karani (2015), Wanyama (2018), and Kangogo (2015) applied descriptive approach, used descriptive design and cross section design respectively in different studies to show how the concept of knowledge management has been applied in different industrial contexts and yielded excellent results. Therefore, the current research set out to bridge the existing knowledge gap by presenting a research-backed assessment of the effect of strategic implementation of knowledge management practices on the delivery of private healthcare services in Nairobi County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to investigate the influence of knowledge management practices on care delivery in private hospitals in Nairobi.

1.4 Objectives of the Study

The present research attempted to meet following objectives:

i. To examine the outcome of knowledge creation on the delivery of private healthcare services in Nairobi County, Kenya ii. To establish the effect of knowledge sharing on the delivery of private healthcare services in

Nairobi County, Kenya iii. To determine the effect of knowledge application on the delivery of private healthcare services in Nairobi County, Kenya iv. To examine the effect of knowledge storage on the delivery of private healthcare services in Nairobi County, Kenya

1.5 Research Questions

The research questions that were addressed in the course of this study were as follows

RQ1: How does the process of creating knowledge influence the provision of private healthcare services in Nairobi County, Kenya?

RQ2: How does knowledge sharing impact the delivery of private healthcare services in Nairobi County, Kenya?

RQ3: What role does the application of knowledge play in enhancing the delivery of private healthcare services in Nairobi County, Kenya?

RQ4: How does knowledge storage affect the delivery of private healthcare services in Nairobi County Kenya?

1.6 Study Limitations

Our analysis had important limitations that could have impacted the results. The first limitation relates to the sample size. Though the sample size was a larger proportion of the target population, it was too small to guarantee precision and reliability of results. Besides, the small sample size may make the study susceptible to random variation and type two error where the effects of the predictors may fail to manifest even where they exist. Further, the small sample size may pose a challenge in generalizability of the results. The second limitation is that the study relied on the perception of single administrator to represent the entire organization. The performance of the organization was evaluated based on the perception of the administrator and not measured through the standard metrics such as

time to service, readmission rate, length of stay and so on. The possibility of response bias limits the validity of the results.

1.7 Significance of the Study

This is important because it sought to assist in the management of private healthcare facilities in Nairobi County, Kenya, by identifying effective knowledge management strategies to improve their performance. The findings can enable these facilities to effectively navigate evolving knowledge in critical areas such as diagnosis, treatment protocols, and medical trials, thereby improving the quality of care they offer. Furthermore, the insights gained from this research can have broader applicability beyond the healthcare sector, as knowledge management principles are relevant across various industries. The study's findings can also inform regulators and policymakers, offering valuable insights into the formulation of regulations and policies that facilitate the effective utilization of knowledge by private healthcare facilities. Moreover, academics stand to benefit from this research, as it contributes to the enrichment of knowledge management and private healthcare literature. Thus, within the local context, the body of knowledge in Kenya will greatly benefit from the expanded understanding of knowledge management's role in private healthcare delivery.

1.8 Scope of the Study

This research focused on investigating the impact of the practices involved in knowledge management on the delivery of private healthcare services, particularly within Nairobi County, Kenya. The research aimed to investigate the effects of creation, sharing, application, and storage of knowledge on the provision of private healthcare services. The study was carried out in private healthcare facilities located in Nairobi County over a one-month period in September 2024. The theoretical frameworks of the resource-based view, knowledge-based view, and organizational learning theory

guided the methodology of this inquiry. In terms of scope, the inclusion criteria was private healthcare facilities with inpatient services situated within Nairobi County, Kenya.

1.9 Study delimitations

The study was conducted within the confines of the Nairobi County as outlined in the Kenyan definition of the county boundaries. Given that the study focused on health facilities, the administrators of these facilities were the respondents for the study. This decision was made given that it is the administrators who are involved in the day-to-day running of these clinics.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This second chapter of the study presented a critical review of the theoretical underpinnings, conceptual framework and empirical scholarly work necessary for the understanding of the problem under study. The section on theoretical framework delved into the identification and discussion of knowledge management theories and their influence on service delivery in private healthcare facilities. Primarily, the chapter reviewed the works done by other authors and scholars on the matter with the aim of identifying gaps and drew a connection between dependent and independent variables through a carefully modelled conceptual framework.

2.2 Theoretical Literature Review

Information can be viewed as the currency of knowledge economy (HR Magazine, 2009), and the value of such a company currency predominantly depends on the knowledge of an organization, how it uses its knowledge, and how quickly it is ready and able to acquire new knowledge. In the past, competitiveness was determined depending on the amount of capital that is available to an organization. Today however, knowledge is viewed as the foundation of competitiveness in organizations.

The last decade of 20th century was marked by the concept of knowledge management. Quite a few authors perceived this concept as a trend that would be abandoned soon. As literature suggested, this modern syntagm would be used to impress rather than to research this area in pursuit of useful and usable knowledge management (Scarbrough and Swan, 2001; Ponzi and Koenig, 2002; Hislop, 2010; Serenko, Bontis, Booker, Sadeddin and Hardie, 2010; Oluikpe, 2012). However, at the end of 20th Century, there was an exponential growth of literature on knowledge management, and there are no signs that growing trend of interest in this area would end. Thus, initial assumptions that knowledge management was just a fashion were rejected. What is obvious today is that knowledge management as an exceptionally important category is associated with all organizations regardless of the sector they belong to-private or public, for-profit or non-profit, labor-intensive or capital-intensive, production or service.

In modern business environment where knowledge makes the fundamental resource for development, effective knowledge exploitation is impossible without an appropriate setting up of knowledge management as one of the prerequisites for achievement of goals of modern organizations. Ensuring success of an organization in the long run means creating a coherent organizational system that

connects people, processes and technology in order to increase the knowledge of its members and the organization as a whole. Therefore, knowledge management is recognized as a critical factor in achieving strategic competitive advantage of modern organizations (Omotayo, 2015). Furthermore, it is perceived as a basis for sizing organizational performance, competitiveness and profitability. As a rule, organizations that create and use knowledge in the right way are more innovative and function better than those with inadequately developed knowledge management (Riege, 2007; Omotayo, 2015). In addition, knowledge management is one of the basic determinants of sustainability and prosperity of the organization (Teece, Pisano and Shuen, 1997, Cegarra-Navaro and Cepada-Carrion, 2010, Kimhawi, 2012; Cavicchi, 2017) and a crucial driver of organizational perfomances too (Bosua and Venkitachalam, 2013). A higher degree of knowledge management in the organization requires a higher degree of productivity and greater flexibility in the organization (Martenson, 2000). Therefore, even from the macroeconomic point of view, knowledge in modern business conditions is perceived as the basis for growth of gross domestic product across national economies.

Globalization and development of information and communication technologies, which have contributed to the enormous speed of information are among the causes that affects the growing importance and significance of knowledge management in the modern business environment (Greiner Bohman, and Kremar, 2007). Consequently, globalization and the development of information and communication technology, as complementary processes, have contributed to the multiplication of knowledge by sharing information, and due to the increasing availability of knowledge, and the speed of information flow, information and knowledge become obsolete at great speed. This means that knowledge management requires permanent focus.

For the purpose of grounding this study in research, a number of knowledge management theories were chosen and it is upon these theories that the research was premised. These theories included the Organization Learning Theory, Resource-Based View (RBV), and Knowledge-Based View (KBV).

2.2.1 Resource-Based View Theory

RBV is a theory that was once fronted by Penrose in 1959 who held that the growth of any organization is determined by the resources it possesses and how best it can exploit these resources and create new ones. Therefore, this view champions the idea that dissimilarities occur in the performance of firms in the same market due some of them having resources that are rare, valuable, imitable and well organized, which enable them to enjoy a competitive advantage over its closest rival (Hislop et al., 2018). Essentially, RBV looks internally to the firm to determine if it has the resources and capabilities needed to maintain and sustain its competitive edge in the market (Bromiley & Rau, 2016). Therefore, Nason and Wiklund (2018) aver that this theory can be used to explain the difference in performance between firms operating in any industry.

Central to the RBV theory is the recognition of the need to check on the transferability of a firm's resources as this is critical in determining the capacity of the firm to advance and sustain its competitiveness in the market (Huang et al., 2015). Accordingly, the theory holds that the success of any firm is determined by the sum of all the resources, assets and capabilities it possesses. It is these resources, assets and capabilities that afford a firm a sustainable competitive advantage. As thus, valuable company assets, capabilities and resources ought to be difficult to imitate so that competitors find it difficult to acquire or copy. Clearly, such a move would ensure that the firm get an exclusive opportunity to generate profits.

Although, a resource-based perspective has long been central to strategy researchers, the resource based view (RBV) received a fresh impetus only during the 1980's (Lockett & Wild, 2014). It emerged as an opponent to the until then prevalent environmental model or position-based view (PBV). Strategies with this classical view regard the external environment as the primary determinant of strategy. That is, strategy is formulated with a view to as advantageous perceived position in the market. Grant (1991) argues that firms start the formulation of their strategy generally with a mission statement which is usually related to the market or the customers a firm wants to serve.

2.2.2 Knowledge Based View Theory

KBV holds that knowledge is an important, scarce and valuable resource within a firm. This theory further extends the RBV theory by pointing out the critical role knowledge plays as the most valuable asset that a firm can possess (Collins, 2021). Essentially, knowledge is considered to be a justified true belief that is intricately connected to the person (Huang et al., 2015, Shin-Yuan et al., 2015). In modern organizations with staff changing jobs and roles ever so often, it is critical for organizations to find ways of tapping the knowledge possessed by these experts to ensure that their departure from the firm does not leave a vacuum. Caputo et al. (2019) opines that the firm's capacity to harness the tacit and explicit knowledge possessed by its employees and use these to power their operations is the clear differentiator between firms that outperform their competitors. However, similar to the other critical assets, capabilities and resources identified in the RBV theory, the knowledge that the firm obtains must bear the qualities of inimitability, evaluability and heterogeneity. Additionally, Pereira and Bamel (2021) consider knowledge as being a critical resource that has the capacity of yielding greater organizational outcomes that are not easy to acquire, identify and imitate. Hence, competencies rooted in knowledge arguably hold the utmost significance and strategic importance in terms of earning and maintaining competitiveness. The capacity to acquire actionable knowledge,

particularly in comparison to rivals, emerges as the sole source of competitiveness that can be sustained. The unique competencies a firm possesses can result in enhanced performance because there are no other firm that share in these competencies and abilities. Therefore, this current study will employ KBV as a leading theoretical framework to determine whether the process of knowledge management is critical in the delivery of services in private healthcare facilities in Nairobi County, Kenya.

2.2.3 Organizational Learning Theory

This theory, which was fronted by Argyris and Schon hold that organizations need to continue updating their knowledge base as new and better information come to the fore. By so doing Adebisi and Bakare (2019) aver the firm will be able to weather the storms and stay competitive in the highly competitive and volatile market conditions. Therefore, a learning organization can be said to be one that embraces the following five features- team learning, shared vision, system thinking, individual knack and psychological frameworks. Therefore, to ensure that the organization becomes a learning organization, it is important for the firm to make it a habit of receiving feedback and inculcating the feedback in its operations and make these new feedback and information as part of their operational norm. Ba et al. (2017) opines that firms which manage to realize the full potential of learning stand a chance of using the knowledge collected to enrich their operations. Guided by this notion, learning organizations can change their ways of thinking and become more interconnected even as they form communities where their staff can openly share what they are learning thereby contributing to the body of knowledge that can be leveraged by the firm to inform or finetune its operations (Cha et al., 2018).

According to Conner and Prahalad (Chapter 7) as cited in Muñoz-Guarasa and Pajares (2014), organizational mode (market or firm) through which individuals coorperate affects the knowledge they apply to business activity. Specifically the organizational mode affects knowledge substitution (how present knowledge is employed), and knowledge flexibility (how future knowledge is acquired). In the choice of organizational mode, opportunism-independent considerations can outweigh opportunism-based ones. When the possibility of opportunism is low, transaction cost economics predicts the choice of a market mode. However, the resource-based theory predicts that a firm organization would nevertheless be selected in in low-opportunism conditions when results in more valuable knowledge applied to the business activity.

There exist a number of concepts that articulates a knowledge-based view of the firm: (1) Knowledge is the most important resource for generating market value and economic rent. (2) explicit and tacit types of knowledge vary in their transferability (3) Knowledge is subject to economies of scale and scope,and knowledge-intensive industries may experience increasing returns. (4) Knowledge is created by human beings, who need to specialize to be efficient in knowledge creation and storage. (5) Producing a good or service typically requires the application of many types of knowledge. Based on these observations, Grant asserts that firms exist to create conditions in which multiple individuals can intergrate their specialist knowledge. He identifies four intergration mechanisms (rules and directives, sequencing, routines and group problem-solving and decision making) that need to be supported by a base of common knowledge.

Information acquisition forms the first part of the learning cycle where the organization gets to gather information from the outcome-action connections from its staff which serves to confirm the validity of the outcomes. According to Adebisi and Bakare (2019), many of the outcome-action relationships

are typically derived from experiences, grafting, experiments, and benchmarking. These must then undergo thorough analysis to uncover the underlying causes and effects. After the information has been acquired, the next step entails deductions where the firm compares the expected versus the actual outcomes and decide on what new knowledge can be used to update their current knowledge base and update their memory accordingly. Additionally, during this phase, novel-outcome connections need to be adapted as need be, outcomes that were not anticipated should be evaluated for interconnections and learning be augmented for the benefit of the organization. Taken together, these actions expand the firm's knowledge base.

The next step in the learning cycle involves taking action or adaptation. During this phase, the organization applies the knowledge that it has determined is appropriate for its use case and apply it to its unique circumstances. Once adaptation is completed, the organization can now boast of having an updated knowledge base that is current and fit for purpose. Omotayo (2015) and Hussinki et al. (2017) propose that the process of adaptation needs to be iterative and continuous and should cut across all the phases in the cycle of learning. Firms should always endeavor to use information and knowledge from credible and reputable sources such as expert knowledge from authoritative persons. Internally, explicit information can be collected, coded, transmitted and documented as data that can be used by others within the organization to update their own knowledge bases (Park et al., 2015). For tacit knowledge which cannot be collected or stored, the firm can use means such as mentorship and apprentice programs where mentees are attached to knowledgeable experts within the organization so that they can learn from these mentors on a first-hand basis and tap into their tacit knowledge. Against this backdrop, the current study will apply the organizational learning theory to

determine knowledge management, in its entirety, influences the delivery of private healthcare services in Nairobi, County Kenya.

2.3 Empirical Literature Review

In this next section, the focus is on presenting information from extant research on the subject to show the gap that led to this study. The studies reviewed are drawn from local, regional and global contexts.

2.3.1 Knowledge Creation and Organizational Performance

In a study by Mizra (2019) examining the process of knowledge management and clinical framework for healthcare organizations across countries, with Sweden as a reference point, the aim was to propose a clinical knowledge management system for such organizations. Regarding knowledge creation, the study discovered that interacting with patients during rounds serves as a key source for the generation of new knowledge. This knowledge can be enhanced by integrating it into nursing education. Nurse supervisors are tasked with identifying optimal interaction methods and facilitating knowledge exchange meetings for nurses. The study did not however attempt to link knowledge creation with organizational performance, which is the focus in the present study.

Focusing on the automotive industry in Malaysia, Bihamta et al. (2018) examined how knowledge creation can potentially affect organizational performance. In pursuit of this goal, the researcher investigated the substantial influence of the processes of knowledge creation including externalization, socialization, internalization, and combination, as frameworks for enhancing quality. Employing a cross-sectional survey methodology, the research unveiled a positive correlation between knowledge creation and the performance of the organizations under study. Additionally, the research highlighted that the concept of continuous improvement has been extensively adopted by numerous automotive manufacturers worldwide. Despite the excellent findings from this study, the

findings cannot be extrapolated as they are because of the narrow approach that the researchers took. Their investigation solely explored performance concerning knowledge creation, representing only a limited aspect of the broader knowledge management domain. Additionally, the research focused on the automotive sector, which operates within a unique industrial framework distinct from the private healthcare industry. As a result, certain discoveries might not directly apply to the current study's context.

On their part, Chung et al. (2018) interrogated how organizational agility can help organizations to be more given to the procedures of knowledge creation which would in turn improve their performance. In this study, 217 businesses were targeted in Macau China where it was found that there was a positive correlation between organizational agility and knowledge creation with those organizations that have adopted agility as their way of operation being more averse to knowledge creation which has in turn helped in improving their performance. However, a significant limitation of this study emerges: it utilized a non-linear model emphasizing the mediating role of organizational agility, yet it did not necessarily illustrate the direct connections between knowledge creation processes and organizational performance. Additionally, similar to the previous study, the focus of this study was in the electronic industry which varies markedly from the private healthcare industry that the current study is concerned with. Therefore, the findings from the study might not be a good fit for the current study.

Barraies and Chaher (2016) investigated how the processes involved in knowledge creation predict organizational outcomes, particularly in terms of innovation, and their impact on organizational learning. The study targeted 191 Tunisian MSMEs operating in the ICT sector with the outcome proving that there was a connection between the procedures of knowledge creation, organizational

learning and the outcome of innovation withing the targeted firms. Further, the researchers found that the firms which showed a positive correlation in relation with the study parameters embraced socialization, internalization and externalization as guiding principles in their operations. However, just like the other studies reviewed prior, this study suffered two main shortcoming that makes its findings to be of no direct applicability to the current study. Firstly, the study focused on studying organizational innovation and knowledge creation which are narrow aspects of organizational performance and knowledge management which the current study is much interested in. Secondly, the study's focus was on MSMEs in the IT sector, which operate in different industrial contexts in comparison with the private healthcare facilities that this current study is focused on.

Iyer et al. (2017) conducted a study aimed at exploring how innovation outcomes were predicted by organizational internal systems such as new knowledge creation. The researchers adopted a desktop review design where the outcome revealed a deep connection between knowledge creation and innovation performance. The researchers also found that the processes which were internal to an organization contributed more to the creation and transmission of knowledge compared to those which were external to the organization. The study also suffered some shortcomings. Firstly, being based on desktop design means that the study lacked focus both in industrial and geographical context. Second, the study was not specific to private healthcare organizations and as such, the findings might not have a direct application to the current study whose focus is on private healthcare facilities.

Hirani (2016) explored the knowledge management strategies applied at Aga Khan University Hospital, Nairobi, employing a blend of quantitative and qualitative data analysis methods. The study involved participants such as section heads, program directors (10), consultants (64), registrars (28),

senior house officers (24), and residents (54). It uncovered that crucial knowledge management practices at the university hospital encompassed the adoption of electronic medical records, continuous medical education, communities of practice, knowledge cafes, and web-based systems. However, the study had a broader focus on knowledge management overall and specifically analyzed one hospital as a case study, while the current study centers on surveying diverse private healthcare facilities in Nairobi County.

Cheruiyot et al. (2017) explored the process of institutionalizing knowledge management within manufacturing enterprises operating within the local context of Kenya. The researchers sampled a total of 60 senior managers from three firms operating within the manufacturing sector. The research revealed that two main elements impact the establishment of knowledge management within institutions: organizational practices and technological infrastructure. Additionally, they also highlighted that activities like knowledge creation and dissemination play a crucial role in adding value to organizations. Therefore, adopting a comprehensive strategy for implementing knowledge management practices necessitates the careful refinement and alignment of organizational practices to support the overall process effectively. However, a notable drawback of the study was its inability to establish a clear connection between knowledge management practices and organizational performance. Further, the context in which the study was conducted (manufacturing sector) is also markedly different from the current study context (private healthcare sector) rendering the findings inapplicable and non-generalizable to the current study context.

2.3.2 Knowledge Sharing and Organizational Performance

Regarding knowledge sharing, a number of scholars have done research on this area and documented their findings. For instance, Radisi (2019) explored the role played by trust in enhancing the

relationship among employees in the private health sector in Greece. The study focused on exploring how trust is developed through actions such as teamwork, collaborations and communication and how these contribute to knowledge sharing. To establish this connection, the author used qualitative methos including the use of a semi-structured interview guide. The target population comprised of two clinics in Thessaloniki, where 12 employees- 6 from clinic A and 6 from clinic B participated in the interviews. From the data collected, it emerged that although the knowledge sharing was mainly through verbal means and not systematic, it still contributed to some improvements in organizational performance. Although this study came very close to mirroring the current study, especially since it also targeted private healthcare facilities, it failed to completely meet the threshold because it did not link knowledge management and organizational performance which is the primary focus of the current study.

On their part, Tubigi and Alshawi (2018) researched on how knowledge management processes including knowledge sharing or transfer and usage influenced or impacted organizational performance in Germany's airline industry. The researchers employed deductive and inductive methods, along with a qualitative approach, to steer their investigation. They gathered primary data through interviews and analyzed it using content analysis. The study's findings indicated that knowledge transfer was not the predominant process utilized in organizational knowledge management. Consequently, it was challenging to definitively establish the extent to which it impacted organizational performance. On the other hand, the found that knowledge usage, being a process of knowledge management, influenced organizational performance the most. Despite these findings, the study's results cannot be directly applied to the current study because of the mismatch

in terms of the target population – airline industry versus private healthcare industry- and the research instruments and design used between this study and the present research.

Choi and Lee (2019) undertook a study to investigate how IT supports practices in knowledge management, including encoding, applying, storage, sharing, and knowledge retrieval, and how these processes predict outcomes for teams and organizations. The study focused on two ICT firms in South Korea, each comprising 139 teams. Despite the positive effect of knowledge sharing on knowledge application, the findings indicated that it did not directly translate into improved performance. This underscores the importance of not only sharing knowledge but also ensuring its application to enhance both team and organizational performance. However, the study has two limitations: it narrowly focuses on IT-based enablers of knowledge management, overlooking other aspects, and it does not directly examine the impact of these enablers on the private healthcare industry.

Another study by Zahari et al. (2019) focused on how organizational performance is predicated on the sharing of knowledge within the organization with a focus on insurance firms in Malaysia. The findings from this study demonstrated that in deed dissemination or sharing of knowledge somewhat predicts the performance of any firm. Similar to the previous studies, this study also suffers from certain shortcomings that makes its findings not directly applicable to the current study. For instance, it is important to note that the target population for this study, namely the insurance industry, differs significantly from the private healthcare sector that the current study is centered on. Secondly, the research primarily concentrated on knowledge creation, which represents just one aspect of knowledge management.

Alonso and Viridiana (2017) examined the implications of implementing knowledge management initiatives to enhance efficiency in customer service and foster a positive work environment in small

and medium enterprises. Their study focused on a company in Mexico specializing in the distribution of cleaning products. The researchers discovered that implementing core knowledge management processes, such as sharing innovative ideas within the company, led to a notable increase in customer satisfaction. However, while the study provided valuable insights, it did not establish a direct connection between these findings and service delivery in the private healthcare industry, as its primary focus was on elucidating the implementation of knowledge management processes in a different industry.

On the local front, Nguthari and Kwasira (2015) focused on the exploration of the influence of knowledge management practices on the performance of law firms in Nakuru City, Kenya. The researchers chose to target all the 162 law firms registered in the city. They employed a mix of qualitative and quantitative approaches in the study. From this study, the researchers found that in law firms specifically, there were many different ways in which knowledge can be managed and shared. They studied different areas that include how the law can be applied when providing legal services, how lawyers interact with their clients and businesses they represent the referral sources, the skills and backgrounds both of attorneys and staff working at the law firms and lateral hires. The researchers also found that of all the processes involved in knowledge management, knowledge sharing had the most influence on the performance of the law firms. Despite the findings from this local study, the findings cannot be directly applied to the current study because of the difference in industrial context. The findings are from the legal sector while the current research focuses on private healthcare sector.

2.3.3 Knowledge Application and Organizational Performance

Mizra (2019) delved into the intricacies of the knowledge management process and its consequential impact on clinical knowledge acquisition within cross-country healthcare organizations in Sweden.

The study aimed to propose a clinical knowledge management system tailored specifically for such cross-border healthcare entities. Upon investigating knowledge application, Mizra's study revealed a crucial need for amalgamating experiential insights and insights garnered from staff meetings into standardized nursing protocols. This synthesis was facilitated through tutorial mechanisms, which encouraged nurses to actively engage with patients, thereby enhancing problem-solving abilities and fostering the creation of novel knowledge. Such meticulously documented and reliable knowledge, in turn, serves to empower physicians in making more accurate diagnoses. It's worth noting, however, that Mizra's study refrained from directly correlating knowledge application with organizational performance—a facet that the present study aims to address as its primary focus.

In their research, Ruchi et al. (2016) examined the impact of knowledge management on the performance of software companies in India. The results indicated a direct correlation between the effectiveness of knowledge management practices and the performance of the examined organizations. Furthermore, the study demonstrated that factors such as system structure, knowledge framework, strategic implementation, and the conversion of knowledge all had a positive effect on organizational performance. The researchers held that the findings from this study can be very useful to managers of organizations as it can act as a guide for the implementation of knowledge management initiatives in their organizations, However, the study used a metric- innovative-based metric- to measure organizational performance but this might not be readily applicable to the current study. The study also suffered a number of shortcomings ranging from the location where the study was conducted; India, and the industry specific content which renders the findings from this study inapplicable in the current study context.

Yosuff and Daudi (2018) explored the relationship between knowledge management practices and the performance of SMEs in Saudi Arabia, with a particular focus on the intermediary role of social capital. Employing a 5-point Likert scale, along with regression and correlation analyses, the study found a positive correlation between firm performance and the application of knowledge. However, the study's findings were limited by a low response rate of 38%, and its context-specific nature to Saudi Arabia's unique socio-economic environment, making the results less applicable to other settings.

Zaim et al. (2018) delved into how knowledge utilization affects the performance of service-oriented organizations in Turkey. The study, which took a quantitative approach and involved 1068 participants from service-based firms, indicated that practices like program improvement, policy development, and alternative assessment positively influenced firm performance, demonstrating that knowledge utilization leads to enhanced organizational performance. Nonetheless, the metrics used for measuring knowledge utilization in this study differ from those related to knowledge application in the context of this research.

Kinyua et al. (2016) investigated the impact of knowledge application on the performance of commercial banks in Kenya, using a cross-sectional survey design. The study measured knowledge application through factors such as IT integration, problem-solving, and process efficiency and evaluated performance using non-financial metrics like innovation and market responsiveness. The results confirmed that knowledge application positively impacts bank performance. However, the performance indicators used in this study are not directly translatable to the context of private healthcare delivery.

Karani (2015) assessed the impact of knowledge utilization on the performance of firms in the telephony sector, using a census sampling method for 21 companies. The study, which applied regression and descriptive analysis, found that knowledge utilization—indicated by problem identification, shifts in employee thinking, and project support—significantly boosts firm performance. Performance was gauged in terms of profitability, which differs from the performance measures relevant to the delivery of private healthcare in the current study's context.

2.3.4 Knowledge Storage and Organizational Performance

Concerning knowledge storage, Mizra (2019) assessed this as part of knowledge management and looked at how this applies to the clinical framework for cross country healthcare organizations in Sweden. Primarily, the researcher aimed at proposing a clinical knowledge management system that could be used for the management of cross-country healthcare organizations. Regarding knowledge storage, the study found that organizational knowledge and patient data were critical assets for any organization. Therefore, the researcher averred that there was need to ensure that this data is protected from unauthorized access. One way to achieve this is by implementing an access management policy where all data in soft copy is password protected and those that are in physical copies are placed under lock and key. However, this study did not draw a link between organizational performance and knowledge storage which was the primary focus of the present study.

In a related study, Oztekin et al. (2017) explored the influence that knowledge storage had on the monetary and non-monetary performance of firms operating in the service sector in Istanbul. To achieve this feat, the researchers applied a cross-sectional approach which sampled 83 executives who were drawn from 300 firms. The researchers used personal interviews as the mode for collection of primary data which were then subjected to path and exploratory factor analysis for data analysis.

The study revealed that factors such as employees' access to knowledge repositories, effective internal policy documentation, and the maintenance of up-to-date information repositories had a positive impact on both the financial and non-financial performance of service industry firms. The concepts of knowledge storage used in this study vary markedly from those conceptualized in the current study and as thus, the findings from this study might not be directly applicable to the current study. Al-Ghazi (2018) conducted a study which aimed at measuring the effect of knowledge management on organizational performance via the use of balance scorecard perspectives. In this study, the researcher employed a case study design and targeted private hospitals in the Amman, Jordan. Using the balance scorecard, the study proved that storing and applying knowledge notably predicted the firm's outcomes as indexed from the perspectives of customers who left their own feedback. However, this study narrowly measured performance by the balanced score card as opposed to delivery of private healthcare. Likewise, Zaki and Soliman (2017) examined the impact of knowledge storage on the performance of banks in Egypt. The research focused on 40 registered banks, from which 3 were randomly selected for the study sample. The researchers used self-administered questionnaires to collect primary data from the participants who comprised of 50 staff drawn from the 3 participating banks. From this study, it was found that activities tied to knowledge storage such as keeping knowledge repositories up to date and implementing quality protocols for organizational processes' documentation. The findings from this study cannot be directly applied to the current study because it only measures performance using profitability, which is very different from the conceptualization of delivery of private healthcare in the study.

Within the local context, Koech et al. (2016) investigated how knowledge storage and retrieval affect staff performance and engagement in Technical Vocational Education and Training (TVET)

institutions in the Rift Valley region of Kenya. Utilizing an exploratory research approach, the study encompassed 3,147 employees across these institutions, from which a sample of 343 participants was derived using Cochran's formula for both continuous and categorical variables. The results indicated a positive relationship between effective knowledge storage practices and the performance of employees. The target population for the study makes its findings nongeneralizable and as thus cannot be applied to the current study. On the same front, Wanjiru (2018) explored the connection that subsists between innovation and leadership and storage of knowledge with special emphasis on commercial banks in Kenya. The study targeted a population of 39 commercial banks applying crosssectional descriptive research approach. It also used questionnaires that were self-administered for collecting primary data. The study revealed that organizational innovations are frequently driven by leadership, which can be utilized to shape knowledge management practices within the organization. However, this study neglected to illustrate the relationship between knowledge storage and organizational performance, a connection that the current study aims to establish.

2.4 Summary of Empirical Literature Review and Research Gaps

This chapter provides a comprehensive review of existing literature concerning the impact of knowledge management practices on the delivery of private healthcare services. While the reviewed studies have shown connections between private healthcare delivery and knowledge management practices, the emphasis has predominantly been on contexts outside of private healthcare facilities. Additionally, to the researcher's knowledge, there has been no study specifically conducted in Nairobi County based on the available published literature. This highlights a gap in knowledge, underscoring the necessity for this study. Table 1 offers a synopsis of the identified gaps in the current empirical research.

Table 1:

Summary of Extant Studies

Author(s)	Study	Findings	Research/Knowledge Gaps	Focus of the Current Study
Mizra (2019)	Knowledge management process and clinical framework for cross country healthcare organizations with reference to Sweden	Making interaction with patients during rounds is a source of new knowledge generation.	The study did not attempt to link knowledge creation with organizational performance, which is the focus in the present study.	The study aims to investigate how knowledge creation impacts the delivery of private healthcare services in Nairobi County, Kenya.
Hirani (2016)	The knowledge management practices implemented in the Aga Khan University Hospital, Nairobi	Key knowledge management practices implemented in the university hospital include the utilization of electronic medical records, continuous medical education, communities of practice, knowledge cafes, and web-based systems.	The study focused on knowledge management in general, as well as a case study of one hospital while the present study focuses on a survey of various private health facilities in Nairobi County	The study aims to evaluate the impact of strategically implementing knowledge management practices on the delivery of private healthcare services in Nairobi County, Kenya.
Radisi (2019)	Examining the role of trust in employee relationships within the private healthcare sector in Greece and its impact on knowledge sharing.	The results revealed significant evidence regarding the organization and sharing of knowledge, indicating that sharing typically occurred verbally among colleagues but lacked a systematic approach.	The study did not strive to establish a correlation between knowledge sharing and organizational performance, which is the primary focus of the current study.	The study aims to ascertain the influence of knowledge sharing on the delivery of private healthcare services in Nairobi County, Kenya.

Bihamta et al. (2018)	How the mechanism of creation of knowledge influences performance of organizations	Positive association between managing knowledge and	The study only laid emphasis on creating knowledge which is a narrow aspect of managing knowledge; it was	This study focuses on the concept of knowledge management in relation to four practices: creation,
		performance of organizations	centered on the automotive industry, which operates under a distinct operational framework compared to the private healthcare sector.	sharing, application and storage; it also focuses on private health facilities
Iyer et al. (2017)	The role played by knowledge systems like creation of knowledge in innovation performance.	Innovation performance is significantly impacted by knowledge creation	This study focused on innovation performance, which is not a reflective outcome of the firm	It focuses on the holistic notion of outcomes for the target organization and how these are influenced by the process of knowledge creation.
Tubigi and Alshawi (2015)	Exploring how knowledge management processes influence the performance of organizations operating within Germany's airline industry.	Knowledge transfer stands out as the most common in knowledge management processes used by firms but this did not directly impact on performance.	The research employed a qualitative approach, which focuses on perception and sentiment, thus overlooking the quantifiable relationship between knowledge sharing and organizational performance.	This study utilizes a quantitative design to explore the empirical relationship between organizational performance and knowledge sharing, grounded in objective data.

Choi et al. (2019)	IT has the capacity if facilitating knowledge management practices that include implementing encoding, storing, sharing and knowledge retrieval. All of these practices are important as they can help to forecast outcomes both for teams and organizations. g, and retrieving knowledge. These practices also forecast both team and organizational outcomes.	From the results, the act of sharing knowledge was found to bear a positive correlation on the application of knowledge; however, this failed to show how it directly impacted team performance.	The primary limitation of this study was its narrow focus, which exclusively examined IT-based enablers of knowledge management, neglecting other facets of knowledge management.	The current study is concerned with the application of knowledge management in its entirety.
Ruchi et al. (2016)	The influence of knowledge management on the performance of software organizations in India	The researchers found that knowledge conversion, structure of systems and the application of knowledge positively affected organizational performance.	The findings from this study are not readily generalizable and applicable to the current study because it only looked at a narrow aspect of knowledge management and it also focused on software organizations which are markedly different from the private health sector which the current study is based on.	The current study focuses on knowledge management in private healthcare industry.
Yosuff and Daudi (2018)	Knowledge Management and Firms Performance in SMEs	Utilizing knowledge has a positive impact on organizational performance.	The puny rate of 38% and the fact that the study focused on an industry (SME) that was markedly different from what the current study focuses on, the findings from the study are thus ungeneralizable.	The current research aims at achieving a return rate of 70% and above

Al-Ghazi (2018)	How knowledge management helps to predict outcomes for an organization.	Perspectives of customers are important and as thus, they are indexed through knowledge storage and application.	The findings narrowly measure organizational performance by using balance scorecard.	This current study uses both monetary and non-monetary performance indexes
Wanjiru (2018)	Connection between factors such as knowledge innovation, storage and leadership in commercial banks in the country.	It found that the firm's performance was positively impacted by knowledge storage practices.	The study focuses narrowly on the concept of innovation which does not reflect on organizational performance	The current study focuses on knowledge management in private healthcare industry.

2.5 Conceptual Framework

The study adopted a conceptual model from the discussion presented in the literature review, which forms the basis for the relationships of current study variables as shown in figure 1 below.

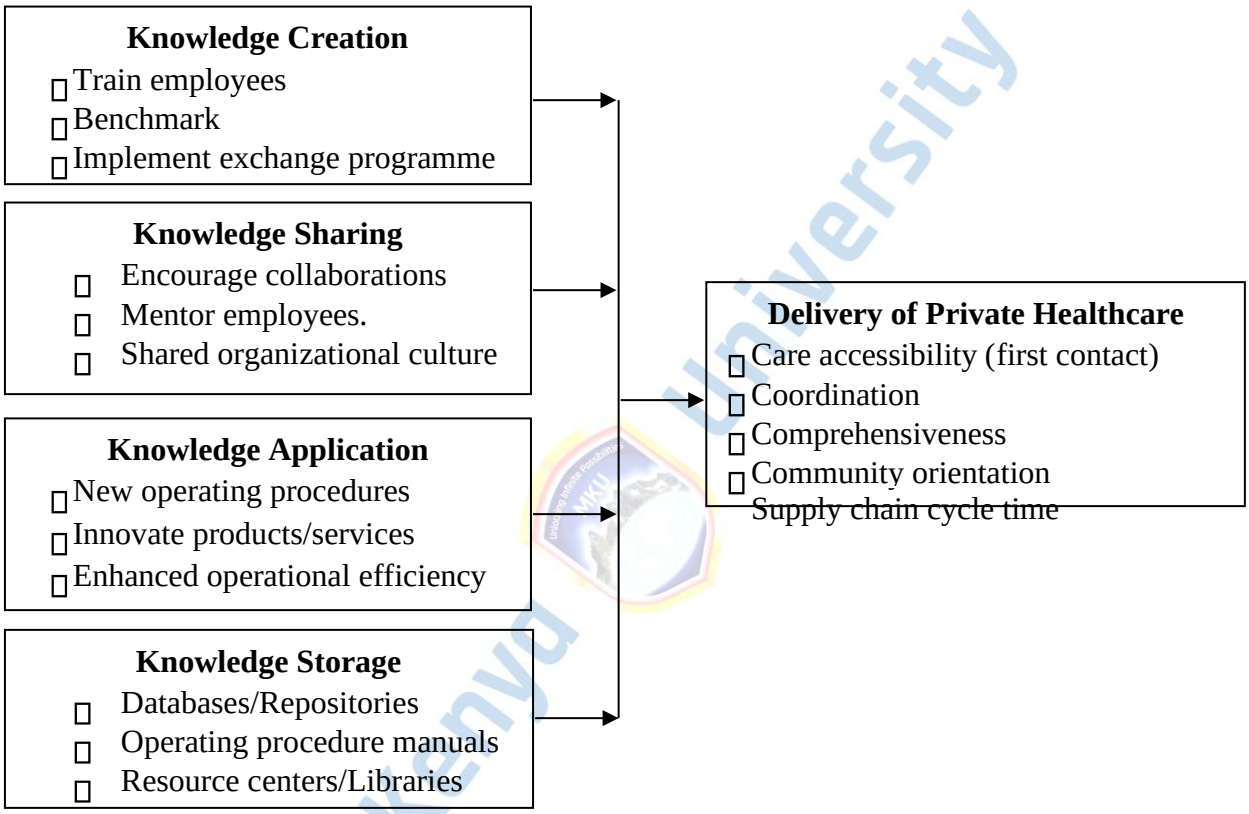

Figure 1: Conceptual Framework

Source: Researcher (2021)

Figure 1 depicts the framework of the study, highlighting the independent variables which include different aspects of knowledge management: knowledge creation, illustrated through initiatives like employee training, benchmarking, and exchange programs; knowledge sharing, captured through mentorship programs, collaborative efforts, and the spread of organizational culture; knowledge application, shown by the adoption of new operational procedures, the introduction of

new products or services, and enhancements in operational efficiency; and knowledge storage, emphasized by the availability of procedural manuals, databases or repositories, and resource centers or libraries. These elements are posited to have a direct impact on the delivery of private healthcare, the dependent variable, which is measured through aspects such as care accessibility (initial contact), coordination of services, comprehensiveness of care, and orientation towards community needs.

2.6 Recap of Literature Review

This chapter was intended to give the theoretical foundation of the current study. As a consequence of anchoring the study in a theoretical foundation, three theories were identified as relevant and applicable to the current study. The three theories included resource-based view theory, knowledge-based view theory, and organizational learning theory. Taking the literature in perspective, different methodologies have been used for research on this topic and different results obtained. Yet, none of these studies have addressed the issue of how knowledge management practices impact care delivery in private hospitals.

Looking at the relevant pieces of research, one would notice that the majority of studies have investigated the influence of knowledge management on organization's performance. Bihamta et al. (2018) investigated how the mechanism of creation of knowledge influences performance of organizations. Iyer et al (2017) examined the role played by knowledge systems like creation of knowledge in innovation performance. Yosuff and Daudi (2018) studied the relationship between knowledge Management and Firms Performance in SMEs. Ruchi et al (2016) investigated the influence of knowledge management on the performance of software organizations in India.

Nevertheless, a look at theseliterature show that there is a gap between studies' knowledge management strategies and healthcare service delivery. For example, a study such as Wanjiru (2018)

which examined the connection between factors such as knowledge innovation, storage and organization performance did so with respect to commercial banks. Besides, even studies Hiran (2016) which investigated the effect of knowledge management practices in hospital setting only did their investigation in a single hospital limiting the generalizability of their results. This show s that there is a gap in literature regarding the influence of knowledge management practices and performance of healthcare organizations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter 3 presented the methodologies that were used to realize the objectives of the study. The design and methodology of this study involved a quantitative analysis of primary data collected by the researcher from among the private health facilities. The collected was used to examine the impact of strategic knowledge management on how private facilities deliver healthcare services. The chapter defined the target population, presented the design of research, the sample size, instruments used to gather primary data and the procedures and processes that were leveraged to collect, process and analyze the data. Additionally, the ethical considerations that guided the study were also captured in this section.

3.2 Research Design

The study employed a descriptive quantitative cross-sectional research design. As outlined by Doyle et al. (2020), a descriptive study design aims to address questions concerning the "what, who, when, how, and where" of a specific research issue, elucidating a phenomenon, population, event, or their correlation. The descriptive design was, therefore chosen as it would facilitate the researcher's need to address the questions of "what, who, when, how, and where". The question of what is addressed by examining the impact of knowledge management strategy. The "who" apply to the private healthcare facilities which represent the practitioners in those facilities. In this study, the "when" refer to the period in which the study is conducted. It generally referred to the year of the study which is 2024. As for the "how", the study would be interested in knowing whether the knowledge management strategies are impacting the care delivery positively or negatively. As for

"where" this question was addressed based on the area of the study which was within the confines of Nairobi County in Kenya.

The researcher opted for descriptive cross-sectional design because of its capacity to provide a clear portrayal of the statistical associations between the independent and dependent variables under investigation. A cross-sectionals design was applicable as the researcher only collected data at a single point in time. Utilizing a descriptive research design was particularly suitable for this study, given that the study sought to examine the impact of the explanatory variable (knowledge management strategies) in the outcome variable. Besides, data collection was carried out through structured questionnaires.

3.3 Population

The target population for this study encompassed all the level 4 private healthcare facilities within Nairobi. According to Collis and Hussey (2019), a target population is defined as a group of items or observations that are interconnected and constitute what the researcher is interested in studying. While both private and public health facilities may share similar characteristics in terms of the services provided, they differ in operational efficiency which may be influenced by bureaucratic approached to emerging knowledge In addition, they may not be equally accessible for research purposes. Due to time constraints and the high levels of bureaucracy associated with public health facilities, the researcher decided to focus exclusively on private healthcare facilities.

Consequently, the target population included level 4 healthcare facilities in Nairobi and the study population was limited to private healthcare facilities. This decision was made to ensure the feasibility and manageability of the research. The study population, therefore, consisted of 40 registered level 4 private healthcare facilities operating in Nairobi County, Kenya. The unit of observation in this study was the administrators of these 40 private healthcare facilities, making

them the primary subjects of analysis. Nevertheless, in as much as the administrators were the respondents, the gave their responses on behalf of the health facility on which they work. As such, the study subjects remained the health facilities.

3.4 Sample and Sampling Technique

A sample is a subset of a population under study, often referred to as a sub-section of the study population. Samples are utilized when the population is too large to be investigated in its entirety. The process by which a sample is selected from the population is known as sampling. Sampling encompasses a range of methods and plans that guide a researcher in choosing a sample from a target population (Mujere, 2016). Similarly, Collis and Hussey (2019) describe sampling as a crucial aspect of any study, aimed at drawing conclusions about a larger population based on the analysis of a sample.

There are various sampling methods available, and the choice of a sampling technique depends on the nature of the data and the study. These methods can broadly be categorized into probability sampling, which involves random selection, and non-probability sampling, which involves nonrandom selection based on convenience or other criteria. In this current study, a census approach was applied, where all 40 registered private hospitals in Nairobi County, Kenya, were included, and the administrators from these facilities were reached for responses. The sampling frame is given in appendix IV. A census approach involves including all study subjects, making it distinct from other sampling methods. 10% of the target sample size was however set aside for piloting. This means that four facilities were targeted for piloting while the other 36 were targeted for full study. Of the four facilities marked for piloting, one did not respond hence data from only three facilities were used for the pilot study.

Given that four facilities were set for pilot study, the remaining 36 facilities were expected to provide the data for the full study. Nevertheless, only 30 out of the possible 36 respondents attempted the survey. Yet, 2 of the 30 respondents who attempted the survey did not complete the questionnaire. The data from these two respondents were discarded, thereby making the number of respondents in the study to be 28. Intrinsically, the sample size for this study was 28.

3.5 Instruments

The primary research instrument utilized in this study was a structured questionnaire, which was meticulously designed and distributed online to various participants. According to Saunders et al. (2016), structured questionnaires are particularly effective for collecting primary data that is not directly observable. Furthermore, Collis and Hussey (2019) aver that due to constraints such as time and the participants' capacity to read and write, structured questionnaires can either be administered by the researcher or completed by the participants themselves. In this study, the participants being able to read and write were charged with the responsibility of completing the questionnaires independently. The researcher facilitated this process by distributing the questionnaires through an online link. The respondents were expected to have filled the questionnaire after one week thereby ensuring that participants had ample time to thoroughly read and complete them.

Regarding the structure of the questionnaire, the questions were formatted using a 5-point Likert scale. This scale is a widely used rating system that provides five response options, typically ranging from "Strongly Disagree" to "Strongly Agree." The questionnaire was divided into five distinct parts, each focusing on different aspects of the study. Part A gathered information about the participants' profiles; Part B was about knowledge creation. The section contained five statements that talked about how the facilities create knowledge. Part C was made of five

statements that focused on how healthcare professionals in the facilities share information among themselves and with workers from other organizations. Part D was made of five statements that addressed knowledge application. Part E on its part had five statements that dealt with how knowledge is stored. The final section, Part F, was made of seven statements pertaining to the care delivery of private healthcare facilities. Given the limited research on this subject, and to the best of the researcher's knowledge, there are no pre-existing research instruments developed for this specific purpose with predetermined reliability and validity. As such, this questionnaire was developed by the investigator specifically for this study, and therefore, the reliability and validity of the instrument could not be reported

3.6 Pilot Study

The pilot sample for the study was targeted to collect data from 4 hospitals, which constitutes approximately 10% of the total 40 participating hospitals. The sample size aligned with recommendations from Connelly who suggests that a pilot study should involve around 10% of the total sample size. It is crucial to emphasize that participants involved in the pilot study were not included in the main study to avoid duplication of data. The primary objective of the pilot study was to assess and refine the research instruments used for data collection. This includes ensuring that the instruments meet the quality standards of reliability and validity proposed by Nunnally (1978). During the pilot study, the questionnaires were administered to the four selected hospitals to get feedback on clarity, relevance, and comprehensiveness. Additionally, the pilot study was intended to help identify any potential issues or ambiguities in the research instruments, to allow for necessary adjustments to be made before the commencement of the main study.

3.6.1 Validity of the Instrument

Validity concerns how accurately a questionnaire measures what it is intended to measure. Saunders et al. (2016) define validity as the degree to which an instrument precisely captures a

concept. In this research, the research instrument was developed for the first time hence its validity was measured from the pilot data. The validity of the research instrument was assessed using both face validity and content validity. These two forms of validity are distinct: content validity evaluates whether the measure comprehensively represents all aspects of the concept, while face validity examines whether the measure appears to assess the intended concept at a surface level (Johnson, 2021). To enhance this assessment, insights from the thesis supervisor were sought to further verify the validity of both the content and the appearance of the questionnaire.

3.6.2 Reliability of the Instrument

Reliability concerns itself with the consistency of the research instrument. Cronbach's alpha is a good tool that can be relied upon to gauge internal constancy of the research instrument. This tool has a scale that varies from 0 to 1 alpha coefficient values. Weber (2017), suggests that while a coefficient scale above 0.7 is preferable, a range between 0.4 and 0.7 is considered acceptable.

3.7 Data Collection Procedure

Following the pilot study, which confirmed the validity, completeness, and appropriateness of the research tools, the next step involved the researcher obtaining a letter of authorization for the study from the university. This letter facilitated the acquisition of a research permit. Data collection started by the researcher introducing themselves and the study to the participant. This introduction involved producing both authorization letter and research permit. After the introduction, the researcher sought the participants' consent where the participants were required to sign a consent form. After signing the consent form, the participants were given a link to the questionnaire in Qualtrics. The participants were also provided with log in details that would enable them to access the survey. The participants were allowed adequate time to fill and submit the questionnaire. After

filling the questionnaire, the respondents were required to click on submit button to hand in their responses.

3.8 Data Analysis and Presentation

Data from Qualtrics were exported to SPSS for cleaning and analysis. Data cleaning involved removing the first three records which were part of the pilot study. It also involved removing records with incomplete responses. Data was analyzed using both descriptive and inferential statistical analyses. For descriptive statistics, the researcher used means, percentages, and standard deviations. To test the given hypotheses for the study, the researcher leveraged the SPSS's correlational and regression computation powers. Intrinsically, the data analysis techniques employed in this study were regression and correlation analyses. The following regression model was used to determine the extent to which knowledge management practices affect performance.

$Y= \alpha +\beta_1 X_1 +\beta_2 X_2+\beta_3 X_3+ \beta_4 X_4+\varepsilon$

Y = Delivery of Private Healthcare

α = Constant term β = Beta

Coefficients

X_1 = Knowledge Creation

X_2 = Knowledge sharing

X_3 = Knowledge application

X_4 = Knowledge storage ε =

Standard Error

The findings of the study were organized in tables and charts for visual assessment and also for interpretation and reporting. Assessment of statistical significance, and degree of confidence among the independent variable in relation to healthcare delivery. Interpretation of results was

formally provided in the discussion section in relation to addressing the study's hypotheses. The findings of the study were presented using tables and figures.

3.9 Ethical Considerations

To comply with the ethical requirements of research, the researcher sought permission to conduct the study from both the participants and the responsible authorities. Given that this study involved human subjects, it was imperative to ensure that the rights of these participants were respected, particularly regarding the confidentiality of their information. Participants were thoroughly informed about their rights, with a strong emphasis on the voluntary nature of their participation. As a result, only individuals who provided their informed consent were included in the study.

The researcher guaranteed the privacy and confidentiality of the information shared by the participants. This assurance was crucial in building trust and encouraging honest and accurate responses. Participants were reassured that the data collected would be used exclusively for the research objectives and would not be disclosed to unauthorized parties. In line with ethical guidelines, the study adhered to principles such as respect for persons, beneficence, and justice, as outlined in the Belmont Report. These principles emphasize the importance of informed consent, minimizing harm, and ensuring fair treatment of all participants. By following these ethical standards, the researcher aimed to uphold the integrity of the study and protect the welfare of the participants.

CHAPTER FOUR

RESEARCH FINDINGS AND PRESENTATION

4.1 Results

The researcher employed a census approach to data collection, aiming to gather data from all 40 facilities within the sample frame. Since 10% of the data (n=4) were used for the pilot study, the new target sample for the study was 36. However, only 30 of the possible 36 invited participants completed the questionnaire, resulting in a survey response rate of 83.3%. This response rate is calculated by taking the number of surveys completed as a proportion of the total number of invitations sent and then expressing the results as a percentage. Nevertheless, two respondents did not complete the survey, which affected the survey completion rate. The completion rate is calculated from of completed surveys as a proportion of attempted surveys, also expressed as a percentage. In this study, two respondents did not complete filling their survey questionnaire giving a completion rate of 93.3%. The two incomplete data from these two respondents were discarded, therefore, the final analysis results were done with a sample of 28.

Conducting a pilot study was crucial as it helped to test and refine the research instruments, ensuring its clarity, relevance and comprehensiveness. To maintain the integrity of the main study and avoid data duplication, the data from these three hospitals were excluded from the final analysis. Data from the three facilities collected for pilot study were analyzed separately and the results are as contained in table 2 below.

Based on pilot data the majority of the private facilities in Nairobi have operated for more than five years. Only 33.3% of the facilities have been in operation for less than 5 years. The results also revealed that all the administrators who filled the questionnaires had been in their respective posts for less than 5 years.

Table 2

Frequencies for Pilot Data

		Frequency	Percent	Valid Percent	Cumulative Percent
How long has your facility been in operation?	Less than 5	1	33.3	33.3	33.3
	11-15 over 20	1	33.3	33.3	66.7
		1	33.3	33.3	100.0
	Total	3	100.0	100.0	
How long have you worked in this facility?	less than 5	3	100.0	100.0	100.0

Based on the pilot data, the average score for knowledge creation was 15, and knowledge sharing was 19.33, knowledge application was 20.67. Knowledge storage had an average of 15.67 while healthcare delivery had an average score of 26.67. See table 3

Table 3

	knowledge creation	ıowledge sharing	knowledge application	knowledge storage	ıealthcare delivery
Valid N	3	3	3	3	3
Missing	0	0	0	0	0
Mean	15.0000	19.3333	20.6667	15.6667	26.6667
Median	18.0000	20.0000	21.0000	14.0000	24.0000
Mode	7.00[a]	20.00	19.00[a]	13.00[a]	23.00[a]
Std. Deviation	7.00000	1.15470	1.52753	3.78594	5.50757
Minimum	7.00	18.00	19.00	13.00	23.00
Maximum	20.00	20.00	22.00	20.00	33.00

The first step of the analysis was to determine if the health facilities included in the study have operated long enough to provide a reliable response. Figure 2 show that majority of the private facilities in Nairobi have operated for more than five years. Only 7.14% of the facilities (n=2) have

been in operation for less than 5 years. Specifically, 25% of the facilities had been in operation for a period between 5 and 10 years. Another 25% of the facilities had operated for 10 to 15 years.17.6% of the facilities had been in existence for between 16 and 20 years, while another 25% (n=7) have been in existence for over 20 years.

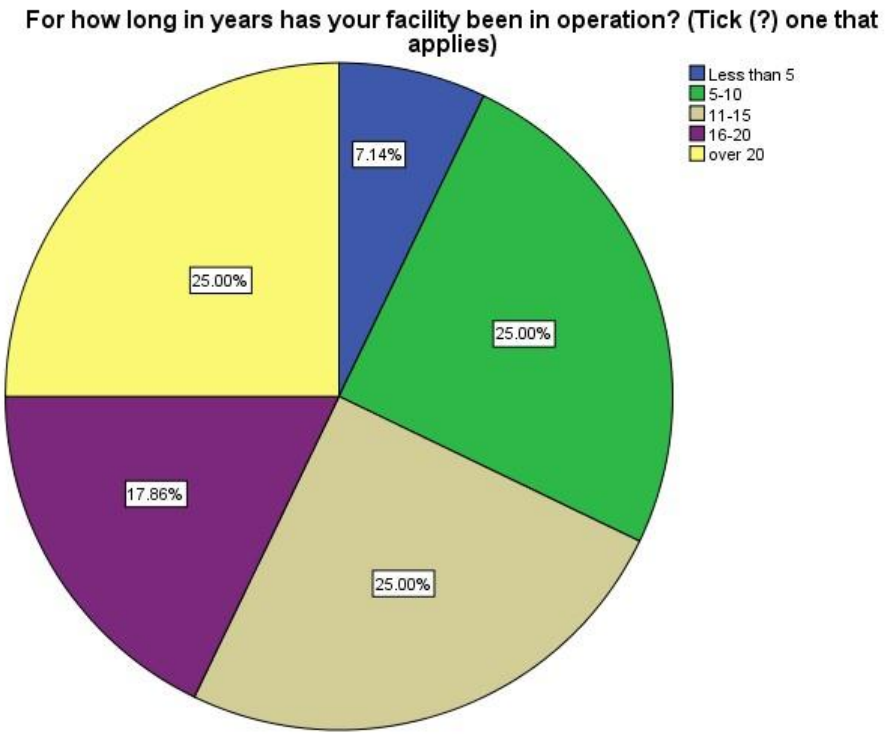

Figure 2: **Pie chart showing years of operation by private facilities in Nairobi**

The results as contained in figure 3 show that the majority of the administrators who filled the questionnaire had been in their respective facilities for less than five years. The results another large proportion of the administrators had been in their respective facilities for between 5-10 years, and only a small percentage (7.14%) had stayed in their facilities for over ten years.

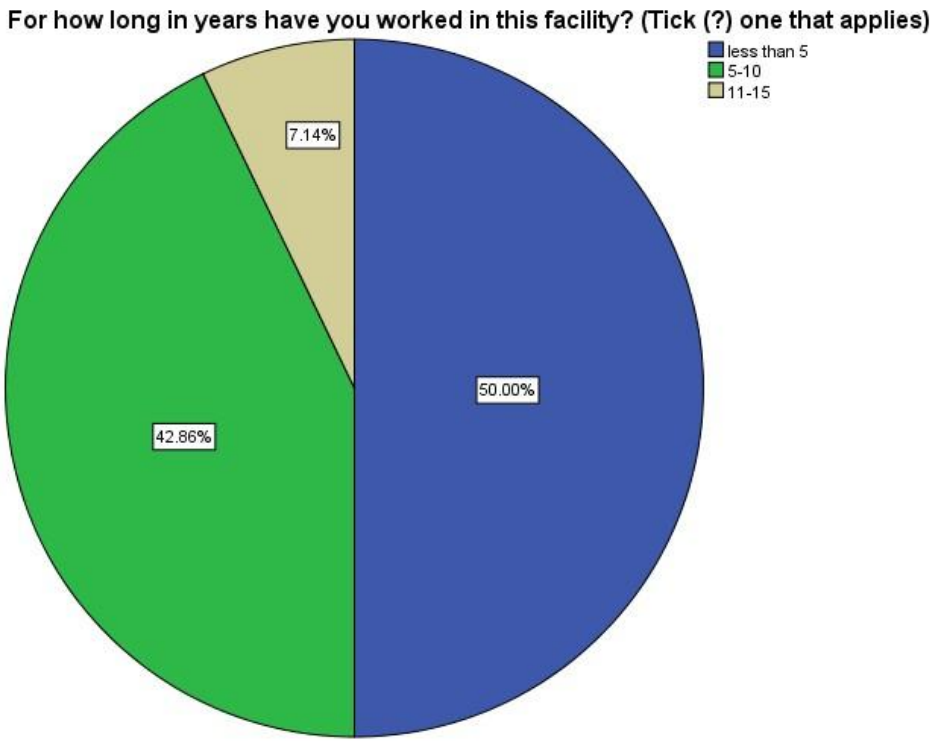

Figure 3: Pie chart showing number of years in the facility by the respondent

The four knowledge management practices were each measured using five items. All the items were scored using 5-point Likert scale, and the score for each knowledge management practice obtained by summing the scores from their respective five items. Given that each knowledge management practice was measured using five statements, it was expected that for each practice, the least score would be 5 and the highest score would be 25. The results as contained in table 4 show that the average score for knowledge creation was 16.607 (SD= 5.6). The minimum score for knowledge creation practice was 7 and the maximum score was 25. The median and modal values for knowledge creation were 18. As for knowledge sharing, the average score was 19.714 (SD=4.04) with the minimum score of 11 and a maximum of 25. The media score was 19.5 while the mode was 19. The mean, median and modal scores for knowledge application practice were 21.1 (SD= 2.16), 21, and 20 respectively. The minimum score was 15 and the maximum score 24. Further, the average score for knowledge storage was 17.85 (SD= 4.54) with the minimum score

being 7 and maximum score being 25. The median score for knowledge storage was 19 and the mode was 20. See table 4.

Healthcare delivery was measured using seven items all scored on a five-point Likert scale. The healthcare delivery score was thus obtained by summing the scores of these individual items where it was expected that the least score would be 7 and the highest score to be 35. The results show that the average score for healthcare delivery was 29.29 (SD=4.54). the median score for healthcare delivery was 30 and the mode was 28.

Table 4

Descriptive Statistics

	knowledge creation	knowledge sharing	knowledge application	knowledge storage	healthcare delivery
Valid N	28	28	28	28	28
Missing	0	0	0	0	0
Mean	16.6071	19.7143	21.1071	17.8571	29.2857
Median	18.0000	19.5000	21.0000	19.0000	30.0000
Mode	18.00[a]	19.00	20.00[a]	20.00	28.00[a]
Std. Deviation	5.59325	4.04472	2.16606	4.46977	4.53674
Minimum	7.00	11.00	15.00	7.00	17.00
Maximum	25.00	25.00	24.00	25.00	35.00

a. Multiple modes exist. The smallest value is shown

To answer the research questions, inferential statistics in the form of regression analysis was performed. The first results from the regression analysis is the coefficient of determination results. Coefficient of determination is used to demonstrate how much variation in a given factor is caused by its relationship with another factor. The results from regression analysis show that the coefficient of determination was 0.314. This showed that 31.4% of variation in healthcare

practices could be as a result of its relationship with knowledge management practices. In other words, knowledge management practices accounted for 31.4% of the variation in healthcare delivery (R^2 =0.314). See table 5.

Table 5

Coefficient of determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.560a	.314	.194	4.07213

The second table from the analysis presented the results on the significance of the model. Researchers use a measurement called p-value to determine the significance of the model where a model is considered significant if the p-value is less than the significance level. Results as contained in table 6 show that the p-value for the model was 0.06 which is not less than the significance value of 0.05. Therefore, the model was not significant at a 5% level of significance (*F=2.628, p= 0.06*).

Table 6

ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	174.323	4	43.581	2.628	.061b
	Residual	381.392	23	16.582		

Total	555.714	27	

Examining the impact of each knowledge management practice, the results as contained in table 5 show that knowledge creation has a positive impact on healthcare service delivery (β= 0.112). However, the impact of knowledge creation on healthcare delivery was found not to be significant at a 5% level of significance (*t=0.466, p=0.65*). Knowledge sharing negatively impacts healthcare delivery service (β= -0.038). The impact of knowledge sharing on healthcare delivery is not significant at a 5% level of significance (*t=0.123, p=0.903*). Knowledge application has a significant positive impact on the delivery of healthcare (β= *0.964, p=0.03*). Whereas knowledge storage positively impacts healthcare delivery (β=0.148), the impact is negligible at a 5% level of significance (*t=0.572, p=0.573*).

Table 7

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.179	8.589		.603	.552
	knowledge creation	.112	.239	.138	.466	.645
	knowledge sharing	-.038	.307	-.034	-.123	.903
	knowledge application	.964	.417	.460	2.313	.030
	knowledge storage	.148	.259	.146	.572	.573

a. Dependent Variable: healthcare delivery

The researcher's attention was drawn to the fact that knowledge sharing had a negative impact on healthcare delivery. As a result a deeper examination was done on the distribution of responses for the five items under the knowledge sharing variable. The results of this analysis are contained in table 8.

Concerning the statement "Mentorship programs are in place within our facility to share knowledge effectively," it was established that 7.1% (n=2) of the respondents strongly disagree with the statement. 14.3% (n=4) disagree with the statement and another 14.3% remained neutral.39.3% (n=11) agreed with the statement and another 25% strongly supported the statement. This show that the majority of the respondents agree that mentorship program, are in place in their facilities to help them share knowledge.

Regarding the statement "Collaborations with other facilities enable us to exchange knowledge seamlessly," the results show that those who disagreed and those who strongly disagree constitute 28.6 %10.7% remained neutral, 32.1% (n=11) agreed with the statement and another 28.6% (n=8) strongly supported the statement. In this regard, it could be said that over 60% of the participants agree that in their facilities collaboration with other facilities enable them to exchange knowledge seamlessly.

12 respondents (42.9%) strongly supported the statement that cultivating a culture of knowledge sharing s integral to their organization. Another 39.3% (n=11) agreed with the statement making those who are in support of the statement to constitute 82.2% of the entire respondent population. Two administrators, however, remained neutral without agreeing or disagreeing with the statement. One person disagreed and another two people strongly disagreed. In total, only three respondents registered their disagreement with the statement that "Cultivating a culture of knowledge sharing is integral to our organization."

Regarding the statement “Regular briefings are conducted to disseminate new information among staff members” two administrators (7.1%) disagreed with the statement, while 4 (14.3) remained neutral. 28.6% agreed with the statement with another 50% showing strong agreement with the statement. This show that in over 78% of the private health facilities there are regular briefings conducted to disseminate new information among staff members.

Regarding memos, one person showed strong disagreement with the statement that “Internal memos serve as a channel for distributing novel information within the organization.” 2 people chose to remain neutral. 35.7 % of the respondents (n= 10) showed some level of agreement with the statement while 53.6% showed a strong level of agreement with the statement. The results show that the majority of the administrators attest to the fact that internal memos serve as a channel for distributing novel information within the organization. See table 8.

From this analysis, it can be deduced that knowledge sharing is a common practice among private health facilities in Nairobi. For example, the majority of the respondents agree that mentorship programs are in place and plays a role of facilitating knowledge sharing. The majority also agree that their respective facilities collaborate with other facilities to share information. Most respondents recognize that cultivating a culture of knowledge sharing is integral to an organization. More than three quarters of the respondents acknowledged that their organization holds regular briefings to disseminate new information to staff and over 80% of the respondents acknowledge the role of internal memo in sharing information within the organization.

Table 8

Frequencies for Knowledge sharing

		Frequency	Percent	Valid Percent	Cumulative Percent
Mentorship programs are in place within our facility to share knowledge effectively.	Strongly disagree	2	7.1	7.1	7.1
	Disagree	4	14.3	14.3	21.4
	Neutral	4	14.3	14.3	35.7
	Agree	11	39.3	39.3	75.0
	Strongly agree	7	25.0	25.0	100.0
	Total	28	100.0	100.0	
Collaborations with other facilities enable us to exchange knowledge seamlessly	Strongly disagree	4	14.3	14.3	14.3
	Disagree	4	14.3	14.3	28.6
	Neutral	3	10.7	10.7	39.3
	Agree	9	32.1	32.1	71.4
	Strongly agree	8	28.6	28.6	100.0
	Total	28	100.0	100.0	
Cultivating a culture of knowledge sharing is integral to our organization	Strongly disagree	2	7.1	7.1	7.1
	Disagree	1	3.6	3.6	10.7
	Neutral	2	7.1	7.1	17.9
	Agree	11	39.3	39.3	57.1
	Strongly agree	12	42.9	42.9	100.0
	Total	28	100.0	100.0	
Regular briefings are conducted to disseminate new information among staff members	Agree	2	7.1	7.1	7.1
	Neutral	4	14.3	14.3	21.4
	Agree	8	28.6	28.6	50.0
	Strongly agree	14	50.0	50.0	100.0
	Total	28	100.0	100.0	
	Strongly disagree	1	3.6	3.6	3.6
	Neutral	2	7.1	7.1	10.7

Internal memos serve as a channel for distributing novel information within the organization	Agree	10	35.7	35.7	46.4
	Strongly agree	15	53.6	53.6	100.0
	Total	28	100.0	100.0	

Next, an analysis was done on the variable knowledge application given that it was shown to have a positive and significant impact on healthcare delivery. Concerning the statement "New knowledge informs the development of updated operating procedures," it was established that none of the respondents showed any form of disagreement with the statement. One person (3.6%) remained neutral. 60.7%% (n=17) agreed with the statement and another 35.7% (n=10) strongly supported the statement. This show that the majority of the respondents agree that new knowledge informs the development of updated operating procedures.

Regarding the statement "Operational efficiency is enhanced through the integration of new knowledge," the results show that none of the respondents disagreed or strongly disagreed with the statement. 10.7% remained neutral, 71.4% (n=20) agreed with the statement and another 17.9% (n=5) strongly supported the statement. In this regard, it could be said that over 80% of the participants agree that in their facilities operational efficiency is enhanced through the integration of new knowledge

Three respondents (10.7%) are neutral about the statement that New products/services are created based on acquired knowledge. None of the participants disagreed with the statement. 14 people (50%) agreed and another 11 people strongly agreed. In total, only three respondents registered a neutral statement to the statement that "New products/services are created based on acquired knowledge" The rest of the respondents actually agree with the statement.

Regarding the statement “Customer feedback informs our utilization of acquired information to meet their needs effectively” one administrator (3.6%) disagreed with the statement. 39.3% agreed with the statement with another 57.1% showing strong agreement with the statement. This show that in over 96% of the private health facilities customer feedbacks are taken and used utilized when making decisions that help to meet customer needs.

Regarding the use of acquired knowledge to address issues, one person showed strong disagreement with the statement that “Acquired knowledge is applied to tackle complex issues within the facility.” Another one person disagreed while 5 people chose to remain neutral. 46.4% of the respondents (n= 13) showed some level of agreement with the statement while 28.6% showed a strong level of agreement with the statement. The results show that the majority of the administrators (75%) attest to the fact that acquired knowledge is applied to tackle complex issues within the facility. See results in table 9.

From this analysis, it can be deduced that private health facilities apply the knowledge they gather when providing healthcare services. For example, the majority of the respondents agree that new knowledge informs the development of updated operating procedures. The majority also agree that operational efficiency is enhanced through the integration of new knowledge. Most respondents recognize that new products/services are created based on acquired knowledge and that customer feedback can inform the utilization of acquired information to meet needs. More than three quarters of the respondents acknowledged that acquired knowledge is applied to tackle complex issues within the facility.

Table 9

Frequencies for knowledge application

		Frequency	Percent	Valid Percent	Cumulative Percent
New knowledge informs the development of updated operating procedures.	Neutral	1	3.6	3.6	3.6
	Agree	17	60.7	60.7	64.3
	Strongly agree	10	35.7	35.7	100.0
	Total	28	100.0	100.0	
Operational efficiency is enhanced through the integration of new knowledge.	Neutral	3	10.7	10.7	10.7
	Agree	20	71.4	71.4	82.1
	Strongly agree	5	17.9	17.9	100.0
	Total	28	100.0	100.0	
New products/services are created based on acquired knowledge	Neutral	3	10.7	10.7	10.7
	Agree	14	50.0	50.0	60.7
	Strongly agree	11	39.3	39.3	100.0
	Total	28	100.0	100.0	
Customer feedback informs our utilization of acquired information to meet their needs effectively.	Disagree	1	3.6	3.6	3.6
	Agree	11	39.3	39.3	42.9
	Strongly agree	16	57.1	57.1	100.0
	Total	28	100.0	100.0	
Acquired knowledge is applied to tackle complex issues within the facility.	Strongly disagree	1	3.6	3.6	3.6
	Disagree	1	3.6	3.6	7.1
	Neutral	5	17.9	17.9	25.0
	Agree	13	46.4	46.4	71.4
	Strongly				

		8	28.6	28.6	100.0
	agree				
	Total	28	100.0	100.0	

4.2 Discussion

This section provides the discussion of the results by objectives.

4.2.1 Impact of Knowledge Creation on Healthcare Delivery

The first objective of this study was to examine the impact of knowledge creation on healthcare delivery. The study found that knowledge creation had a positive but insignificant impact on healthcare delivery. The findings indicate that knowledge creation activities such as training, benchmarking, exchange programs, workshops and seminars do not influence how healthcare workers deliver services. This can be translated to mean that by merely organizing training, benchmarking and exchange programs, workshops and seminars the organization does not stand to boost its level of effectiveness in care delivery.

The findings contradict the results by Alharbi and Aloud, (2024) which showed that knowledge creation had a significant impact on the performance of healthcare organizations in Saudi Arabia. A possible cause for the contradicting result is that while the study by Alharbi and Aloud, (2024) focused on all organizations; both public and private in the entire country, the current study focused on private facilities in just one county in Kenya. The study also theorizes that the insignificant findings may have been as a result of ineffective knowledge creation strategies. According to Paunu, Väyrynen, and Helander (2022) strategy-driven knowledge creation practices can ensure that the practice is correctly targeted and thus boost the outcome. Though private health facilities

take their staff through knowledge creation activities, it is not within the scope of this study what the practices targeted and the strategies employed on those knowledge creation activities.

4.4.2 Effects of knowledge Sharing on Healthcare Delivery

Knowledge sharing practice appeared to have a negative but insignificant impact on healthcare delivery performance. knowledge sharing practices included regular briefings, internal memos, and mentorship programs meant to help share information among healthcare players. It also includes collaboration with other facilities. The study found that knowledge sharing negatively impact service delivery but its impact was not significant. This show that even though the knowledge is shared among the staffs and between organizations, they may not be implemented. The finding is consistent with the results from Alharbi and Aloud, (2024) which also established that knowledge sharing has nonsignificant effect on service quality and operational performance. Just sharing knowledge about the delivery of healthcare does not make healthcare givers put it into practice. Nevertheless, the researcher's attention was drawn to the fact that knowledge sharing had a negative impact on service delivery. The expectation was that when knowledge is shared among staffs, the become more informed and can then utilize the knowledge to improve on care delivery. The possible explanation to this negative impact is that there could be factors that confound the relationship between knowledge sharing and care delivery.

4.2.3 Impact of knowledge Application on Healthcare Delivery

The third hypothesis was that knowledge application of knowledge in healthcare facilities impacts the delivery of healthcare in those facilities. Knowledge application included replacing outdated operation procedures, integrating new knowledge, creating new products using new knowledge and using customer feedback to make improvement. The study found that enforcing these practices helps to improve on service delivery. The hypothesis was supported as the results showed that if

pieces of new knowledge are applied in the health facilities, they contribute to significant improvement in services delivered.

The results confirm the findings by Alharbi and Aloud, (2024) which established that knowledge application improves operational and innovation performance. According to Alharbi and Aloud, (2024), effectively utilizing knowledge within an organization not only streamlines operations but also fosters a culture of innovation, leading to improved overall performance. This result was expected as an increase in knowledge leads to confidence in carrying out a task and also contributes to better decision making. The ability to make critical decisions with certainty and to undertake tasks with confidence contributes to better performance.

4.2.4. Impact of Knowledge Storage on Healthcare Delivery

The fourth hypothesis was that knowledge storage affects healthcare service delivery. Knowledge storage activities include cataloging, documenting and archiving new knowledge. This hypothesis was not supported as the results showed that engaging in these activities do not help to improve healthcare service delivery. As Popescu et al (2022) found in their study, proper storage of information helps in easing retrieval and usage and thus contribute in boosting service delivery. This study has, however, shown that storing new information does not impact its usage and ultimate impact. The contradicting results can be attributed to the fact that while Popescu et al (2022) did their study with respect to the process of service delivery, the current study focused on the outcome. The results thus reveal that unless the new information is applied, its impact cannot be experienced.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Private hospitals significantly enhance healthcare management by addressing public system limitations, especially during crises like COVID-19. Their impact varies globally, with notable contributions in developing countries and successful public-private collaborations in places like the Netherlands. In Sub-Saharan Africa, private healthcare fills critical gaps and provides essential resources, driven by high costs and inefficiencies in public systems.

The healthcare sector is characterized by development of new knowledge, and their effective implementation can enhance the efficiency of service delivery. Effective knowledge management is crucial for private hospitals to optimize healthcare delivery, improve clinical outcomes, and maintain competitiveness. Investing in knowledge management systems helps streamline processes, update clinical guidelines, and support staff training, ultimately enhancing patient care and organizational performance.

The purpose of this study was to assess the impact of strategic knowledge management practices on the delivery of healthcare services in private health facilities in Nairobi. The study aimed at examining how the four areas of knowledge management; knowledge creation, sharing, application, and storage impact healthcare service delivery. Using a descriptive cross-sectional design, data was collected using online questionnaire from 33private hospitals. Data from 28 facilities were analyzed using regression analysis in SPSS to test for the impact of the four practices on healthcare delivery. The study found that most private facilities in Nairobi have been operating for over five years, with 25% operating for 5-10 years, 25% for 10-15 years, 17.6% for 16-20 years, and 25% for over 20 years.

Regression analysis was applied to understand the effects and their significance. The results showed that the model was not significant and could only explain a small percentage of variation in healthcare delivery. The insignificance of the model and the low value for the coefficient of determination was translated to mean that other than knowledge management practices, there are other factors that impact healthcare delivery. This is expected given the diverse nature of healthcare delivery service. Consequently, the study proceeded to examine the impact of knowledge management practices on healthcare delivery where it was established that the average scores for the various practices were as follows; knowledge Creation: 16.607, knowledge Sharing: 19.714, knowledge Application: 21.1, and knowledge Storage: 17.85. The study further established that only knowledge application significantly impacts service delivery, while other practices like knowledge creation, sharing, and storage do not have a significant effect.

5.2 Conclusion

Despite its significance, the relationship between knowledge management practices and healthcare service delivery has remained unexplored especially with regards to private health facilities. In its exploration, the current study knowledge creation does not affect service delivery but knowledge application does. Also, knowledge sharing and storage have no effects on healthcare service delivery. The study thus came to the conclusion that creating knowledge and not implementing it does not empower an organization to provide high quality service. Likewise, sharing new knowledge or having a top notch means of storing new knowledge does not empower the organization to provide high quality service. Good knowledge creation, sharing and storage capabilities must be accompanied by effective application of these knowledge. Private health facilities should therefore optimize knowledge application to enhance service delivery.

5.3. Recommendation

Based on these findings the study recommends that knowledge creation must be accompanied by effective application. Though knowledge creation was found to be insignificant, it is through knowledge creation that new innovative ways are established. As such, organizations should not only strengthen knowledge creation but also emphasize on the application of such new innovative ideas to enhance service delivery. The study, therefore recommends that organizations should prioritize factors that influence the application of knowledge for effective improvement in service delivery. Given that the impact of knowledge sharing was found to be negative though nonsignificant, the study recommends that future researchers should look into what could have led to the impact being negative. Future researchers should seek to determine the possible confounders in the relationship between knowledge sharing and care delivery in private hospitals. Besides, future studies should explore effects of knowledge application on other sectors to generalize the results to the entire economy.

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APPENDICES

Appendix I: Research Tool

Instructions

- There is no wrong answer; each response will be treated as a correct one. Your opinion is what is required in this study.
- Do not think too long about each statement. It should take you around 10 minutes to complete.

Part A: Demographic Information

1. For how long in years has your facility been in operation? (Tick (√) one that applies)

Less than 5 [ ] 5-10 [ ] 11-15 [ ] 15-20 [ ] Over 20 [ ]

2. For how long in years have you worked in this facility? (Tick (√) one that applies)

Less than 5 [ ] 5-10 [ ] 11-15 [ ] 15-20 [ ] Over 20 [ ]

Knowledge Creation	**1**	**2**	**3**	**4**	**5**
New information is obtained in the facility by training staffs					
The facility facilitates staffs to take part in workshops and seminars that are relevant					
The facility sponsors benchmarking exercises for employees to acquire new knowledge					
In our facility, new knowledge is created through market research					
The facility sponsors various exchange programmes for employees to acquire new knowledge					

Part B: Knowledge Creation

Please indicate your level of agreement with the statements in relation to knowledge creation in your facility, using the scale: Use a Likert scale of 1-5, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

Part C: Knowledge Sharing

Please indicate your level of agreement with the statements in relation to knowledge sharing in your facility, using the scale: Use a Likert scale of 1-5, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

Knowledge Sharing	**1**	**2**	**3**	**4**	**5**
Mentorship programs are in place within our facility to share knowledge effectively.					
Collaborations with other facilities enable us to exchange knowledge seamlessly.					
Cultivating a culture of knowledge sharing is integral to our organization.					
Regular briefings are conducted to disseminate new information among staff members.					
Internal memos serve as a channel for distributing novel information within the organization.					

Part D: Knowledge Application

Please indicate your level of agreement with the statements in relation to knowledge application in your facility, using the scale: Use a Likert scale of 1-5, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

Knowledge Application	**1**	**2**	**3**	**4**	**5**
New knowledge informs the development of updated operating procedures.					
Operational efficiency is enhanced through the integration of new knowledge.					
New products/services are created based on acquired knowledge.					
Customer feedback informs our utilization of acquired information to meet their needs effectively.					
Acquired knowledge is applied to tackle complex issues within the facility.					

Part E: Knowledge Storage

Please indicate your level of agreement with the statements in relation to knowledge storage in your facility, using the scale: Use a Likert scale of 1-5, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

Knowledge Storage	**1**	**2**	**3**	**4**	**5**
New knowledge is cataloged in our resource centers/libraries.					
New knowledge is documented in our operating procedure manuals for reference.					
Our databases/repositories serve as repositories for storing new knowledge.					
We store new knowledge in our resource centers/libraries					
Our facility has implemented robust knowledge archival systems.					

Part E: Healthcare Delivery

Please indicate your level of agreement with the statements in relation to the delivery of healthcare in the facility, using the scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree

Healthcare Delivery	**1**	**2**	**3**	**4**	**5**
Effective delivery of services to individuals and communities' hinges on a comprehensive understanding of community needs.					
Our offerings encompass a spectrum of essential personal health services designed to promote well-being, manage illness, and address disabilities.					
Our primary care services are readily accessible whenever care is needed.					
Our primary care services are efficiently utilized in response to care needs.					
All healthcare events and services within the institution are interconnected, ensuring seamless transfer of pertinent information for client care.					
We provide a variety of essential personal health services aimed at promoting and maintaining health while addressing illness and disability.					

Mechanisms are in place to facilitate communication of information and its integration into the client's care plan.					

Appendix II: ERC Certificate

Mount Kenya University

REF: **MKU/ISERC/4030**
TO: **NYAGA JAMES MURIITHI**

Date: 30 July 2024

REG: **MBA/2021/82019**

Dear Sir/Madam,

RE: ASSESsMENT OF THE EFFECT OF Strategic KNOWLEDGE MANAGEMENT PRACTICES ON SERVICE DELIVERY IN PRIVATE HEALTHCARE IN NAIROBI County, Kenya

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **2948.** The approval period is **30/07/2024 - 29/07/2025.**

This approval is subject to compliance with the following requirements:

i. Only approved documents including informed consents, study instruments, MTA will be used
ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions
vi. 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
vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

MOUNT KENYA UNIVERSITY
ETHICS REVIEW COMMITTEE
P. O. Box 342 - 01000,
THIKA

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

Appendix III: Introduction Letter from MKU

Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MBA/2021/82019

22nd August, 2024

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: NYAGA JAMES MURIITHI – REGISTRATION NO. MBA/2021/82019

The purpose of this letter is to introduce the above named student who is pursuing **Master of Business Administration** in the department of **Accounting and Finance** in the school of **Business and Economics**.

The title of the research is **"Assessment of the Effect of Strategic Knowledge Management Practices on Service Delivery in Private Healthcare in Nairobi County, Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **August, 2024 and October, 2024.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Mount Kenya University
P.O. Box 342 - 01000 THIKA
Office of the Director,
Graduate Studies

Dr. Samuel M. Karenga, PhD
Director, Graduate Studies
Enc.

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.

Appendix IV: NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **894056**

Date of Issue: **11/September/2024**

RESEARCH LICENSE

This is to Certify that Dr.. James Muriithi Nyaga of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: ASSESSMENT OF THE EFFECT OF STRATEGIC KNOWLEDGE MANAGEMENT PRACTICES ON SERVICE DELIVERY IN PRIVATE HEALTHCARE IN NAIROBI COUNTY, KENYA for the period ending : 11/September/2025.

License No: **NACOSTI/P/24/39692**

894056

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix V: Field Entry/ Research Authorization

Mount Kenya University

REF: **MKU/ISERC/4030**
TO: **NYAGA JAMES MURIITHI**

Date: 30 July 2024

REG: **MBA/2021/82019**

Dear Sir/Madam,

RE: ASSESsMENT OF THE EFFECT OF Strategic KNOWLEDGE MANAGEMENT PRACTICES ON SERVICE DELIVERY IN PRIVATE HEALTHCARE IN NAIROBI County, Kenya

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This approval is subject to compliance with the following requirements:

i. Only approved documents including informed consents, study instruments, MTA will be used
ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions
vi. 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
vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

MOUNT KENYA UNIVERSITY
ETHICS REVIEW COMMITTEE
P. O. Box 342 - 01000,
THIKA

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
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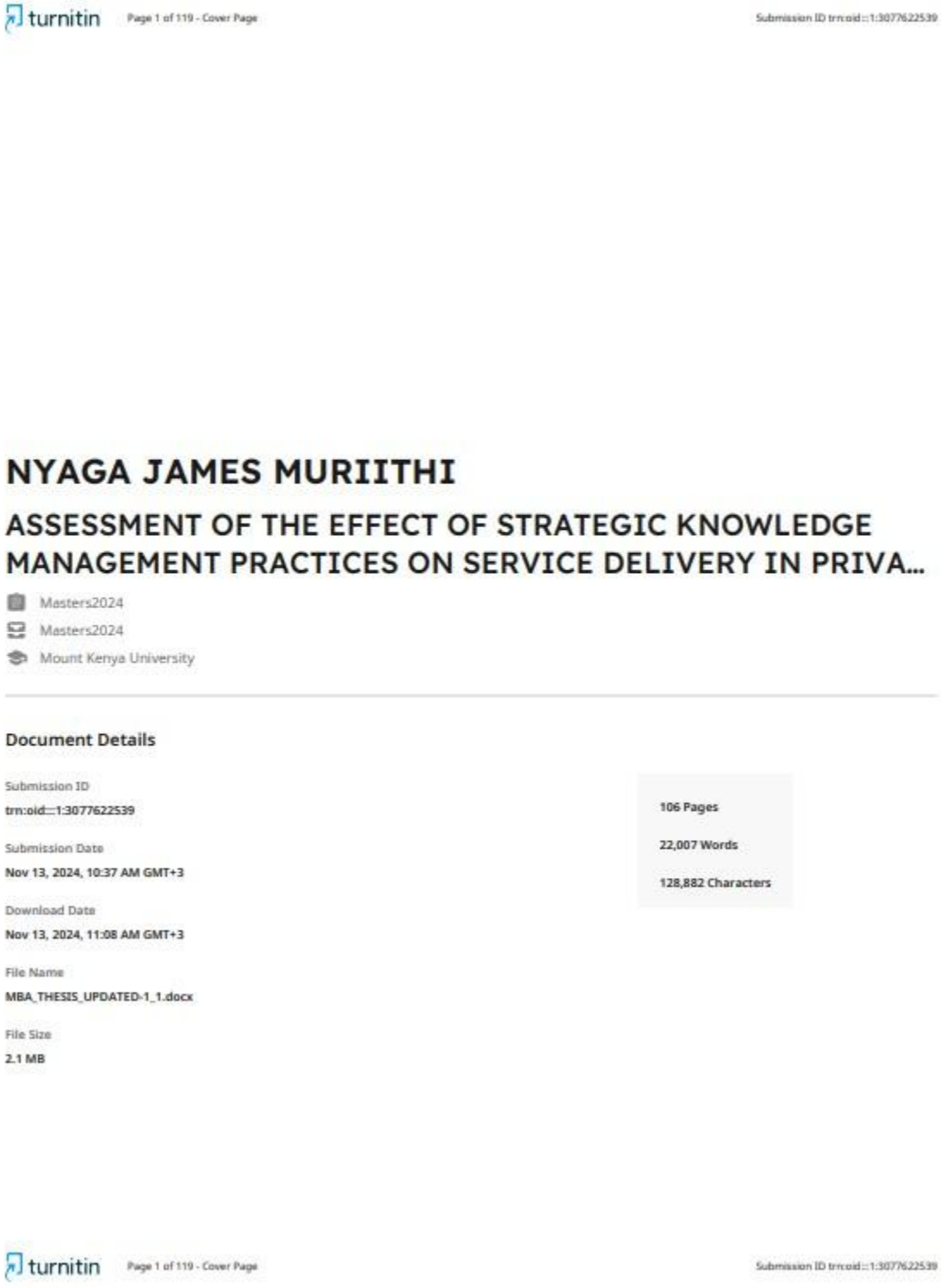
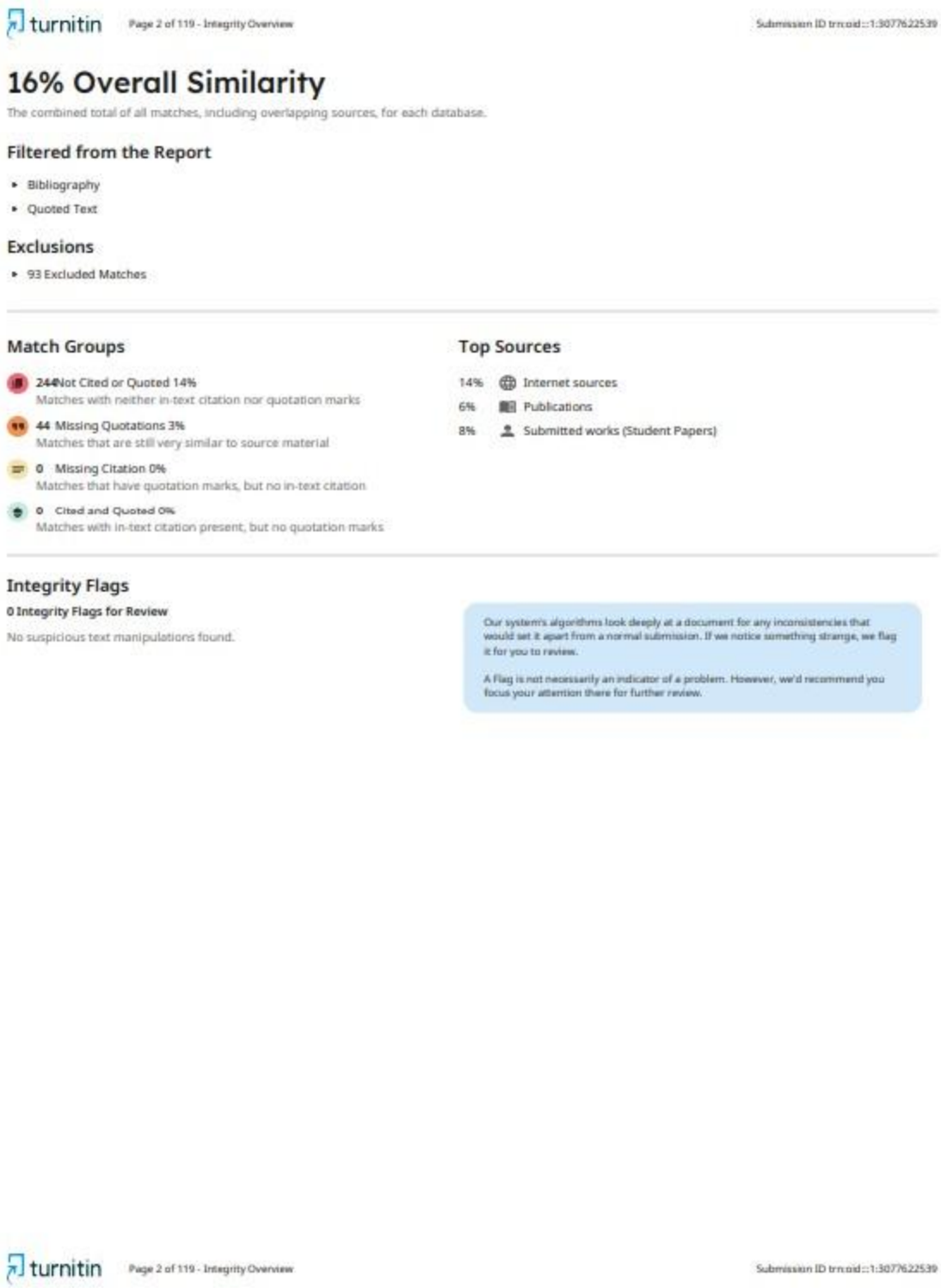
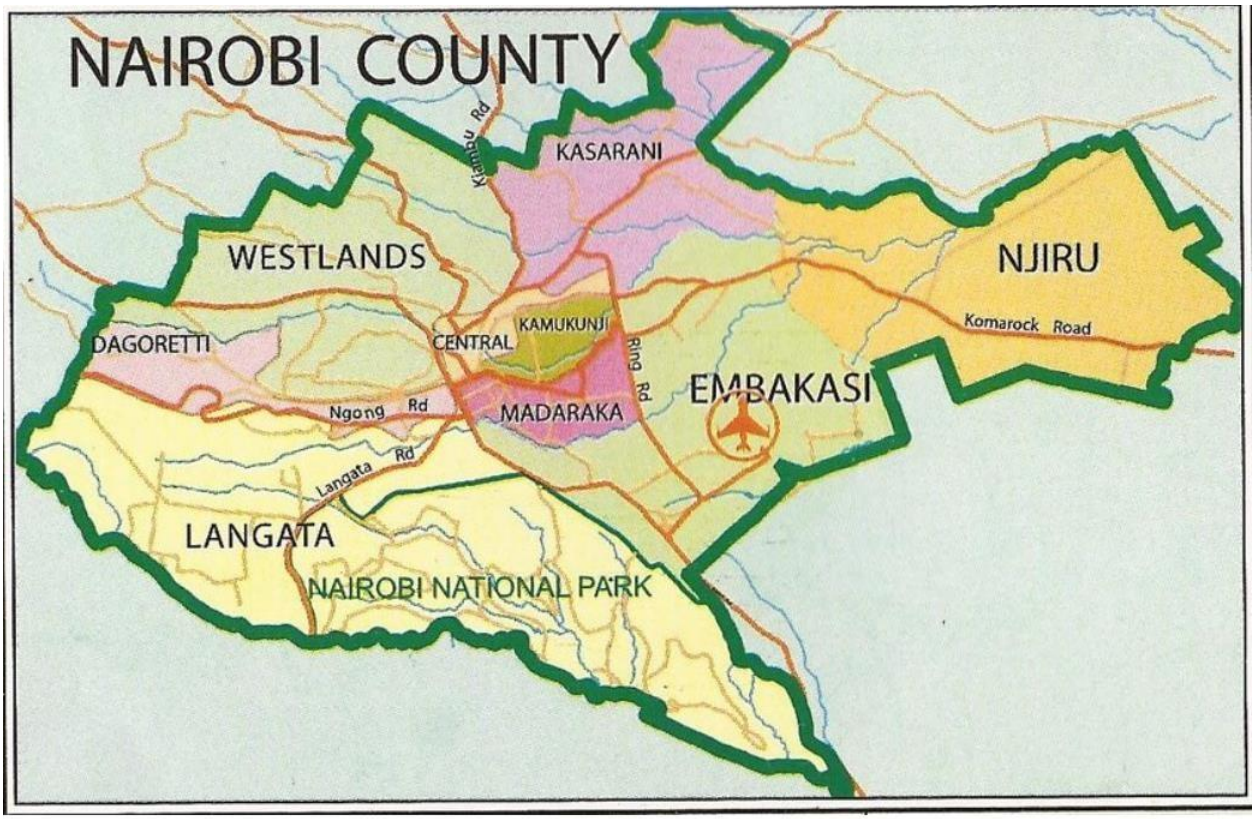
Email: info@mku.ac.ke, Web: www.mku.ac.ke
Chartered and ISO 9001 : 2015 Certified Institution.
Unlocking Infinite Possibilities

Appendix VI: Turnitin Report





Appendix VII: Research Site Map



Appendix VIII: Sampling Frame for Private Hospitals in Nairobi County

1. Acacia Medical Center
2. Apples + Sense
3. Bristol Park Hospital
4. Care Hospital
5. Family Health Options Kenya
6. Garden Specialist Hospital
7. Guru Nanak Ramgarhia Sikh Hospital
8. Jacaranda Healthcare

9. Jamaa Mission Hospital
10. Jamia MedClinics
11. Kasarani Maternity and Nursing Home
12. Komarock Modern Healthcare
13. Ladnan Hospital
14. Langata Hospital
15. Livewell Health Clinic
16. Maria Immaculata Hospital
17. Mariakani Cottage Hospital
18. Marura Nursing Home
19. Masaba Hospital
20. Medanta Africare
21. Melchizedek Hospital
22. Menelik Hospital
23. Meridian Equator Hospital Limited
24. Meridian Medical Center
25. Midhill Hospital
26. Oasis Healthcare Group
27. Penda Health
28. Radiant Hospital
29. Reinha Rosary Hospital
30. Ruaraka Uhai Neema Hospital
31. Savanna Healthcare Services

32. Scion Hospital

33. St. Francis Community Hospital

34. St. Mary's Hospital Langata

35. St. Scholastica Uzima Hospital

36. St Patrick Healthcare Centre

37. The German Medical Center

38. The Lifeline Group of Hospitals – Wendani

39. Wema Hospital

40. Westlands Medical Centre